

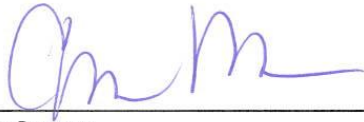
NJDOH Pandemic Influenza Plan

September 2015

Signature Page

The New Jersey Department of Health (NJDOH), Division of Public Health Infrastructure, Laboratories and Emergency Preparedness (PHILEP) has written the NJDOH Pandemic Influenza Plan to prepare for, respond to, and recover from an influenza pandemic affecting the State of New Jersey, and is hereby approved. This Plan supersedes and replaces any previously written pandemic influenza plans. It is a part of and adheres to the policies in the State of New Jersey Emergency Operations Plan, Emergency Support Function 8 Annex: Public Health and Medical Services.

Approval date 9/2/15



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Table of Contents

SECTION I. OVERVIEW	1
1. PURPOSE	1
2. AUTHORITIES	1
A. LAWS, ORDINANCES, REGULATIONS, RESOLUTIONS AND DIRECTIVES	1
B. NJ EMERGENCY HEALTH POWERS ACT	1
3. SITUATION	2
A. BACKGROUND	2
B. IMPACT ON NEW JERSEY	3
4. PLANNING ASSUMPTIONS	4
5. STRATEGY	5
6. RESPONSIBILITIES	6
A. PRIMARY AGENCY	6
B. SUPPORT AGENCIES.....	6
SECTION II. OPERATIONS	8
1. COMMAND AND CONTROL	9
2. SURVEILLANCE	12
3. LABORATORY DIAGNOSTICS	19
4. HEALTHCARE PLANNING	25
5. EMERGENCY MEDICAL SERVICES	30
6. INFECTION CONTROL	34
7. CLINICAL GUIDELINES	38
8. VACCINE DISTRIBUTION AND USE	45
9. ANTIVIRAL DRUG DISTRIBUTION AND USE	50
10. COMMUNITY MITIGATION	57
11. PUBLIC HEALTH COMMUNICATIONS	61
13. PSYCHOSOCIAL CONSIDERATIONS	66
SECTION III. APPENDICES	73
SECTION IV. GLOSSARY	

SECTION I. OVERVIEW

1. PURPOSE

The purpose of the Plan is to:

- Describe the role of NJDOH in response to an influenza pandemic affecting NJ
- Minimize morbidity and mortality potentially resulting from an influenza pandemic
- Coordinate internal NJDOH response activities
- Provide guidance and information to Local Information Network and Communications System (LINCS) agencies, Local Health Departments (LHDs), and healthcare partners and other stakeholders in the development of their own influenza pandemic plans

2. AUTHORITIES

A. LAWS, ORDINANCES, REGULATIONS, RESOLUTIONS AND DIRECTIVES

1. Federal

- Homeland Security Presidential Directive 5: Management of Domestic Incidents
- Executive Order: Amendment to E.O. 13295 Relating to Certain Influenza Viruses and Quarantinable Communicable Diseases

2. State

- N.J.S.A. 24:1-1 et seq.: Food and Drugs
- N.J.S.A. 26:1-1 et seq.: Health and Vital Statistics
- N.J.S.A. Appendix A: 9-34. Emergency Powers of Governor
- N.J.S.A. 26: 13-1 et seq.: Emergency Health Powers Act
- N.J.A.C. Title 8 - Chapter 57 - Communicable Diseases

B. NJ EMERGENCY HEALTH POWERS ACT

The NJ Emergency Health Powers Act (EHPA), signed into law September 14, 2005 (P.L. 2005, c.222), grants certain powers to state and local public health authorities to ensure effective planning and response to public health emergencies. This Act was codified at N.J.S.A. 26:13-1 et seq.

The EHPA also amends N.J.S.A. 26:4-2 to state that, in order to prevent the spread of disease affecting humans, the NJDOH and local boards of health, within their respective jurisdictions, both have the power to:

- Declare what diseases are communicable
- Declare when any communicable disease has become epidemic
- Require the reporting of communicable diseases
- Maintain and enforce proper and sufficient quarantine, wherever deemed necessary
- Remove any person infected with a communicable disease to a suitable place, if in its judgment removal is necessary and can be accomplished without any undue risk to the person infected

- Disinfect any premises when deemed necessary
- Remove to a proper designated place all articles within its jurisdiction which, in its opinion, are infected with any matter likely to communicate disease and to destroy such articles when, in its opinion, the safety of the public health requires it

In the event the Governor, in consultation with NJDOH Commissioner and the Office of Emergency Management, declares a public health emergency, NJDOH shall oversee the uniform exercise of these powers in the State and the local board of health shall be subject to NJDOH's authority.

NOTE: The laws, regulations and directives above represent the core legal foundation and are not a complete listing of all authorities that may be implemented. The Plan is part of and adheres to the policies in the State of New Jersey Emergency Operations Plan, Emergency Support Function 8 Annex: Public Health and Medical Services.

3. SITUATION

A. BACKGROUND

Over the course of the 20th century influenza pandemics, influenza viruses that spread worldwide have caused millions of deaths across the globe. The most famous and destructive pandemic occurred in 1918 when more than 500 million people were impacted, with the virus killing between 50 and 100 million people worldwide. The pandemic is considered one of the deadliest natural disasters in human history.

The influenza virus, with its unique ability to cause sudden pervasive illness in all age groups, still impacts the world today, and public health professionals fight each and every year to contain and respond to the ever-changing threat posed by the virus.

Most recently, in the spring of 2009, the novel A(H1N1) virus emerged in Mexico, and by April of that year entered the United States. Quick to respond, public health officials in the United States declared a public health emergency, and in June the World Health Organization (WHO) declared an influenza pandemic, with 74 countries reporting 30,000 confirmed cases of the virus.

In New Jersey, the NJDOH responded to two separate waves of the pandemic, one that occurred in May and the other occurring in October. When the initial wave hit, the Department's primary objectives were to: 1) receive and distribute Strategic National Stockpile (SNS) supplies (e.g., antiviral medications, syringes and personal protective equipment) to the public health and healthcare continuum; 2) provide epidemiological surveillance to facilitate early detection and mitigation of disease; 3) test clinical specimens for the presence of the virus; 4) coordinate statewide public information campaigns; and 5) maintain timely situational awareness with our response partners.

During the second wave, the Department's primary objective was to implement a mass vaccination campaign to predetermined priority groups based on disease risk. Over a relatively short time period, more than 1.1 million vaccine doses were administered via registered vaccine provider sites, which included colleges and universities, federally qualified health centers (FQHC), government agencies, health departments, hospitals, private medical practices, employee health services and retail pharmacies.

Fortunately, the pandemic proved milder than anticipated, and NJDOH and our response partners were provided the unique opportunity to manage a large scale biological event. The duration of the response lasted

almost a year, and in that time New Jersey had over 3,000 laboratory-confirmed H1N1 cases with 42 deaths, with nearly 9,000 cases investigated through the Communicable Disease Reporting and Surveillance System (CDRSS). In addition, NJDOH operated two call centers to support the mass vaccination campaign, with nearly 40,000 calls received at the public call center, and over 14,300 calls received from the medical community at the emergency communications center. NJDOH also provided public service announcements and coordinated messaging statewide for uniformity and accuracy of information. Messaging stressed the importance of preventing the spread of disease, with recommendations for infection control and social distancing measures, such as washing hands thoroughly and staying home when sick.

The Looming Threat:

History tells us that Influenza pandemics are inevitable but unpredictable and arrive with very little warning. Should an influenza pandemic virus again appear that behaves as the 1918 strain, the results could be catastrophic, even when taking into account the remarkable advances in medicine. Air travel could hasten the spread of a new virus, and decrease the time available for implementing interventions. Outbreaks would most likely occur simultaneously throughout much of the U.S., preventing shifts in human and material resources that usually occur in response to other disasters. The effect of influenza on individual communities will be relatively prolonged (weeks to months) in comparison to other types of disasters. Healthcare systems could be rapidly overburdened, economies strained, and social order disrupted.

Depending on where the initial outbreak begins, the U.S. may have little to no lead time to react. In a best case scenario public health officials will have three months to enact plans to protect public safety. Two or more “waves” are anticipated, occurring within three to nine months of the initial outbreak in a given area. Historically, it is expected that in any locality the length of each wave is approximately six to eight weeks. Based upon current vaccine production methods, vaccines may not be available in time to mitigate the impact of the second wave.

B. IMPACT ON NEW JERSEY

1. GEOGRAPHIC/DEMOGRAPHIC FACTORS

NJ’s geographic and demographic characteristics make it particularly vulnerable to importation and spread of infectious diseases, including influenza.

NJ is the most densely populated state with a population of over 8.8 million people, including large populations of immigrants. Nearly half of NJ’s population lives in the urban/suburban areas of the northeastern third of the state near New York City.

NJ has more roadways per square mile of land than any other state and provides an important transportation route in the Washington, D.C. - Philadelphia - New York corridor with over 210 million vehicles traveling through this route per year.

Air traffic includes Newark Liberty International Airport, which provides transportation to over 31 million passengers per year, nationally and internationally, and is the busiest airport in the tri-state area. NJ is also a major ocean transport center with several major shipping yards.

More than 500,000 commuters use the bridges, tunnels and train network systems connecting New York and NJ each day; and thousands of tourists visit Atlantic City’s casinos and other NJ attractions daily.

2. PERSONNEL

Depending on the severity of the disease, absenteeism is expected to reach 30%-50% in all sectors of the work force as the pandemic progresses. More specifically, widespread illness in communities will increase the likelihood of sudden and potentially significant shortages of personnel in sectors that provide critical community services (e.g., police, fire fighters, school staff, utility and transportation workers). In addition, shortages of health care workers are anticipated as they would be at higher risk of exposure and illness than the general population, which would further strain the health care system.

3. HOSPITALS

If a severe (1918-like) pandemic hits NJ, the impact on the healthcare system and the number of deaths is estimated as follows:

(Based on CDC’s FluAid program, available at: <http://www.cdc.gov/flu/pandemic-resources/tools/fluaid.htm>)

Illness	2,524,000 (30% of population)
Outpatient medical care	1,262,000 (50% of ill)
Hospitalization	277,000 (22% of outpatients)
ICU (Intensive Care Unit)	41,000 (15% of hospitalized patients)
Mechanical ventilation	20,000 (50% of ICU patients)
Deaths	5,000 (2% of ill)

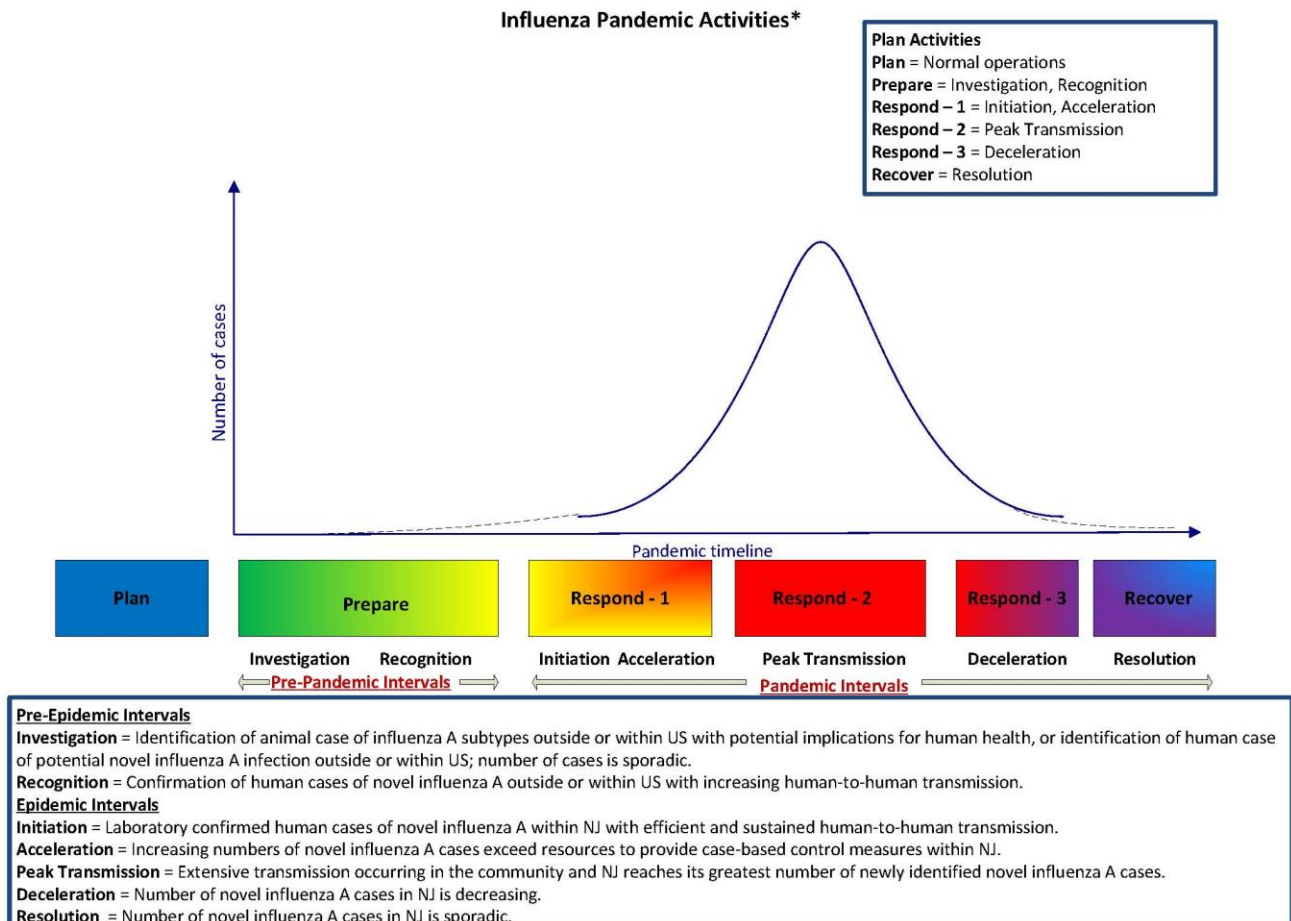
4. PLANNING ASSUMPTIONS

- A. Influenza-like illness (ILI) surveillance is being conducted.
- B. Communication systems among federal, state and local healthcare partners are in place.
- C. Up to 50% of the population will be affected either through illness, caring for those with illness, or changing lifestyle in response to the pandemic.
- D. No vaccine will be available for at least 6 months and then there will be limited quantities available on a periodic basis.
- E. There will be a supply of antivirals which are effective if taken in a timely fashion.
- F. Limited vaccine, when available, will be distributed to target groups.
- G. The Governor will declare a Public Health Emergency and may declare a State of Emergency, depending on the severity of the pandemic.
- H. Support and response services will be needed for an extended period of time (months).

- I. There will be a large number of hospitalizations and deaths.
- J. Medical supplies will be limited.
- K. The State will need to be self-sufficient (uncertain federal support).
- L. Both health providers/responders and the public will experience significant stress and will require mental health services.

5. STRATEGY

The conceptual framework of the Plan follows defined intervals that can be found in the progression of a typical epidemic curve, as described in the Centers for Disease Control and Prevention (CDC) document, “Interim Guidance on Use of Intervals, Triggers, and Actions for Novel Influenza A (H1N1) Response” (April 2009). Each interval represents a block of time that would trigger corresponding public health actions, and is associated with action levels that delineate steps within the Operations section of the plan, as described in the figure below under Plan Activities:



*The operational framework for NJDOH activities in response to an influenza pandemic affecting NJ will be based upon defined intervals of the progression of a typical pandemic curve; the intervals serve as triggers to indicate when to act, and the disease risk assessment will determine how to act.

6. RESPONSIBILITIES

A. PRIMARY AGENCY

NJDOH is responsible for:

1. Serving as the lead agency for pandemic influenza preparedness and response in the event the Governor declares a public health emergency. The NJDOH oversees the uniform exercise of the EHPA, and local boards of health are subject to the Department's exercise of this authority.
2. Providing subject matter expertise (e.g., surveillance, laboratory diagnostics, infection control, clinical guidelines).
3. Providing accurate and timely medical and health information to stakeholders and the public
4. Serving as a liaison to HHS during planning and response activities.
5. Planning for statewide prophylaxis and vaccination.
6. Working with county and local public health agencies to guide coordinated planning and response.
7. Providing planning guidance to healthcare entities including hospitals, long-term care facilities (LTCFs), home health agencies and hospice agencies, emergency medical services (EMS), primary care centers, private health professionals, alternate care sites.
8. Maintaining a Strategic State Stockpile (SSS) of pharmaceuticals and antivirals.
9. Distributing resources from the SSS and Strategic National Stockpile (SNS).
10. Providing epidemiological guidance for response activities.

B. SUPPORT AGENCIES

1. LINCS Agencies are responsible for planning, coordination, and delivery of specialized services related to public health emergencies. They work with the LHDs and acute care hospitals in their jurisdictions and collaboratively develop influenza pandemic plans and facilitate coordination with LTCFs.
2. LHDs are responsible for developing and implementing plans in coordination with their LINCS agencies and acute care hospitals and LTCFs in their jurisdictions.
3. NJ Department of Human Services (NJ DHS) is responsible for:
 - A. Developing plans to deliver psychosocial support services
 - B. Working with NJDOH to develop educational materials
 - C. Ensuring availability of Disaster Response Crisis Counselors
4. NJ Hospital Association is responsible for working with their members to:
 - A. Develop influenza pandemic plans that include appropriate infection control, surge capacity, and cross-training of staff
 - B. Comply with NJDOH guidance issued as the situation unfolds.
5. Acute Care Hospitals are responsible for:
 - A. Developing, exercising, and implementing influenza pandemic plans that include appropriate infection control, surge capacity, and cross-training of staff
 - B. Complying with NJDOH guidance issued as the situation unfolds.

6. The Health Care Association of New Jersey and Leading Age New Jersey (formerly New Jersey Association of Homes and Services for the Aging) are responsible for providing influenza pandemic related guidance to their agency members.
7. LTCFs are responsible for collaborating with their area hospitals' requests regarding surge capacity plans and to comply with NJDOH guidance issued as the situation unfolds.
8. Rehabilitation hospitals, long term acute care hospitals, and other specialty hospitals are responsible for collaborating with their area hospitals' requests regarding surge capacity plans and to comply with NJDOH guidance issued as the situation unfolds.
9. The Home Care Association of NJ is responsible for providing influenza pandemic related guidance (infection control, voluntary isolation and quarantine) to agency members, and potentially non-member agencies, who attend/avail themselves of the educational offerings of the Home Care Association of NJ.
10. Home Health Agencies and Hospice Agencies are responsible for providing information and education to staff and influenza pandemic related guidance (infection control, voluntary isolation and quarantine) to patients in the home.
11. New Jersey Primary Care Association is responsible for providing influenza pandemic related guidance to their association members.
12. Federally Qualified Health Centers (FQHCs) are responsible for planning to serve as screening, triage, and treatment centers.

SECTION II. OPERATIONS

Operations are divided into 12 sections:

1. Command and Control
2. Surveillance
3. Laboratory Diagnostics
4. Healthcare Planning
5. Emergency Medical Services
6. Infection Control
7. Clinical Guidelines
8. Vaccine Distribution and Use
9. Antiviral Drug Distribution and Use
10. Community Mitigation
11. Public Health Communications
12. Psychosocial Considerations

1. COMMAND AND CONTROL

The purpose of this section of the Plan is, through a unified command and control structure, to:

1. Limit severe illness and death from pandemic influenza.
2. Work with health care and public health partners to support appropriate influenza evaluation and care.
3. Maintain essential medical and public health services.
4. Communicate rapidly, accurately, and frequently with the public, the medical community, and other partners and stakeholders.

The NJDOH Incident Command System (ICS) will activate if there is evidence or credible threat of a pandemic in New Jersey or nearby jurisdictions.

Once the ICS is activated, the Incident Commander (IC) and Section Chiefs (SC) will develop an Incident Action Plan (IAP) to define the Department's operational response. The IAP will be modified as needed based on epidemiologic, clinical, and other characteristics of the pandemic.

The IC will stay in close contact with the Section Chiefs and other Senior Department heads throughout the phases of the pandemic, during response and mobilization, all the way through to recovery and demobilization.

A. OVERVIEW

This section describes the command and control structures under which the NJDOH operates during an emergency. Command and control for the agency is broken into two (2) distinct yet interrelated systems:

Externally, the Department operates under the State Emergency Operations Plan (SEOP) under the leadership of the Office of Emergency Management (OEM) as the Emergency Support Function 8 (Public Health and Medical Services) lead state agency;

Internally, the Department uses ICS, an incident command and management structure which facilitates and streamlines emergency response during times of a public health emergency.

The ICS is headed by an Incident Commander (IC) who oversees the following eight (8) Sections:

1. Operations
2. Planning
3. Logistics
4. Administration/Finance
5. Epidemiology/Surveillance
6. Laboratories
7. Public Information
8. State Agency Liaison

An ICS organizational chart is shown below. Each of these functional Sections is led by an ICS Section Chief who is a senior staff member from their respective division/program. For each ICS Section, an organizational structure has been developed that designates emergency-specific core job functions and responsibilities specified in Job Action Sheets.

During emergencies, the primary command and control location for NJDOH operations is the Health Command Center (HCC). Use of the HCC enhances the Department's ability to respond to an emergency event and sustain its critical public health and healthcare functions. The HCC is designed to provide a secure, well-equipped workspace for the NJDOH ICS leadership during an emergency activation.

B. ROLES AND RESPONSIBILITIES

NJDOH will activate the ICS and implement pandemic plan operations from the HCC under the leadership of the designated Incident Commander (IC) who is responsible for incident management and coordination with the other responding Departments and Agencies as defined in the State's Emergency Operations Plan.

Each ICS Section is responsible for performing its specific functional role in accordance with the incident action plan and the directives of the IC.

ICS Section Heads will regularly convene under the leadership of the IC at the HCC.

The IC and ICS Section Heads will develop an Incident Action Plan and define Operational Periods to guide NJDOH response to the incident, making adjustments as the event unfolds.

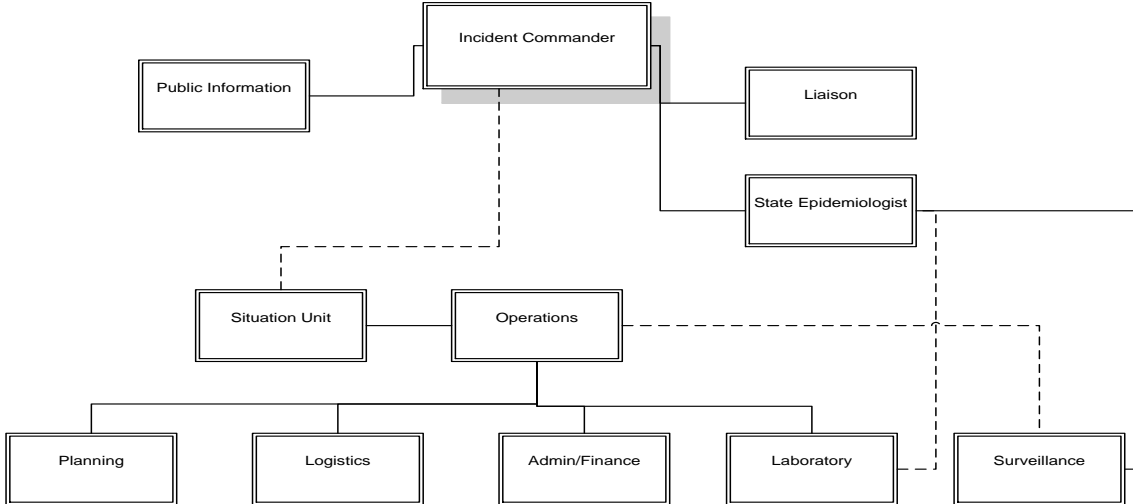
C. PLANNING

Understanding that emergency operations evolve over time, from response and mobilization to recovery, the ICS Section Heads are actively involved in agency-wide emergency preparedness and planning efforts, development of their ICS Section's organizational structure, and ongoing refinements to NJDOH ICS.

D. EXERCISES

The Department's Incident Command structure will be exercised on a regular basis utilizing realistic scenarios to include a pandemic influenza.

NJ DOH Pandemic Influenza Response: ICS Organization Chart



- Operations: Responsible for the coordination of the activities of the units assigned to the response.
Insure that the Incident Action Plan is adhered to.
- Situation Unit: Responsible for the production and distribution of briefing documents and requests for information generated by the Incident Commander or Commissioner.
- Planning: Responsible for the development of the Incident Action Plan.
- Logistics: Responsible for the management and allocation of supplies, equipment, and resources.
- Admin/Finance: Responsible for procurement and financial issues related to the response/Incident Action Plan

2. SURVEILLANCE

A. ACTION LEVEL – PLAN

Action Item 1: With collaboration from stakeholders, integrate and maintain a statewide surveillance/reporting system for tracking influenza related morbidity/mortality.

[See "Virologic and Disease Surveillance for Influenza" (Surveillance Appendix 1)]

- 1.1 The NJDOH Communicable Disease Service (CDS) Influenza Surveillance Program (ISP) and stakeholders participate in the Centers for Disease Control and Prevention (CDC) U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet). [See "Memo to Recruit Providers for Outpatient Influenza-like Illness Surveillance Network (Surveillance Appendix 1, Attachment B)]
- 1.2 ISP and stakeholders conduct Influenza-like Illness (ILI) Surveillance with schools, long term care facilities (LTCFs), and hospital emergency departments. [See "Memo for Influenza-Like Illness Surveillance" (Surveillance Appendix 1, Attachment C)]
- 1.3 ISP monitors 122 City Mortality Reporting System.
- 1.4 ISP and stakeholders conduct pediatric influenza surveillance for influenza associated deaths and severe illness. [See "Memo for Pediatric Influenza Surveillance" (Surveillance Appendix 1, Attachment D)]
- 1.5 ISP monitors reports of nosocomial respiratory outbreaks.
- 1.6 ISP maintains current reporting with regard to the unexplained death program. [See "Unexplained Deaths Project" (Surveillance Appendix 1, Attachment F)]
- 1.7 ISP and regional epidemiologist monitor other surveillance systems (e.g., respiratory syncytial virus surveillance, Communicable Disease Reporting and Surveillance System (CDRSS), emergency department visits/admissions/ILI, EpiCenter) for respiratory illness which can assist in verification of influenza surveillance data.
- 1.8 ISP develops reporting protocols by which state/county medical examiners can report unusual deaths possibly due to an infectious cause to state/local health officials.
- 1.9 ISP works with Public Health and Environmental Laboratories (PHEL) staff to obtain clinical samples for testing.

Action Item 2: With stakeholders, perform year-round analysis of influenza surveillance data on a weekly basis and share information. [See "Virologic and Disease Surveillance for Influenza" (Surveillance Appendix 1)]

- 2.1 ISP determines influenza activity level in the state using Council of State and Territorial Epidemiologists (CSTE) guidelines.

2.2 ISP develops a weekly report which summarizes information obtained by influenza surveillance. [See “Weekly Influenza Report” (Surveillance Appendix 1, Attachment E)]

2.3 ISP distributes the report on a weekly basis to stakeholders via NJLINCS and web-posting.

Action Item 3: Develop guidelines for stakeholders required to report suspect human cases infected with a novel influenza virus. [See “Reporting of Cases of Severe Respiratory Illness of Unusual Presentation or Unknown Cause” (Surveillance Appendix 2)]

3.1 Using the World Health Organization (WHO) and CDC guidance, if available, ISP works with clinical staff to develop written guidelines which include information on:

- a. identification of suspect cases;
- b. risk factors that might be associated with the circulating novel influenza virus;
- c. collection tool (e.g., form, database); and
- d. reporting mechanism (e.g., fax, database).

3.2 ISP distributes Surveillance Appendix 2 and the developed guidelines to stakeholders involved in reporting (e.g., local health departments [LHDs], health care providers, infection control professionals) through LINCS or other acceptable mechanism.

3.3 Cases meeting CDC case definition for novel influenza will be reported by NJDOH to CDC via appropriate reporting mechanisms.

Action Item 4: Develop reporting protocol for animals potentially infected with novel influenza virus. [See “Role of NJDOH in Animal Surveillance for Novel Influenza” (Surveillance Appendix 3)]

4.1 ISP together with the NJ Department of Environmental Protection (NJDEP), the NJ Department of Agriculture (NJDA), and the U.S. Department of Agriculture (USDA) develops and implements reporting protocols by which reports of suspicious morbidity/mortality in animals (domestic or wild) are reported to the appropriate agency (NJDEP, NJDA, USDA).

4.2 ISP and other agencies as described above develops and implements a communication tool by which information regarding suspicious animals is shared among agencies involved.

4.3 ISP and other agencies as described above develops and implements notification protocols among the agencies regarding reporting animals which test positive for novel virus.

Action Item 5: Develop protocol to identify and report individuals who routinely handle birds and bird products, and may be exposed to animals potentially infected with novel influenza virus. [See “Animal Exposure Guide” (Surveillance Appendix 4)] NOTE: Exposure is primarily through contact with animals smuggled or transported illegally to NJ.

5.1 ISP works with USDA/Food Safety and Inspection Service (FSIS)/NJDA/NJDEP/CDC Division of Global Migration and Quarantine (DGMQ) to identify individuals exposed to animals potentially infected with a novel influenza virus.

- 5.2 ISP makes Appendix 4 available to LHDs to provide guidance to individuals who have been identified as being exposed to animals potentially infected with a novel influenza virus.
- 5.3 ISP along with other agencies identified above develops reporting mechanisms for agencies to refer individuals in contact with suspect animals to local/state public health agencies.
- 5.4 ISP works with clinical staff and local health agencies to collect and monitor information necessary on individuals exposed to potentially infected animals. These assumptions are: clinical staff provides guidance on actions taken with these individuals, temperature checks, clinical evaluation, and investigational follow-up.

Action Item 6: Create animal/poultry worker surveillance program to identify exposure to animals potentially infected with novel influenza virus. [See “Animal Worker Surveillance for Novel Influenza” (Surveillance Appendix 5)] To be implemented in Surveillance “Action Level – Prepare” section.

- 6.1 ISP develops a plan with USDA/NJDA/NJDEP, in consultation with occupational health and clinical staff, to implement an animal/poultry worker surveillance program.

NOTE: *This includes public and private workers.*

Action Item 7: Comply with reporting procedures of CDC’s DGMQ station at Newark Liberty International Airport.

- 7.1 ISP follows DGMQ protocols for reporting possible case/contacts of ill travelers.

Action Item 8: Develop a method to communicate relevant case/outbreak information. [See “Communication Data” (Surveillance Appendix 6)]

- 8.1 CDS staff works with NJDOH Office of Communications (OCOM) to develop data table for communicating relevant case/outbreak information. [See “Communication Data Table” (Surveillance Appendix 6, Attachment A)]
- 8.2 CDS and OCOM to define timeline in which information will be shared.
- 8.3 CDS and OCOM to develop contact list and mechanism by which data table will be shared.

Action Item 9: Develop check lists, command structure and outbreak management protocols by which the ISP operates under CDS Incident Command System (ICS) structure. [See “Outbreak Response Structure - Influenza Surveillance” (Surveillance Appendix 7)] To be implemented in Surveillance “Action Level – Respond – 1” section.

- 9.1 ISP develops command, control and management procedures by which ISP will operate.

B. ACTION LEVEL – PREPARE

Action Item 1: Identify persons exposed to animals infected with novel influenza virus. [See “Animal Worker Surveillance for Novel Influenza” (Surveillance Appendix 5)]

- 1.1 ISP implements the animal/poultry worker surveillance program developed in Surveillance “Action Level – Plan” section.

NOTE: *This includes public and private workers.*

Action Item 2: Initiate “Enhanced Passive Surveillance for Novel Strains of Influenza” (Surveillance Appendix 9).

- 2.1 Using WHO and CDC guidance, ISP and clinical staff develop clinical and epidemiologic criteria for case definition.
- 2.2 ISP along with clinical, medical and lab technical staff develops guidelines on patient management, infection control, laboratory testing, and epidemiology.
- 2.3 ISP develops reporting mechanism (i.e., forms, database) and protocols to capture reported cases.
- 2.4 ISP disseminates via NJLINCS, or other appropriate mechanism, technical documents containing clinical, epidemiology and reporting information for stakeholders responsible for reporting (i.e., LHDs, health care providers, infection control professionals).

NOTE: *The template for guidelines, forms and reporting mechanisms can be developed, but specific guidelines may be revised as clinical information evolves.*

Action Item 3: Work with clinical staff to develop contact tracing guidelines for identification and monitoring contacts of novel influenza virus cases. [See “Contact Tracing” (Surveillance Appendix 10)] To be implemented in Surveillance “Action Level – Respond – 1” section.

- 3.1 Using WHO and CDC guidance, if available, ISP works with clinical staff to define “contact.”
- 3.2 ISP works with CDS staff and external stakeholders (i.e., LHDs, LINCS Agencies, home health and hospice agencies, hospitals, healthcare providers) on guidelines for monitoring and collecting contact information (finalize draft form and protocol development).
- 3.3 ISP develops mechanism for local health agencies to report contacts of cases (might be contained within case report or separate) to regional epidemiologist or ISP.

Action Item 4: Evaluate seasonal influenza surveillance case definition and alter it based on clinical/epidemiology of novel virus.

NOTE: *Depending on characteristics of the novel influenza virus, the current seasonal influenza case definition may need to be altered to ensure information is being collected for novel influenza virus and seasonal influenza virus.*

- 4.1 ISP evaluates the current case definition.

- 4.2 ISP and clinical staff use WHO and CDC guidance to make alterations to the case definition, as necessary.

NOTE: *Some cases of H5N1, primarily children, have presented with gastrointestinal illness and fever with little or no respiratory symptoms.*

- 4.3 ISP ensures distribution of case definition to stakeholder via LINCS or other appropriate mechanism.

Action Item 5: Work with local health agencies and facilities providing acute care to develop mechanism and reporting protocol to capture case counts of patients infected with novel influenza. [See “Tracking Case Counts” (Surveillance Appendix 11)] To be implemented in Surveillance “Action Level – Respond – 2” section.

- 5.1 ISP works with healthcare planning staff to identify reporting entities by determining where patients are most likely to be evaluated medically (i.e., acute care facilities, triage centers, FQHCs LTCFs and set up reporting structure specific to these entities.
- 5.2 ISP works with clinical staff to determine the case definition by which these entities will be reporting (i.e., all cases meeting clinical criteria, positive laboratory test).
- 5.3 ISP develops mechanism and reporting protocol to capture case counts of patients from these entities (most likely use CDRSS ILI module to collect data - decision will be based on what information CDC is asking NJDOH to collect).
- 5.4 Case counts from reporting entities are collected by local health authorities and reported to the regional epidemiologist responsible for that jurisdiction.
- 5.5 The regional epidemiologist collects case count and reports county/city specific case count to NJDOH.
- 5.6 ISP relays case counts through NJDOH chain of command.
- 5.7 ISP notifies CDC of statewide case counts.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Implement communications plan with the OCOM.

- 1.1 ISP implements the “Communication Data Table” (Surveillance Appendix 6 - Attachment A).

Action Item 2: Implement surveillance to detect contacts of novel influenza cases.

- 2.1 ISP notifies external stakeholders (i.e., LHDs, LINCS Agencies, home health and hospice agencies, hospitals, HCPs), via LINCS or other appropriate mechanism, to implement contact tracing developed in “Prepare section”. [See “Contact Tracing” (Surveillance Appendix 10)]

Action Item 3: Implement command and control.

- 3.1 ISP implements command and control procedures for epidemiology and surveillance developed in Surveillance “Action Level – Plan” section, Action Item 9. [See “Outbreak Response Structure - Influenza Surveillance” (Surveillance Appendix 7)]

Action Item 4: Evaluate and prioritize surveillance mechanisms to determine the most effective ones to use during staff shortages. To be implemented in Surveillance “Action Level – Respond – 2” section.

- 4.1. ISP determines which surveillance systems are providing the most information with the least resources.
- 4.2 ISP develops prioritized list to determine which surveillance systems will be eliminated as staff resources decline.
- 4.3 Based upon testing capacity of PHEL, ISP develops and shares the plan for submission of specimens with stakeholders.

Action Item 5: Ensure accurate mortality reporting.

- 5.1 ISP works with Medical Examiner’s Office and Office of Vital Statistics to ensure providers are accurately recording influenza on the death certificate.

Action Item 6: Work with LHDs and acute care facilities to obtain data related to outcomes of influenza patients.

- 6.1 ISP develops and implements electronic reporting on influenza patients from acute care facilities. [See “Epidemiologic Studies” (Surveillance Appendix 8)]
- 6.2 ISP collects and analyzes data, in conjunction with LHDs.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: With local health authorities, evaluate the use of contact tracing.

- 1.1 ISP evaluates the effectiveness of contact tracing implemented in Surveillance “Action Level – Respond – 1” section to determine when contact tracing should be discontinued. Considerations include whether there is sufficient:
- Information regarding transmission
 - Information regarding geographic dispersion, and
 - LHD personnel.

Action Item 2: Eliminate surveillance systems that are time-and resource-intensive.

- 2.1 According to priority list developed in Surveillance “Action Level – Respond – 1” section, ISP directs reporting entities to begin to eliminate surveillance systems.

Action Item 3: Implement Tracking of Case Counts.

3.1 ISP directs reporting entities to implement the mechanism and reporting.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize response activities and return to normal operations.

Action Item 2: Review Surveillance section and update as appropriate.

Action Item 3: Instruct local entities to conduct medical chart review (clinical, epidemiological, virologic) on subset of patients infected with novel influenza virus. [See “Epidemiologic Studies” (Surveillance Appendix 8)]

3.1 ISP and clinical staff develop a mechanism for selection of patients whose charts will be reviewed.

3.2 ISP and clinical staff develop a medical chart review form requesting pertinent information.

3.3 With external partners, ISP develops a mechanism for local entities to report finding of medical chart review.

3.4 ISP develops an analysis tool and a mechanism for reporting findings back to health care providers.

3. LABORATORY DIAGNOSTICS

A. ACTION LEVEL – PLAN

Action Item 1: Integrate and maintain statewide laboratory surveillance/reporting system in New Jersey.

- 1.1 Virology performs confirmatory testing to determine type and subtype of positive Influenza Rapid Antigen test specimens from sentinel hospital-based laboratories and health care providers submitted through CDS' Influenza Surveillance Program (ISP). [See "Virologic Surveillance for Influenza" (Laboratory Diagnostics Appendix 1)]
- 1.2 Virology submits specimens to CDC for Influenza strain identification according to the guidelines provided in the United States Department of Health and Human Services' (HHS) "Pandemic Influenza Plan Supplement 2: Laboratory Diagnostics". Refer to <http://www.hhs.gov/pandemicflu/plan/sup2.html>.

Routine surveillance specimens are submitted according to guidance provided in "The 2006-2007 WHO Influenza Reagent Kit for Identification of Influenza Isolates, Section V. Shipment of Isolates, Guidelines."

- 1.3 Virology participates in World Health Organization (WHO)/ National Respiratory and Enteric Virus Surveillance System global surveillance program. Refer to <http://www.who.int/csr/disease/influenza/surveillance/en/index.html>.
- 1.4 Virology provides the ISP and stakeholders (sentinel hospital-based laboratories and health care providers) with test information and appropriate forms for clinicians and laboratories regarding proper specimen handling and transport of influenza specimens. [See "NJDOH Instructions for Collection, Testing and Shipping of Influenza Specimens" (Laboratory Diagnostics Appendix 2)]
- 1.5 Patient specimens that screen positive for influenza are shipped as Biological Substances, Category B according to Department of Transportation, 49 Code of Federal Regulations (CFR), Parts 171, 172, 173 and 175, and International Air Transport Association requirements. Refer to http://a257.g.akamaitech.net/7/257/2422/13nov20061500/edocket.access.gpo.gov/cfr_2006/ocqtr/pdf/49cfr173.199.pdf

Action Item 2: Adopt protocols put forth by CDC/Association of Public Health Laboratories (APHL) regarding testing of novel influenza viruses and ensure cross-training of staff in these protocols. (Protocols on file with Virology)

- 2.1 Virology ensures that Public Health and Environmental Laboratories (PHEL) staff is trained to perform the level of confirmatory testing recommended by CDC/APHL for novel influenza viruses. Two tests are recommended; Virology uses the Food and Drug Administration-cleared Laboratory Response Network (LRN) assay to perform this testing.

- 2.2 Virology develops and implements cross-training procedures to assist with surge capacity and business continuity. [See “PHEL Cross-Training Procedures for Novel Influenza Testing” (Laboratory Diagnostics Appendix 3)]

Action Item 3: Ensure that protocols for receiving and testing specimens from possible cases infected with a novel virus and protocols to communicate laboratory findings are in place.

- 3.1 Virology works with clinical/surveillance/laboratory staff to develop protocols as follows:

- Accepting specimens at PHEL for additional testing to rule out novel influenza virus.
- Specimens submitted to the PHEL for testing for a novel influenza virus are accessioned by the staff of the Specimen Receiving Laboratory located in the Laboratory Building of PHEL Room 216 according to SOP # PHLS-SR-6, “Diagnostic Specimen Receipt and Processing.” Specimen data is entered into the PHEL Laboratory Information Management System (Harvest) and the appropriate test is ordered for influenza. These specimens are referred to the Molecular Lab of the Virology Program. For specimens submitted after normal work hours, on weekends or holidays, specimen testing may occur in advance of accessioning. Whatever the timeframe, testing needs to commence as quickly as possible. Appropriate staff are contacted by the Virology Program Manager or Laboratory Director (or designee) and instructed on how to proceed with testing.
- Testing procedures at PHEL for novel influenza viruses.

To rule in or rule out influenza A/H5, PHEL laboratorians follow protocols provided by the LRN (See 2.1 above) entitled: Procedure for the Identification of Influenza A/H5. Staff continues to monitor this procedure to determine when it is revised and to ensure that the latest revision is used. Specimens that meet the criteria as presumptive positives are forwarded to the CDC. Contact information for the CDC can be found within the LRN protocol noted above entitled: Detection of Influenza A/H5 by Fluoregenic 5’ Nuclease Assay Using the ABI 7000 sequence Detection System (7. Reporting Action). The same contact information can be found on the emergency phone contact tree discussed below.

- Notification protocols for reporting of the specimens (both internal and external). A phone tree has been created to communicate results of novel influenza testing both internally and externally to the CDC. This exists on the hard drive of the Virology Program Manager at P\mydocs\AVIAN or NOVEL FLU. In this folder the contact tree exists as an Excel file (Emergency Contact Tree.xls).
- 3.2 PHEL’s Laboratory Outreach Program (LOP) communicates the protocols for specimen receipt, testing, and reporting to submitters using the LINCS and the LRN. LOP maintains databases for Laboratory Medical Directors, Laboratory Administrative Directors, and Microbiology Supervisors.

These list serves are updated biannually and shared with the NJDOH and LINCS administrative staff. LOP maintains a listserv of LRN members that can be used to communicate directly with laboratories as the need arises.

- 3.3 Virology posts specimen collection, shipping and handling protocols on the NJDOH web site at www.njflupandemic.gov.

Action Item 4: Assess equipment and supplies (e.g., testing and Personal Protective Equipment - PPE) needed to process a large number of specimens.

- 4.1 Virology identifies primary and secondary vendors to provide equipment and supplies. [See "Supply List" (Laboratory Diagnostics Appendix 4)] The number of specimens that need to be tested is determined by the CDS, based on the epidemiology of the disease at the time of the pandemic. During this timeframe, Virology attempts to maintain a minimum of a four week inventory.
- 4.2 Virology acquires, in advance, equipment and supplies that do not have limited shelf life.
- 4.3 Virology calls other sources of backup equipment and supplies (i.e., CDC, other labs) that may be available to avoid shortages.

Action Item 5: Build partnerships with health care providers and clinical laboratories.

- 5.1 LOP maintains partnerships with 67 New Jersey clinical microbiology laboratories that are considered part of the LRN and 30 clinical laboratories that provide basic LRN functions. LOP does this through the maintenance of contact databases, regular email correspondence, emergency preparedness training and inspections, and tabletop and full scale exercises.
- 5.2 LOP establishes and convenes a PHEL Laboratory Influenza Preparedness Task Force to assess and address on-going operational needs (e.g., surge capacity, training, resources, laboratory protocols). Members represent LOP's 67 clinical microbiology and 30 clinical laboratory partners.

Action Item 6: Work with the NJDOH Human Resources Safety Officer to establish and implement a worker surveillance program for PHEL staff that may be exposed to novel influenza viruses.

- 6.1 PHEL identifies laboratory tasks that put staff at risk for exposure to novel influenza virus.
- 6.2 PHEL, with the NJDOH Human Resources Safety Officer, develops a program for monitoring PHEL staff that performs the tasks identified in 6.1 above for illness.
- 6.3 PHEL, in conjunction with the NJDOH Human Resources Safety Officer, implements the Surveillance Protocol for PHEL Staff.

Action Item 7: Develop a list of all PHEL staff by job function so that appropriate personnel can be offered vaccine when vaccine becomes available.

B. ACTION LEVEL – PREPARE

Action Item 1: Review and modify activities as appropriate to reflect changes in laboratory protocols, situation and guidance documents.

Action Item 2: Determine the number of specimens to be processed to conduct virologic surveillance as resources decrease.

2.1 Virology and PHEL management evaluate resources (human and supplies) available to process specimens and estimates the number of specimens that can be safely processed in a week.

2.2 Virology notifies the ISP as to the number of specimens that can be processed.

Action Item 3: Develop a surge capacity plan for specimen submission.

3.1 PHEL management, based on the number of specimens to be processed develops a surge capacity plan.

3.2 PHEL management, with the ISP, develops a mechanism for decreasing daily intake of specimens.

3.3 Virology, with the ISP, provides guidance to submitters describing:

- which specimens PHEL will be requesting as the outbreak evolves;
- how many specimens each facility will be required to submit; and
- the time-frame for submission of specimens (e.g., Northeast hospitals submit specimens on Monday).

3.4 PHEL works with their stakeholders to develop a transportation mechanism to receive specimens in a timely manner based on the plan described above. This could include the use of the current NJDOH courier system, commercial carrier, local police and/or law enforcement.

Action Item 4: Develop a surge capacity plan to scale back or eliminate non-essential public health lab services. [See “Surge Capacity Plan for Eliminating Non-Essential Lab Services” (Laboratory Diagnostics Appendix 5)]

4.1 The Director of PHEL’s Public Health Laboratory Services creates a list of all laboratory services provided and develops a mechanism by which each is deemed essential or not. The Director works with the PHEL Assistant Commissioner to finalize the list.

4.2 PHEL management works with the ISP to develop a plan to eliminate services based on essential status and available resources.

4.3 PHEL management creates a plan to test specimens “Between Waves” that are received during the pandemic but not tested due to limitations in staff resources.

Action Item 5: Develop a retention plan that details the length of time specimens are held before they are discarded.

- 5.1 PHEL management develops a plan detailing how to store specimens that are received but not tested and the priority order for testing them. [See “QC Specimen Storage Requirements for Specimens Received but not Tested” (Laboratory Diagnostics Appendix 6)]
- 5.2 PHEL management develops a plan detailing how long to store specimens that have already been tested. [See “QC Specimen Storage Requirements for Specimens already Tested” (Laboratory Diagnostics Appendix 7)]
- 5.3 PHEL management develops a plan for safe disposal of specimens.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Review and modify activities as appropriate to reflect changes in laboratory protocols, situation and guidance documents.

- 1.1 PHEL receives from ISP the plan for submission of specimens, based upon testing capacity.

Action Item 2: Implement surge capacity plans developed in Laboratory Diagnostics “Action Level – Prepare” section.

- 2.1 Using LINCIS and the LRN listserv, PHEL notifies submitters that sampling is being limited.
- 2.2 PHEL implements surge capacity plans for specimen receipt and retention.
- 2.3 PHEL management implements the plan for elimination of non-essential lab services. [See “Surge Capacity Plan for Eliminating Non-Essential Lab Services” (Laboratory Diagnostics Appendix 5)]

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Review and modify activities as appropriate to reflect changes in laboratory protocols, situation and guidance documents.

- 1.1 Select Agent Considerations:
 - The Select Agent Regulation, in its various forms, includes a list of agents which are believed to represent the highest threats to public health. The list includes (1) Reconstructed replication competent forms of the 1918 pandemic Influenza virus containing any portion of the coding regions of all eight gene segments (covered under 42 CFR Part 73); and (2) Avian Influenza virus (H5:N1) (covered under 9 CFR 121). The only way a novel influenza virus would be considered a Select Agent is if it falls under either HHS-CDC-DSAT or USDA-APHIS rules or if the rules are amended to include it. These rules may be amended if a novel Influenza virus strain demonstrates significant morbidity and mortality. PHEL will maintain preparedness for all Influenza virus types and will update its standard operating procedures to reflect the possibility

that a novel pandemic strain may be classified as a Select Agent by either HHS-CDC-DSAT or USDA-APHIS.

- PHEL utilizes state-of-the-art technology to rapidly identify and characterize Influenza virus strains. These efforts are conducted in collaboration with the NJDOH Communicable Disease Service (CDS). PHEL takes advantage of the Influenza Reagent Resource (<http://www.influenzareagentresource.org/>) and implements standard laboratory protocols. The Roche MagNA Pure LC & MagNA Pure Compact work stations and Qiagen BioRobot platforms are available to isolate nucleic acids in an automated, high-throughput format. The FDA-approved ABI 7500 Dx Real-time PCR instrument is used to amplify, identify and characterize Influenza virus strains. BSL-2+ and BSL-3 laboratory units are available for Influenza virus testing.
- Influenza A virus causes a significant level of morbidity and mortality, with seasonal epidemics resulting in three to five million severe cases per year worldwide. Two classes of drugs are available to treat influenza infections, M2 blockers (adamantanes; including amantadine and rimantadine) and neuraminidase inhibitors (NAIs; including oseltamivir and zanamivir). Influenza viruses that are resistant to these drugs can emerge via genome mutation or recombination. If widespread, these viruses pose a significant public health threat, as these viruses are not susceptible to the available drugs. Extensive surveillance of specific viral mutations associated with antiviral drug resistance is necessary to detect new resistant strains, determine new trends in drug-resistant viral spread, and make clinical recommendations for drug use. Multiple methods can be used to detect these mutations, but pyrosequencing has recently been recommended as it is able to accurately quantify single nucleotide polymorphisms (SNPs), is easy to interpret, and can be used to detect multiple mutations within the same region of the viral genome. PHEL is collaborating with the CDC to expand antiviral resistance surveillance to the Mid-Atlantic region. A Qiagen PyroMark Q96ID system has been purchased.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Test stored specimens according to the “Between Waves” plan. See Laboratory Diagnostics “Action Level – Prepare” section.

Action Item 2: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Assess performance and develops modifications as required.

1.1 Review the After Action Report/Improvement Plan and revise the Laboratory Diagnostics section as appropriate.

Action Item 2: Assess and restock supply inventory.

Action Item 3: Assume routine operations until the next wave.

4. HEALTHCARE PLANNING

A. ACTION LEVEL – PLAN

Action Item 1: Facilitate healthcare planning for pandemic influenza.

NOTE: For the purposes of this document, “healthcare entities” refers to hospitals, long-term care facilities, home health agencies, hospice agencies, emergency medical services, primary care centers (including Federally Qualified Health Centers [FQHCs]), and private health professionals.

1.1 NJDOH Public Health Infrastructure, Laboratories and Emergency Preparedness (PHILEP) and the influenza advisory group or equivalent, advise healthcare entities to engage in influenza pandemic planning:

- Advise healthcare entity administrators to devote appropriate resources to pandemic planning
- Encourage and provide assistance to write comprehensive, facility-specific healthcare pandemic influenza plans utilizing appropriate guidance documents below. These plans should be consistent with the National Incident Management System:
 - “Influenza Pandemic Plan Guide for Healthcare Facilities” (Healthcare Planning Appendix 1).
 - “Influenza Surge Capacity Guidance for General Hospitals” (Healthcare Planning Appendix 2).
 - “Pandemic Preparedness Planning Template for Federally Qualified Health Centers” (Healthcare Planning Appendix 3).
 - American Association of Blood Banks Task Force on Pandemic Influenza provisions for the management of the blood supply during a pandemic can be found at www.aabb.org.
- Advise healthcare entities to develop written agreements with other segments of the healthcare, home health, hospice and LTC organizations and outside agencies to ensure coordination of resources during an influenza pandemic
- Advise healthcare associations such as New Jersey Hospital Association, New Jersey Primary Care Association, Health Care Association of New Jersey, New Jersey Association Leading Age and the Home Care Association of New Jersey to support their members’ healthcare planning efforts related to pandemic influenza including issues related to continuity of operations
- Advise healthcare entities to identify staff members who will keep abreast of information released regarding Pandemic Influenza by local, state, federal or world health agencies in order to ensure timely activation of the entities’ influenza pandemic plans.

B. ACTION LEVEL – PREPARE

Action Item 1: Resolve obstacles to healthcare planning; PHILEP may consult with the NJ Office of Homeland Security & Preparedness (NJOHSP) and the NJ Department of Law and Public Safety.

- 1.1 As issues are resolved, this plan will be updated and healthcare partners advised. Issues to be addressed include, but are not limited to:
- Altered standards of care necessary when healthcare resources are limited
 - Ethical issues associated with the allocation of limited resources
 - Liability issues faced by healthcare entities when altering usual standards of care
 - Waiving of State and Federal health mandates such as the Emergency Medical Treatment and Labor Act
 - Payment for healthcare entities rendering care during a public health emergency if patients are directed to seek care from out-of-network providers
 - Command and control of health care resources.
- 1.2 PHILEP ensures that a communication information technology infrastructure exists to facilitate timely collection, dissemination and tracking of information and resources within the healthcare sector and with outside partners including, but not limited to:
- PHILEP Office of Policy and PHILEP Information Technology Program ensure that NJLINCS/Health Alert Network (HAN) is operational to disseminate information to key public health and healthcare partners
 - Communicable Disease Service (CDS) and the NJDOH Office of Information Technology Services ensure that the Communicable Disease Reporting and Surveillance System (CDRSS) is operational to collect information necessary for disease surveillance and management
 - PHILEP Information Technology Program ensure that Hippocrates software is operational to enable situational awareness and the collection of information regarding healthcare resources
 - PHILEP Medical Reserve Corps (MRC) and the PHILEP Information Technology Program ensure that the MRC/Emergency System for Advance Registration of Volunteer Health Professionals (ESAR-VHP) Registry (Emergency Health Care Provider Registry) is operational to ensure that volunteers can be mobilized during a pandemic.
- 1.3 PHILEP Assistant Commissioner and State Epidemiologist ensure that appropriate call centers are available during a pandemic for members of the public and healthcare provider communities to receive up-to-date information. Call centers include, but are not limited to, the CDS Emergency Communication Center (ECC) which will serve as a source of information for public health and healthcare professionals and the PHILEP Public Call Center (PCC), which will provide information to the public and triage individuals seeking health care to appropriate facilities.

Action Item 2: Support training and exercises related to the healthcare response to an influenza pandemic.

- 2.1 PHILEP will notify healthcare entities on exercises and drills sponsored by NJDOH, local public health agencies, and other sectors involved in emergency response.

- 2.2 PHILEP will advise and encourage healthcare entities to train appropriate staff members in the National Incident Management System and the Incident Command System.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: PHILEP facilitates the augmentation of healthcare resources to handle a surge in patient volume.

- FQHCs may act as screening, triage and treatment sites for symptomatic individuals during a pandemic in order to decrease the burden on acute care facilities. NJDOH provided a template to the NJ Primary Care Association to be used by FQHCs for developing plans which incorporate this role.
 - PHILEP facilitates the identification of alternate care sites and work with stakeholders to develop policies and procedures regarding these facilities. The state-owned Western Shelter Gatekeeper System Modular Medical Unit will be used as an alternate care facility and is being outfitted with medical equipment and supplies.
- 1.1 PHILEP has a system in place to facilitate the receipt of available patient care materials (e.g.; pharmaceuticals, ventilators, intravenous fluids, and surgical masks) by healthcare entities from the Strategic State Stockpile and the Strategic National Stockpiles.
- 1.2 PHILEP State Stockpile Program Manager, in consultation with the Medical Director and CDS clinical staff, ensures that items stockpiled include, but are not limited to, antiviral medication, surgical masks, gloves and N-95 respirators.

Action Item 2: Prepare to implement the healthcare sector response to pandemic influenza.

- 2.1 PHILEP and CDS clinical staff, in consultation with the State Epidemiologist, disseminates timely information to healthcare entities regarding the recommended response.
- 2.2 PHILEP encourages healthcare entities to review and update existing influenza pandemic plans.
- 2.3 PHILEP encourages healthcare and public health entities to provide just-in-time training to volunteers and staff to expand and diversify the workforce. For instance, hospital administrators would be provided training for direct patient care, and MRC volunteers would receive training on infection control and personal protective equipment.
- 2.4 PHILEP assesses the status of healthcare resources and, in conjunction with CDS epidemiology staff, assess disease incidence and prevalence using existing infrastructure. This infrastructure includes, but is not limited to:
- Regional Medical Coordination Centers (MCCs) and Health Command Center (HCC) staff who will use Hippocrates to provide situational awareness and to collect information regarding healthcare resources
 - The MRC/ESAR-VHP Registry Emergency Health Care Provider Registry is used to ensure that volunteers are available for training and mobilization during a pandemic

- CDS epidemiology staff performs disease surveillance using multiple data sources as described in the Surveillance Section.
- 2.5 PHILEP Assistant Commissioner and State Epidemiologist prepare call centers for the public, and healthcare and public health providers. Call centers include, but are not limited to, the CDS Emergency Communications Center (ECC) to serve as a source of information for public health and healthcare professionals and the PHILEP public call center (PCC) to provide information to the public and triage individuals seeking health care to appropriate facilities.
- 2.6 PHILEP Stockpile Program Manager inventories and optimizes assets. The Stockpile Program staff ensures that servicing for all warehouse generators and equipment is up-to-date.
- 2.7 PHILEP, in conjunction with CDS, meets with the influenza advisory group or equivalent, as necessary, to review and update recommendations regarding altered levels of care, the waiver of state regulations, etc.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Review and update plans to handle a surge in patient volume, including:

- The use of FQHCs as screening, triage and treatment sites for symptomatic individuals during a pandemic in order to decrease the burden on acute care facilities
- The use of identified alternate care sites.

Action Item 2: Activate the healthcare sector response to pandemic influenza.

- 2.1 PHILEP and CDS clinical staff, in consultation with the Deputy Commissioner/State Epidemiologist, disseminates timely information to healthcare entities regarding the recommended response.
- 2.2 PHILEP Assistant Commissioner and State Epidemiologist activate and maintain call centers for the public and public health providers. Call centers include, but are not limited to, the CDS ECC to serve as a source of information for public health and healthcare professionals. PHILEP will provide information to the public and triage individuals seeking health care to appropriate facilities.

Action Item 3: Implement emergency plans for surge capacity.

- 3.1 PHILEP and CDS clinical staff will (based on available epidemiological data):
- Assist healthcare entities with the procurement of resources from the Strategic State Stockpile and the Strategic National Stockpile, if unable to be secured via usual channels (vendors, Office of Emergency Management)
 - Implement the recommendation of the influenza advisory group or equivalent to determine the institution of altered levels of care, the waiver of state regulations as applicable, etc.
 - Activate plans using the FQHCs as screening, triage and treatment centers.

- Activate plans using alternate care sites.
- Advise healthcare entities to provide just-in-time training as needed to support patient care, such as training in the proper use of personal protective equipment.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

Action Item 2: Review and modify activities as appropriate to reflect changes in situation and guidance documents.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize response activities and return to normal operations.

Action Item 2: Review the After Action Report/Improvement Plan and revise the Healthcare Planning section of this plan as appropriate.

5. EMERGENCY MEDICAL SERVICES

A. ACTION LEVEL – PLAN

Action Item 1: Develop Emergency Medical Services (EMS) guidelines for pandemic influenza response.

- 1.1 Maintain State of New Jersey Pandemic Influenza Plan for Emergency Medical Services (NJ Pandemic Influenza Plan for EMS), and update as needed.
- 1.2 Advise County Office of Emergency Management (OEM) EMS Coordinators to participate in pandemic influenza planning.
- 1.3 Advise County OEM EMS Coordinators of information released regarding Pandemic Influenza by local, state, federal or world health agencies in order to ensure timely activation of NJ Pandemic Influenza Plan for EMS.
- 1.4 Work with County OEM EMS Coordinators to identify response capabilities and needs.
- 1.5 Encourage the EMS Community to participate in pandemic, National Incident Management System (NIMS) and Incident Command System (ICS) training and in exercises and drills.
- 1.6 Coordinate pandemic influenza planning with EMS Task Force (EMSTF).

Action Item 2: Establish notification and activation protocols for coordinating EMS response to pandemic influenza.

- 2.1 NJDOH State Communicator will be used by the State EMS Coordinator or the EMSTF Planning Section to provide notification of information released regarding pandemic influenza.

B. ACTION LEVEL – PREPARE

Action Item 1: Prepare to respond to the spread of novel influenza outside or within the United States.

- 1.1 State EMS Coordinator responsibilities:
 - Schedule conference calls and briefings with EMS community as needed
 - Advise County OEM Coordinators to review plans and prepare for deployment
 - Ambulance Strike Teams (AST)
 - Ambulance Task Forces (ATF)
 - EMSTF assets to Regional EMS Staging Areas
 - Communicate EMS actions and preparedness efforts with the NJ Regional Operations Intelligence Center (ROIC) and Health Command Center (HCC)
 - Start E-Team incident with NJ Office of Emergency Management (NJOEM) and update EMS actions/preparedness efforts
 - Identify reporting periods for County EMS Coordinators to provide County E-Team reports.
- 1.2 EMSTF responsibilities:

- Notify and communicate relevant information, such as EMS preparedness efforts from briefings (NJDOH, NJOEM, other) to members via State Communicator
- Request members to post availability for various potential operational periods
- Prepare a shift schedule to staff various areas of operation (HCC, ROIC, etc.) for leadership
- Activate the Planning Section (particularly the Situation Unit) and disseminate situation reports/advisory bulletins as needed
- Pre-identify areas of operation based on current influenza activity within the state and Regional EMS Staging Areas
- Identify EMSTF Logistics, Mass Care, Staging and Communication Resources to deploy to any of these areas of operations
- Identify EMSTF personnel to staff areas of operation
- Consider possible need(s) for request of waiver of operations
- Assure adequate deployment of personal protective equipment (PPE) and just-in-time training for EMSTF personnel (note: fit testing will be required for different brands of N-95 masks).

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Respond to the potential spread of novel influenza in New Jersey.

1.1 State EMS Coordinator responsibilities:

- Schedule conference calls and briefings with EMS community
- Advise County OEM EMS Coordinators to identify personnel for additional deployments of AST/ATF/EMSTF to Regional EMS Staging Areas
- Communicate EMS actions to the ROIC/HCC
- Update E-Team incident (if already created) with NJ OEM and update EMS actions/preparedness efforts
- Update County OEM EMS Coordinators on the reporting periods that they will provide County E-Team EMS activity reports.

1.2 EMSTF responsibilities:

- Participate in all NJDOH conference calls and briefings
- Notify and communicate relevant information, such as EMS preparedness efforts and weather information, from briefings (NJDOH, NJOEM, other) to members
- Start a thread on NJLINCS Discussion Board
- Identify any staffing shortages due to personnel or family illness
- Communicate information through the State Communicator
- Suspend non-essential activities
- Planning Section disseminates situation reports/advisory bulletins as needed.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Respond to the spread of novel influenza in New Jersey.

1.1 State EMS Coordinator responsibilities:

- Schedule additional conference calls and hold briefings as needed
- Communicate EMS actions to the ROIC/HCC.

1.2 EMSTF responsibilities:

- Participate in all NJDOH conference calls and briefings
- Notify and communicate relevant information, such as EMS preparedness efforts and pandemic updates, from briefings (NJDOH, NJOEM, others) to members
- Update threads on the NJLINCS Discussion Board
- Request members to post availability or additional deployments and additional operational periods
- Identify any staffing shortages due to personnel or family illness
- Communicate information through State Communicator
- Update a shift schedule to staff various areas of operation (HCC, ROIC, etc.) for the leadership
- Identify additional areas of operation based upon influenza activity throughout the state and EMS Staging Area(s)
- Identify additional EMSTF Logistics, Mass Care, Staging and Communication Resources to potentially deploy to any of these areas of operation
- Monitor need(s) for request for waiver of regulations
- Review and modify activities as appropriate to reflect changes in situation and guidance documents
- Assure staff dietary and rest needs are met and EMSTF Chaplain services are available.
- Assure decontamination of personnel and equipment is provided
- Consider EMAC requests.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize response activities and return to normal operations.

- 1.1 EMSTF will demobilize and return to normal EMS provision of services upon determination from Unified Command to do so.
- 1.2 Decontamination of personnel will be addressed prior to release from duty.

1.3 EMSTF Planning Section will create Demobilization Plan generated for incident, and will include provisions for:

- Return of issued radios or other equipment
- Return of incident paperwork and unit activity logs
- Tracking of personnel time and equipment usage.

1.4 Use ICS 221 Checkout Forms to track demobilization of all EMS and EMSTF resources.

Action Item 2: Review the After Action Report/Improvement Plan and revise the EMS section as appropriate.

6. INFECTION CONTROL

A. ACTION LEVEL – PLAN

Action Item 1: Develop infection control guidelines for pandemic influenza response.

- 1.1 NJDOH infection control subject matter experts in Public Health Infrastructure Laboratory and Emergency Preparedness (PHILEP) and Public Employees Occupational Safety and Health (PEOSH), in consultation with the Centers for Disease Control and Prevention (CDC) and the Occupational Safety and Health Administration (OSHA), develop infection control guidelines for healthcare entities and non-healthcare entities based upon federal recommendations including, but not limited to “Guidance on Preparing Workplaces for an Influenza Pandemic” (<http://www.osha.gov/Publications/OSHA3327pandemic.pdf>) and “Pandemic Influenza Preparedness and Response Guidance for Healthcare Workers and Healthcare Employers” (http://www.osha.gov/Publications/OSHA_pandemic_health.pdf).
- NJDOH infection control experts developed “Infection Control Guidelines in Healthcare Settings” (Infection Control Appendix 1) for healthcare entities: hospitals, long-term care facilities, home health and hospice agencies, emergency medical services, primary care centers (including Federally Qualified Health Centers [FQHCs], and private health professionals
 - NJDOH infection control experts developed “Infection Control Guidelines in Non-Healthcare Settings” (Infection Control Appendix 2) for non-healthcare entities. Non-healthcare entities include: local and state agencies including public health agencies, private corporations and businesses, schools and universities, and congregate living facilities not considered healthcare entities (e.g., prisons, dormitories, group homes).
- 1.2 Use “Infection Control Guidelines in Non-Healthcare Settings” (Infection Control Appendix 2) and CDC’s “Interim Public Health Guidance for the Use of Facemasks and Respirators in Non-Occupational Community Settings during an Influenza Pandemic” available at: <http://www.flu.gov/planning-preparedness/community/maskguidancecommunity.html>.
- NJDOH Communicable Disease Service (CDS) health educators and Office of Communications (OCOM) staff develop messages and materials for non-healthcare entities and the public.
- 1.3 NJDOH advises healthcare entities to incorporate infection control policies and procedures into pandemic preparedness plans:
- Administrators of healthcare entities ensure that appropriate resources are devoted to infection control activities including planning, implementation and training
 - Healthcare entities integrate infection control policies and procedures into the entities’ written plan for pandemic influenza

- Healthcare entities ensure that staff have access to and are appropriately medically screened and fit-tested for personal protective equipment (PPE)
- Healthcare entities have provisions for “just-in-time” infection control training
- Appropriate staff from healthcare entities keeps abreast of any information released regarding infection control.

This outreach to healthcare entities occurs through established channels:

- Local Information Network and Communications System (LINCS)/Health Alert Network (HAN)
- Healthcare facilities
- Associations
- Professional organizations

1.4 NJDOH advises non-healthcare entities to incorporate infection control policies and procedures into pandemic preparedness plans:

- Administrators of non-healthcare entities ensure that appropriate resources are devoted to infection control activities, including planning, implementation and training
- Non-healthcare entities integrate infection control policies and procedures into the entities’ written plan for pandemic influenza
- Non-healthcare entities ensure that staff have access to and are appropriately medically screened and fit-tested for PPE
- Non-healthcare entities have provisions for “just-in-time” infection control training
- Appropriate staff from non-health care entities stays aware of any information released regarding infection control.

This outreach to non-healthcare entities occurs through:

- LINCS/HAN
- Respective state departments/agencies
- New Jersey Office of Homeland Security & Protection (NJOHSP) sector liaisons

1.5 CDS and PEOSH coordinate with the Department of Agriculture guidance regarding infection control recommendations for animal/poultry workers.

1.6 The NJDOH State Medical Reserve Corps (MRC) Coordinator, in consultation with MRC/ Emergency System for Advance Registration of Volunteer Health Professionals Registry (ESAR-VHP) Advisory Group and PEOSH, ensure the development of infection control guidelines for volunteers enrolled in the MRC/ESAR-VHP program.

Action Item 2: Provide infection control guidelines for pandemic influenza response to healthcare entities, non-healthcare entities and the public.

- 2.1 NJDOH disseminates infection control materials and guidelines to healthcare and non-healthcare entities as well as the public via NJDOH website and:
- Infection Control Guidelines for Healthcare Entities (Infection Control Appendix 1) are disseminated as described in 1.3 above.
 - Infection Control Guidelines for Non-Healthcare Entities (Infection Control Appendix 2) are disseminated as described in 1.4 above.
 - Infection Control Guidelines for the public are disseminated by NJDOH Office of Communications.

B. ACTION LEVEL – PREPARE

Action Item 1: Prepare to respond to the spread of novel influenza outside or within the United States.

- 1.1 NJDOH infection control experts in PHILEP and PEOSH, under the guidance of the State Epidemiologist and in conjunction with the CDC and OSHA, update infection control guidelines based on current epidemiological evidence.
- NJDOH Commissioner or his/her designee arranges for conference calls, as necessary, to keep key stakeholders, such as public health authorities and healthcare entities, abreast of new information regarding infection control to ensure a unified, coordinated response.
- 1.2 NJDOH infection control experts in PHILEP and PEOSH, under the guidance of the State Epidemiologist and in conjunction with CDC and OSHA, advise healthcare entities to:
- Assess and optimize stocks of PPE
 - Optimize infection control practices in healthcare settings
 - Provide “just-in-time” training in infection control and PPE use.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Respond to the potential spread of novel influenza in New Jersey.

- 1.1 NJDOH infection control experts in PHILEP and PEOSH provide continued guidance.
- NJDOH Commissioner or his/her designee arranges conference calls, as necessary, to keep key stakeholders such as public health authorities and healthcare entities abreast of new information regarding infection control to ensure a unified, coordinated response.
 - Issue LINC messages to healthcare and non-healthcare entities reinforcing infection control guidelines.
 - Work with OCOM to provide revised infection control guidance to the public as the pandemic evolves.
- 1.2 NJDOH infection control experts work with the Health Command Center (HCC) to monitor infection control resources statewide (e.g., PPE, environmental cleaning supplies, private rooms). This information is used to develop alternate standards of care for infection control

based on availability of resources. NJDOH then disseminates information on alternate standards of care to:

- Healthcare entities as described in Plan section, Action Item 1, Task 1.3
- Non-healthcare entities as described in Plan section, Action Item 1, Task 1.4
- The public through the OCOM.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Respond to the spread of influenza in New Jersey.

- 1.1 NJDOH infection control experts continue activities from Infection Control “Action Level – Respond – 1” section.
- 1.2 NJDOH infection control experts review and modify activities as appropriate to reflect changes in situation and guidance documents.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize response activities and return to normal operations.

Action Item 2: Review the After Action Report/Improvement Plan and revise the Infection Control section as appropriate.

7. CLINICAL GUIDELINES

NOTE: Because most of the referenced documents are quite long, frequently revised, and are available online, they are not attached to this plan. However, a list of appendices and URLs are provided. As pandemic influenza preparedness evolves or once a pandemic is underway, relevant components of the Clinical Guidelines section of this plan will be revised on an as-needed basis. The NJDOH Communicable Disease Service (CDS) will send updates to healthcare providers (HCPs).

A. ACTION LEVEL – PLAN

Action Item 1: Provide recommendations on influenza prevention and its associated complications.

- 1.1 CDS advises all health-care workers to be vaccinated against influenza annually.
- 1.2 CDS advises HCPs to administer seasonal influenza vaccine to all persons aged six months or older according to the most recent recommendations made by the Advisory Committee on Immunization Practice (ACIP) regarding the prevention and control of influenza. Refer to MMWR - “Influenza ACIP Vaccine Recommendations” available at: <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>.
- 1.3 CDS advises HCPs to administer pneumococcal vaccines to target groups according to the most recent recommendations made by ACIP. Refer to MMWR - “Prevention of Pneumococcal Disease” and MMWR – “Preventing Pneumococcal Disease Among Infants and Young Children.” Both are available at: <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>.
- 1.4 CDS advises HCPs to consider use of antiviral chemoprophylaxis against influenza for individuals belonging to select groups (e.g., individuals at high risk for influenza-associated complications who have not been vaccinated against seasonal influenza, persons who care for high-risk individuals) and to control outbreaks in institutions. Refer to the most recent ACIP recommendations re: the antiviral regimens that should be used for prophylaxis, MMWR - “Prevention and Control of Influenza” available at: <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>.
- 1.5 CDS advises HCPs that depending on antiviral availability, chemoprophylaxis may also be offered to unvaccinated persons (e.g., household contacts of an influenza patient) who wish to avoid influenza illness. HCPs and patients should make this decision on an individual basis. Refer to the most recent ACIP recommendations regarding the antiviral regimens that should be used for prophylaxis available at: <http://www.cdc.gov/flu/professionals/antivirals/>. For specific guidance regarding the use of antiviral drugs as chemoprophylaxis against Highly Pathogenic Avian Influenza A (H5N1) (HPAI H5N1) infection, refer to the World Health Organization’s (WHO) “WHO Rapid Advice Guidelines on Pharmacological Management of Humans Infected with Influenza A (H5N1) Virus” available at: http://whqlibdoc.who.int/hq/2006/WHO_PSM_PAR_2006.6_eng.pdf.

- 1.6 CDS advises HCPs to consult their local or state health department regarding decisions to provide prophylaxis to close contacts (e.g., household members, schoolmates, coworkers, healthcare providers, and fellow passengers if the patient has been traveling) of a suspect novel influenza patient.
- 1.7 CDS clinical staff provides consultation to the Health Care Planning staff regarding items to include in the Strategic State Stockpile (SSS).

B. ACTION LEVEL – PREPARE

Action Item 1: Provide guidelines for detection and reporting of novel influenza cases.

- 1.1 CDS advises HCPs to review/familiarize themselves with the clinical presentation, complications, and the role of laboratory diagnostics associated with seasonal influenza. Refer to “Influenza Symptoms and the Role of Laboratory Diagnostics” available at: <http://www.cdc.gov/flu/professionals/diagnosis/labrolesprocedures.htm>.
- 1.2 CDS advises HCPs to consider novel influenza infection in the differential diagnosis of persons who are: hospitalized patients with severe influenza-like illness (ILI), including pneumonia, who have a travel or occupational risk OR non-hospitalized patients with ILI and with strong epidemiologic suspicion of novel influenza virus exposure (e.g., direct contact with ill poultry in an affected area, or close contact with a known or suspected human case of novel influenza).

***NOTE:** There might be certain persons (i.e., those with high-risk exposures [e.g., a poultry worker from an affected area] or those with atypical symptoms [young children, elderly patients]) in whom novel influenza infection should still be considered even when clinical criteria are not met, as described in “Special Situations and Exceptions to the Clinical Criteria” available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Box 3).*
- 1.3 CDS advises HCPs to evaluate patients with ILI according to guidance published in “Clinical Evaluation of Patients with Influenza-like Illness during the Interpandemic and Pandemic Alert Periods” available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Box 2).
- 1.4 CDS advises HCPs to obtain clinical specimens for novel influenza A testing according to the guidance provided in the “Surveillance” section of this plan, “Enhanced Passive Surveillance for Novel Strains of Influenza” (Surveillance Appendix 9).
- 1.5 CDS advises HCPs to designate one point of contact (e.g., her/himself or an infection control professional) to update public health authorities on the patient’s clinical status, including, but not limited to, response to therapy.
- 1.6 CDS calls upon HCPs to assist public health officials with the identification of potentially exposed contacts of the suspected novel influenza case-patient (especially healthcare workers). They should understand:

- They are obligated to do so according to New Jersey Administrative Code 8:57, 1.4-1.5.
 - NJDOH is authorized to request and receive protected health information from HCPs when such information is requested as part of public health surveillance, investigations, and interventions.
- 1.7 CDS advises HCPs to report adverse reactions to antiviral therapy used in the treatment of a suspect case of novel influenza through MedWatch (Information about reporting through this system is available at: <http://www.fda.gov/medwatch/>).
- 1.8 CDS advises HCPs that adverse reactions related to vaccination should be reported to public health authorities through mechanisms set up to receive such reports (e.g., the Vaccine Adverse Events Reporting System), available at: <http://vaers.hhs.gov/>.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Remind HCPs about protocols for identification, reporting, treatment, and infection control.

- 1.1 CDS, via LINCS, updates HCPs about the status of the novel virus and reminds them of the protocols to follow.

Action Item 2: Detect cases of novel influenza and immediately report them to appropriate public health authorities, along with other information of public health importance related to novel influenza.

Action Item 3: CDS advises HCPs to obtain clinical specimens for novel influenza A testing according to the situation-specific guidance in the “Surveillance” section of this plan.

Action Item 4: Provide recommendations to manage case-patients suspected of being infected with novel influenza appropriately.

- 4.1 CDS advises HCPs suspecting novel influenza infection to immediately implement infection control precautions according to situation-specific guidance in the “Infection Control” section of this plan, “Infection Control Guidelines for Healthcare Entities” (Infection Control Appendix 1).
- 4.2 CDS advises HCPs to evaluate and treat suspect case-patients for whom an alternate diagnosis is not immediately apparent according to the algorithm, “Case Detection and Clinical Management during the Interpandemic and Pandemic Alert Periods” available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Figure 1).
- 4.3 CDS advises HCPs to treat adult patients in whom community-acquired pneumonia (CAP) is suspected according to “Guidelines on the Management of Community-Acquired Pneumonia in Adults” developed by the Infectious Diseases Society of America and the American Thoracic Society, available at: <http://www.journals.uchicago.edu/doi/pdf/10.1086/511159>.

- 4.4 CDS advises HCPs to treat pediatric patients in whom CAP is suspected according to “The Management of Community-Acquired Pneumonia in Infants and Children Older Than 3 Months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America” available at:
<http://cid.oxfordjournals.org/content/early/2011/08/30/cid.cir531.full>.
- 4.5 CDS advises HCPs to base decisions regarding site of care (i.e., inpatient versus outpatient) on the following factors:
- The patient’s clinical status
 - Whether adequate precautions can be taken at home to prevent the potential spread of infection
 - The availability of personnel and hospital resources.

Objective measures to determine which patients can be safely treated as outpatients are listed below:

- **Adults:** “Pneumonia PORT Severity Index (PSI) Calculation” and the accompanying “Pneumonia Severity Index Risk Classification”, both available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Tables 1 and 2, respectively); and the “CURB-65 Scoring System” and the “Recommended Site of Care”, both available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Tables 3 and 4, respectively).
- **Children** (Excerpted from reference in Action Item 4.4 of Clinical Guidelines “Action Level – Respond – 1” section):
 1. Children and infants who have moderate to severe CAP, as defined by several factors, including respiratory distress and hypoxemia (sustained saturation of peripheral oxygen [SpO₂], <90 % at sea level) (Table 3) should be hospitalized for management, including skilled pediatric nursing care. Signs of respiratory distress include:
 - Tachypnea, respiratory rate, breaths/min
 - Age 0-2 months: >60
 - Age 2-12 months: >50
 - Age 1-5 Years: >40
 - Age >5 Years: >20
 - Dyspnea
 - Retractions (suprasternal, intercostals, or subcostal)
 - Grunting
 - Nasal flaring
 - Apnea
 - Altered mental status
 - Pulse oximetry measurement <90% on room air

2. Infants less than 3-6 months of age with suspected bacterial CAP are likely to benefit from hospitalization.
 3. Children and infants with suspected or documented CAP caused by a pathogen with increased virulence, such as community-associated methicillin-resistant *Staphylococcus aureus* (CA-MRSA) should be hospitalized.
 4. Children and infants for whom there is concern about careful observation at home or who are unable to comply with therapy or unable to be followed up should be hospitalized.
- 4.6 CDS advises HCPs to educate suspect patients considered stable enough to be managed at home and their household contacts about infection control precautions that should be taken in the home. See “Home Care Infection Control Guidance for Pandemic Influenza Patients and Household Members” available at: <http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Box 4).
- 4.7 CDS advises HCPs managing patients for whom there is reasonable suspicion of influenza infection, to start patients on antiviral treatment as soon as possible, within 48 hours of symptom onset, even if laboratory results are not available.
- Regimens currently recommended for seasonal influenza: MMWR - “Prevention and Control of Influenza” available at: <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>) should be used as it is likely that a case of influenza illness during this phase/situation is more likely to represent seasonal influenza.
 - For guidance regarding antiviral treatment of influenza A (H5N1) infection, specifically, refer to the “WHO Rapid Advice Guidelines on Pharmacological Management of Humans Infected with Avian Influenza A(H5N1) Virus” as referenced in Action Item 1.5 of Clinical Guidelines “Action Level – Plan” section.
- 4.8 CDS advises HCPs to continue a full course of antiviral treatment in patients confirmed to have an infection with a novel influenza virus.
- 4.9 CDS advises HCPs that patients who test positive for seasonal human influenza should be managed using standard and droplet precautions following the guidance in the “Infection Control” section of this plan, “Infection Control Guidelines for Healthcare Entities” (Infection Control Appendix 1).
- 4.10 CDS advises HCPs that when clinical and epidemiologic suspicion remains high for novel influenza, even patients who test negative for novel influenza (given the possibility of false-negative test results) are to be continued on antiviral treatment and isolation precautions, especially if an alternate diagnosis cannot be established. However, when influenza tests are negative and an alternate diagnosis is established, isolation precautions and antiviral drug therapy for novel influenza may be discontinued based on clinical assessment.

- 4.11 CDS advises HCPs to provide treatment guidance for home care of patients and, when indicated, information on how patients and their close contacts should obtain therapies for influenza.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Consider limiting use of antivirals for treatment, if supplies are reduced.

- 1.1 CDS advises HCPs to consider limiting (if supplies are low) the use of antiviral chemoprophylaxis against influenza for individuals belonging to select groups (e.g., individuals at high risk for influenza-associated complications who have not been vaccinated against seasonal influenza, persons who care for high-risk individuals) and to control outbreaks in institutions. Refer to the most recent ACIP recommendations regarding the antiviral regimens that should be used for prophylaxis, Morbidity and Mortality Weekly Report (MMWR) - “Prevention and Control of Influenza” available at: <http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>.
- 1.2 CDS advises HCPs regarding decisions to provide prophylaxis to close contacts (e.g., household members, schoolmates, coworkers, healthcare providers, and fellow passengers if the patient has been traveling) of a suspect novel influenza patient. For guidance regarding chemoprophylaxis against influenza A (H5NI) infection, specifically, refer to the “WHO Rapid Advice Guidelines on Pharmacological Management of Humans Infected with Avian Influenza A (H5N1) Virus.” Refer to Action Item 1.5 in Clinical Guidelines “Action Level – Plan” section.
- 1.3 The NJDOH Commissioner will work with the CDC on strategies involving the use of antivirals when supplies are limited.

Action Item 2: CDS advises HCPs or their designee(s) to update public health authorities regarding clinical outcomes of patients related, but not limited, to response to therapy, and vaccine failure, according to the situation-specific protocol(s) in the “Surveillance” section of this plan, “Epidemiologic Studies” (Surveillance Appendix 8).

Action Item 3: Mitigate spread of influenza and its associated complications.

- 3.1 CDS advises HCPs to vaccinate persons in priority groups, in accordance with the latest recommendations if a vaccine against novel influenza becomes available.
- 3.2 CDS advises HCPs to administer seasonal influenza vaccine to target groups according to the most recent recommendations made by the ACIP regarding the prevention and control of influenza, if seasonal influenza strains are still circulating in New Jersey or surrounding states and if seasonal flu vaccine is available.
- 3.3 CDS advises HCPs to administer pneumococcal vaccine to target groups according to the most recent recommendations made by ACIP if vaccine is available.
- 3.4 CDS may advise HCPs to reserve use of antiviral agents(s) for treatment purposes only (and not prophylaxis).

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Review Clinical Guidelines section of this plan and update as appropriate.

Action Item 2: Demobilize response activities and return to normal operations.

8. VACCINE DISTRIBUTION AND USE

NOTE: *Vaccine Distribution and Use Appendix 1 of this section contains documents specific to vaccine distribution during an influenza pandemic. Distribution of vaccine is implemented in accordance with the New Jersey Vaccine Preventable Disease Program (VPDP) Protocols.*

A. ACTION LEVEL – PLAN

Action Item 1: Exercise and Update the New Jersey Pandemic Influenza Vaccination Distribution and Administration Plan (VDP) [See “New Jersey Pandemic Influenza Vaccination Distribution and Administration Plan” (Vaccine Distribution and Use Appendix 1)].

- 1.1 The Director of Communicable Disease Service (CDS) and the Program Manager of PHILEP conduct an annual review and update of the VDP.

The Director of CDS (or designee) and the Program Manager of State Stockpile and Health Logistics (or designee) provide the updated VDP to the following individuals:

- Assistant Commissioner of PHILEP
- State Epidemiologist
- Medical Director of VPDP
- Director of CDS

- 1.2 The SNS Coordinator and the Medical Director of VPDP conduct a review of Receipt, Stage, and Storage (RSS) Sites using the Local Information Network and Communications System (LINCS) Agency RSS checklist to ensure cold chain custody procedures are in place, points of contact are current, security agreements are in place, and adequate refrigeration storage space exists. The complete list of RSS Sites is located in “RSS Facility Checklist by LINCS Agency” and in Hippocrates, NJDOH’s web-based situational awareness software.

- 1.3 The Director of CDS and the Program Manager of State Stockpile and Health Logistics work with the PHILEP to ensure that adequate exercises are conducted for training of staff in the Vaccine Prevention Disease Program.

Action Item 2: Develop vaccine target groups.

- 2.1 NJDOH, with input from the influenza advisory group or equivalent, develops recommendations for health based vaccine target groups based upon current federal guidance, CDC 2013 document “Guidance on Allocating and Targeting Pandemic Influenza Vaccine” available at: (http://www.flu.gov/images/reports/pi_vaccine_allocation_guidance.pdf) .

The recommendations are based upon CDC - U.S. Department of Health and Human Services (HHS) Advisory Committee on Immunization Practices (ACIP), the national Vaccine Advisory Committee’s vaccine target group recommendations, and epidemiologic and surveillance data. Vaccine allocations will be based on current federal, state and local guidance/data for the specific pandemic response.

- 2.2 PHILEP Assistant Commissioner works with the NJ Office of Homeland Security and Preparedness (NJOHSP) to identify critical infrastructures (CI) and develop prioritized lists of positions supporting CI. NJOHSP tasks all state agencies through the NJ State Pandemic Influenza Operations Plan and NJ CI sectors with developing plans to identify essential positions for maintaining CI, and to develop and maintain priority lists of essential staff for vaccination. This serves as a basis for determination of vaccine distribution. Each CI entity works through their occupational health clinic or contracted provider to provide vaccine to their employees.

B. ACTION LEVEL – PREPARE

Action Item 1: Determine vaccine allocation.

- 1.1 The VDPD Program Manager will contact the CDC to determine the amount of vaccine allotted for New Jersey.
- 1.2 As members of the influenza advisory group or equivalent, identified in the State of New Jersey Pandemic Influenza Operations Plan, the NJDOH Commissioner, the Deputy Commissioner and the State Epidemiologist recommend to this group the allocation plan for health target groups identified in Action Item 2 in Vaccine Distribution and Use “Action Level – Plan” section.
- 1.3 The NJOHSP recommends the CI allocation plan to the influenza advisory group or equivalent.
- 1.4 The influenza advisory group or equivalent recommends the allocation plan for both CI and health based target groups to the Governor.

Action Item 2: Notify stakeholders and the public of the allocation plan.

- 2.1 The Commissioner conducts a conference call with public health and healthcare stakeholders (e.g., LINCS agencies, LHDs, hospitals and members of the IAC). These entities are advised on which target groups need to be vaccinated.
- 2.2 CDS health educators work with Office of Communications (OCOM) and the NJ Department of Human Services, Division of Mental Health and Addiction Services, Disaster and Terrorism Branch to develop risk.
- 2.3 NJDOH posts the priorities on the NJDOH website, on Hippocrates and forwards them through the Health Alert Network (HAN).

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Request vaccine.

- 1.1 The Commissioner convenes a meeting with the influenza advisory group or equivalent to consider recommending that the Governor request vaccine and issue a declaration of Public Health Emergency.

- 1.2 The Commissioner advises the Governor to request vaccine and medical supplies and may recommend that the Governor declare a Public Health Emergency.
- 1.3 The State Epidemiologist notifies the Program Manager of State Stockpile and Health Logistics of the intent to request the vaccine and medical supplies.
- 1.4 The PHILEP Assistant Commissioner or the Program Manager of State Stockpile and Health Logistics alerts the Division of State Police Regional Operations and Intelligence Center (ROIC).
- 1.5 Once the Governor approves the request for vaccine, the State Epidemiologist will make a formal request for vaccine with CDC's National Center for Immunization and Respiratory Diseases.

D. ACTION LEVEL RESPOND – 2

Action Item 1: Receive and distribute vaccine.

- 1.1 The Commissioner conducts a conference call with LINCS agencies to:
 - Inform of the state's vaccine allocation and distribution plan
 - Advise them to immediately report any damaged product and/or any break in the cold chain to CDS' Vaccine Preventable Disease Program (VDPD)
 - Advise them to activate their Medical Reserve Corps (MRC) to assist in vaccine administration sites.

Action Item 2: Prepare to open vaccine administration sites.

- 2.1 Commissioner or other NJDOH medical staff may issue a standing order for vaccination based on need.
- 2.2 NJDOH compiles and makes available a list of all vaccine administration sites in New Jersey.
- 2.3 CDS works with the NJDOH OCOM to develop messages for both the LINCS agency Health Educator/Risk Communicators (HERCs) and the public on target groups for flu vaccination and vaccine administration sites to include locations and hours of operation.
- 2.4 NJDOH provides just-in-time, web-based training to appropriate staff on the use of the following for collection of CDC required data:
 - NJ Immunization Information System (NJIIS) - At a minimum, the following information may be collected on NJIIS: individual's name and address, zip code, date of birth, phone number, date of vaccination, lot number, vaccine name and manufacturer, and other information deemed necessary by state and/or CDC officials.
- 2.5 CDS designates a Vaccine Safety Officer to work with OCOM to develop press releases and HAN messages related to adverse event reporting.

- 2.6 The Safety Officer will provide any new information on personal protection to be included in just-in-time training for those individuals staffing the vaccine administration sites.

Action Item 3: Open vaccine administration sites.

- 3.1 Upon receipt of the vaccine allocation and notification by the Commissioner, LINCS agencies activate their vaccine administration sites.
- 3.2 NJDOH advises the LINCS Health Officer to ensure that all staff (e.g., vaccinators, security, mental health workers, Medical Reserve Corp volunteers, etc.) working in vaccine administration sites follow personal protection guidelines as outlined in New Jersey's Antiviral Distribution and Use Plan.
- 3.3 PHILEP RSS staff processes all requests for medical supplies and additional vaccine in accordance with Office of Emergency Management procedures. [Refer NJ SNS Plan, located in the Health Command Center (HCC)]
- 3.4 CDS requires the following data:
- CDS advises LINCS agencies to use NJIIS's NJPVS for collection of CDC required data.
 - CDS tallies the number of individuals vaccinated by county on a daily and weekly basis.
 - CDS automatically transmits vaccine data to CDC within 24 hours through NJIIS as required.

Action Item 4: Verify target groups.

- 4.1 NJDOH requires vaccine administration site staff to verify that individuals receiving vaccine qualify under the NJ target group allocation.
- Documentation for age based criteria (e.g., birth certificate, driver's license)
 - Documentation for risk based criteria (e.g., signed prescription from a qualified licensed healthcare provider listing the risk)
 - Documentation for critical infrastructure based criteria:
 - Name appears on list of eligible employees AND
 - Identification (e.g., employee ID, birth certificate, driver's license).

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

Action Item 2: Re-evaluate target groups.

- 2.1 NJDOH considers CDC guidelines and efficacy data, and with input from the stakeholder IAC, review who has been vaccinated and whether a second dose is recommended, and develop recommendations for health-based vaccine target groups.

- 2.2 NJDOH works with NJOHSP to identify essential staff that have already been vaccinated and consider whether a second dose is recommended, and develop recommendations for CI vaccine target groups.
- 2.3 Data from the tasks above is reviewed by the influenza advisory group or equivalent to determine if the allocation plan should be modified. If there is a recommended change, the Governor is notified.

Action Item 3: Continue vaccinating target groups in accordance with recommendations and resources.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize operations.

- 1.1 Close down operations and return to normal activities.
 - Initiate check-out process of resources (personnel, equipment, supplies)
 - Provide or participate in staff de-briefing
 - Close out inventory management system

Action Item 2: Gather Information from Ongoing Operational Feedback.

- 2.1 Collect comments from staff for completion of after-action report/improvement plan (AAR/IP).

Action Item 3: Modify plans as appropriate.

9. ANTIVIRAL DRUG DISTRIBUTION AND USE

NOTE: *Antiviral Drug Distribution and Use Appendix 1 of this section contains documents specific to antiviral drug distribution during an influenza pandemic. Distribution of antivirals is implemented in accordance with the New Jersey (NJ) Strategic National Stockpile (SNS) Plan, a comprehensive plan that is updated annually, a copy of which is located in the Health Command Center (HCC).*

A. ACTION LEVEL – PLAN

Action Item 1: Arrange for appropriate storage of antivirals.

1.1 The Office State Stockpile and Health Logistics is responsible for the Strategic State Stockpile (SSS) program. The program maintains medical assets, including antiviral agents, in an environment that is secure yet conducive to rapid deployment during an event. The storage location meets the guidelines for the Federal Food and Drug Administration’s Federal Shelf Life Extension Program in the event the antivirals purchased through the CDC federal contracts are approved to enter into the Shelf Life Extension Program. The following measures will be in place to support the proper maintenance and sustainment of antivirals:

- The Storage location is a confidential and secure warehouse that has constant security personnel on-site and is surrounded by a barbed wire fence. All access to the facility is key-controlled and all personnel entering or exiting the facility are visually recorded. In addition, any individuals entering the facility must have a NJ Department of Health (NJDOH) approved photo identification, and they must sign in and out in the facilities entry log. An alarm system is in place to alert security and NJDOH personnel of possible intrusion into the storage area. In addition, the area is monitored 24/7 by closed circuit television at the New Jersey State Police (NJSP) Headquarters.
- Antivirals are required to be stored in a climate-controlled environment, between 59 and 86 degrees Fahrenheit with humidity levels below 60%. Therefore, the facility has a state-of-the-art climate control system installed specifically to meet these standards.
- Dedicated sensors are available to continuously monitor the ambient temperature within the facility and the presence of any water incursion (flooding/pipe leak).
- A fire detection/alarm device and adequate fire suppression are available in accordance with state fire codes.
- An independent office fully equipped with power, internet, analog and digital communications is able to sustain operations and rapidly deploy the stockpiled antivirals. Supportive equipment such as forklifts and pallet jacks are also on site.
- Pest control services are routinely provided.
- In the event of any power disruption, the warehouse has the built-in redundancy of generators to ensure environmental, security and operational conditions/resources are not compromised.

Action Item 2: Develop New Jersey’s Antiviral Distribution and Use Plan [See “Antiviral Distribution Plan” (Antiviral Distribution and Use Appendix 1)].

- 2.1 The Office State Stockpile and Health Logistics develops the plan, which includes:
- Conditions/Environment
 - Receipt/Inventory Control
 - Activation/Operations
 - Distribution
 - Antivirals for the underinsured
- 2.2 The plan can be found in the HCC and the Office of the Assistant Commissioner, PHILEP.

B. ACTION LEVEL – PREPARE

Action Item 1: Request antivirals and SNS assets.

- 1.1 The Commissioner of NJDOH makes the decision to request antivirals through the SNS program. See “SNS Request Procedure” (Appendix I in the NJ SNS Plan).
- 1.2 The Governor, or his/her designee, contacts the CDC Director via the CDC Director’s Emergency Operations Center.
- 1.3 The CDC Director’s Emergency Operations Center arranges a telephone conference call that may include the U.S. Department of Health and Human Services (HHS) Secretary’s Operation Center, the U.S. Department of Homeland Security Operations Center, the U.S. Division of Strategic National Stockpile Coordination Center, and New Jersey’s representative(s). In collaboration with New Jersey officials, these agencies evaluate the request by rapidly assessing the threat and the local response resources. If the Secretary of HHS or designee concurs that local resources are insufficient, he or she will order the deployment of SNS assets.

NOTE: *HHS is not required to wait for the President to activate the National Response Plan to deploy SNS assets. SNS assets can be deployed without a Presidential Disaster Declaration.*

Action Item 2: Activate Receipt, Stage, and Storage (RSS) Site.

- 2.1 The SNS Coordinator receives notification from NJDOH Senior Leadership of intent to request the SNS.
- 2.2 The SNS Coordinator contacts RSS personnel, including the Operations Manager, Warehouse Supervisor and Credentials Lead. See “SNS Contact Information” (Appendix K in the NJ SNS Plan).
- 2.3 When a decision is being considered by the Governor or his/her designee, to request SNS supplies including antivirals from the CDC, NJDOH contacts the Division of State Police at the Regional Operations Intelligence Center (ROIC). The ROIC notifies support agencies responsible for providing direct service in the RSS operations according to “Activation Notification for the Lawrence Township RSS Facility” (Appendix J in the NJ SNS Plan). This serves as notification of RSS activation.

C. ACTION LEVEL – RESPOND – 1

Action item 1: Receive supplies at RSS site.

1.1 The RSS Operations Manager is responsible for receiving, staging, and storing inventory and distribution.

- The RSS staff assembles at the designated credentialing point for the selected RSS site
- The NJDOH Medical Director, or his/her designee, signs for the materials
- A CDC security team may accompany the SNS to assist and advise in the unloading, apportionment and distribution of the SNS materials.

NOTE: *The location of the RSS site will not be made public. The location will be maintained as specified in the SSS program. See “Receipt/Stage/Store Procedures” (Appendix P in the NJ SNS Plan) for specific procedures.*

Action Item 2: Use Chain of Custody.

2.1 A detailed chain of custody record is kept of all transfers of SNS materials.

Action Item 3: Implement Inventory Management/Inventory Control.

3.1 Inventory control activities include, but are not limited to the following:

- Inspect the condition and quantity of containers, pallets, and packaging materials upon receipt
- Conduct a 100% inventory of contents of pallets and/or containers upon receipt. Container quantities for sealed containers are not questioned, but the quantities and type of items in open containers are verified prior to recording materials into inventory
- Collect and verify the accuracy of shipping documents prior to recommending acceptance of items received
- Record quantities of all items received from CDC, quantities transferred between NJDOH locations, quantities transferred to repackaging facilities, quantities shipped to LINCS Agency RSS sites or other requestors, and quantities received back into inventory from LINCS Agency RSS sites or other requestors at the conclusion of the operations
- Track the quantities of all items in inventory at the RSS site
- Utilize pick list slips to authorize withdrawal of inventory to fill an order
- Stage orders in a designated staging area prior to shipment. Each shipment is checked for accuracy prior to shipment.

3.2 The primary method for inventory control is the New Jersey Emergency Preparedness Inventory System (NJEPIS). This is a web-based program, but in the event of internet interruption, it is available on a dedicated server for periodic phone contact and updating. An electronic-based spreadsheet or a manual paper system can also be used. Backup tracking of quantities using appropriate manual paper systems is used when necessary. See “Controlling SNS Inventory” (Appendix Q in NJ SNS Plan) for additional inventory control information.

Action Item 4: Request Distribution and Transportation.

- 4.1 Transport of the SNS materials from the RSS/SSS Warehouses is through state resources requested through the State Emergency Operations Center (SEOC) or commercial vendors. All requests for transportation of SNS or SSS supplies go through the SEOC. The Department of Corrections (DOC) and the Department of the Treasury have primary responsibilities for transportation activities. DOC provides vehicles with two armed officers per vehicle. If additional or other types of vehicles are needed, the Department of the Treasury will facilitate that process.
- 4.2 Security is provided for all transportation of antiviral drugs from the state sites to LINCS agencies and hospitals. The DOC, in coordination with state, county and local law enforcement, provides security for SNS/SSS materiel when en route. When medication is being transported from a LINCS agency to another site, law enforcement shall escort these vehicles according to each LINCS agency's plan.
- 4.3 See "Distribution/Transportation" (Appendix R in the NJ SNS Plan) for specific distribution/transportation information.

Action Item 5: Provide Tactical Communications.

- 5.1 The primary method of communication between SEOC, HCC, RSS sites and transportation units is by telephone. Secondary methods include fax, email and 800 MHz radios.
- 5.2 General RSS communications are handled through the RSS Communications staff.
- 5.3 Security communications are managed by the NJSP using established law enforcement communications protocols and equipment.

Action Item 6: Provide Public Information/Risk Communications.

- 6.1 NJDOH Office of Communications (OCOM) is the lead for public information/risk communications activities. OCOM works with each specific LINCS agency as needed.
- 6.2 An SNS-specific communication plan has been developed with the OCOM as part of an all-hazards communication plan. This plan establishes protocols for developing, approving and disseminating public health information. It addresses coordination with public information officers at local health departments (LHD) and hospitals and includes protocols for staffing and staff assignments, as well as the use of pre-written and pre-approved materials, including message maps, fact sheets and press release templates on various health and disease threats.
- 6.3 These pre-approved materials were produced by and packed as a shelf kit of Category A agents (dangerous biological agents such as anthrax, smallpox, tularemia, etc.) which was distributed to LINCS Health Educators/Risk Communicators (HERCs).

Action Item 7: Arrange for Security.

- 7.1 The New Jersey Department of Law and Public Safety, Division of State Police is the lead agency for SNS security which includes, but is not limited to, protection for CDC and New Jersey personnel working to receive, manage, distribute and dispense the medical assets.
- Escort 12-hour Push Package or VMI from the receiving airport or State of New Jersey's border to the RSS site.
 - Provide security for fixed facilities where the SNS assets are stored, repackaged, or dispensed.
 - Provide security for medical assets during movement from the state RSS site to LINCS Agency RSS sites, hospitals or other approved requestors.
 - Provide oversight for security of CDC and NJDOH personnel moving between key sites.
 - Provide guidance for the development of local security plans for LINCS Agency RSS sites, distribution activities, and Points of Dispensing (PODs) activation.
- 7.2 Security is a collaborative effort of the NJSP, New Jersey National Guard (NJNG), New Jersey Department of Corrections, county and local law enforcement agencies, and federal agencies (U.S. Marshal's Office) and security forces from individual designated sites as required and coordinated by the NJSP. See "Security Coordination" (Appendix O for NJ SNS Plan) for additional information.
- 7.3 Security plans are specific to each antiviral distribution site. They are developed through the joint efforts of NJSP, County Prosecutor's Office, County Sheriff's Office and local law enforcement personnel.
- 7.4 Security Plan contents include:
- Risk assessment for each RSS and antiviral distribution site
 - Procedures for securing the RSS and antiviral distribution sites, including:
 - Controlling access into, within, and out of the facility
 - Perimeter protection
 - Crowd control
 - Traffic control
 - Protection of staff, materiel and equipment
 - Identification of security personnel for each function
 - Identification of equipment, supplies, and information necessary to carry out security functions.
- 7.5 Site credentialing standards are established by NJDOH in cooperation with NJSP, NJNG and the appropriate site Operations Manager.
- An off-site credentialing center outside of the perimeter of the RSS site is established by NJDOH.
 - A current state-issued identification card, a current military identification card, or work place identification card are acceptable as positive identification. All of these forms of

identification must contain a photograph of the bearer for entry. The identification is cross-checked with a staff roster and an event-specific ID will be created as part of the credentialing process. All others are denied entry. See “Credentials/ID” (Appendix R in NJ SNS Plan) for additional information.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Re-supply SNS Materials.

- 1.1 In the event that NJDOH needs to request a re-supply of antivirals through the SNS from the CDC, the State SNS Coordinator, in consultation with the Medical Director of PHILEP, shall forward such a request to the security team lead or designee.
- 1.2 Requests for items from either the Vendor Managed Inventory (VMI) or the 12-Hour Push Package are continuously monitored in the RSS Operations Center and the HCC (Health Command Center), and when item capacity is reduced by 50 percent or more, the RSS Lead/Operations Manager advises the SNS Coordinator or his/her designee. The SNS Coordinator or his/her designee then assesses the need to request a re-supply of the indicated materiel. Once approved, the SNS Coordinator requests re-supply. This does not preclude the need or ability to request re-supply of materiel based on intelligence or anticipated needs as indicated by state officials.

Action Item 2: Request Repackaging.

- 2.1 If VMI is requested, repackaging may be necessary. The SNS VMI typically arrives in unit of use containers. However, due to inventory fluctuations, a portion of the VMI may arrive in bulk containers which will require repackaging for distribution to LINCS agencies, hospitals or other sites as directed by the HCC.
- 2.2 For pharmaceutical repackaging, NJDOH has an arrangement with a New Jersey - based pharmaceutical company.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Continue activities from Antiviral Drug Distribution and Use “Action Level – Respond – 2” section, resources permitting.

- 1.1 Scale back SNS/RSS operations.
 - Reduce RSS staffing levels as activities decrease.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize operations.

- 1.1 Close down operations and return to normal activities.
 - Initiate check-out process of resources (personnel, equipment, supplies)

- Provide or participate in staff de-briefing
- Close out inventory management system.

Action Item 2: Gather Information from Ongoing Operational Feedback.

2.1 Collect comments from staff for completion of after-action report/improvement plan (AAR/IP).

Action Item 3: Modify plans as appropriate.

10. COMMUNITY MITIGATION

NOTE: Community mitigation measures are typically implemented at the local level and will be coordinated among the following: the Local Board of Health (LBOH), the Local Health Department (LHD), the Local Information Network and Communications System (LINCS) agency, schools, and the municipal, county and state governments (including first responders and the Local Emergency Planning Council [LEPC]). In some circumstances, mitigation measures may be implemented statewide.

A. ACTION LEVEL – PLAN

Action Item 1: Work with state decision makers.

- 1.1 The Division of Public Health Infrastructure, Laboratories, and Emergency Preparedness (PHILEP) and Communicable Disease Service (CDS) work with the NJ Office of Homeland Security and Preparedness (OHSP) to plan, through the “State of New Jersey Pandemic Influenza Operations Plan” (OPLAN), the coordination of roles and responsibilities for implementing community mitigation and make recommendations to the Governor through the Commissioner of Health. These documents listed below, as amended and supplemented, are to be used as references:
 - 1) CDC’s “Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States – Early, Targeted, Layered Use of Nonpharmaceutical Interventions” (February 2007), available at: http://www.flu.gov/planning-preparedness/community/community_mitigation.pdf;
 - 2) CDC’s “Updated Preparedness and Response Framework for Influenza Pandemics” (September 2014), available at: <http://www.cdc.gov/mmwr/pdf/rr/rr6306.pdf> ; and
 - 3) “HHS Pandemic Influenza Plan: Supplement 8 – Community Disease Control & Prevention” (November 2005), available at: <http://www.cdc.gov/flu/pdf/professionals/hhspanemicinfluenzaplan.pdf>.
- 1.2 PHILEP and CDS educate state partners about pandemic influenza and work through several scenarios to arrive at written community mitigation recommendations for the Governor’s Office. These documents will be used as a basis:
 - 1) “EMI-Virtual Table Top Exercise (VTTX) - PANDEMIC INFLUENZA - Situation Manual” (May 21, 2014) [See Community Mitigation Appendix 1]; and
 - 2) “The Social Distancing Law Assessment Template” (July 2010), available at: http://www.cdc.gov/php/docs/social_distancing_law_template_072010.pdf
- 1.3 The OPLAN requires NJ’s critical infrastructure sectors, state departments and agencies (and their county and local counterparts, if applicable) to develop pandemic influenza plans that include procedures for the implementation of community mitigation measures.

B. ACTION LEVEL – PREPARE

Action Item 1: Work with state decision makers.

- 1.1 OHSP / Governor’s Office shares community mitigation recommendations with NJ’s critical infrastructure sectors and state departments and agencies (and their county and local counterparts, if applicable) in order for them to fine tune the community mitigation measure implementation section in their influenza pandemic plans.

Action Item 2: Work with medical partners.

- 2.1 PHILEP and CDS direct medical partners (e.g., hospitals, long term care facilities, health centers, private medical practices) to develop plans to prevent the spread of influenza within the community.
- See “Infection Control in Healthcare Settings” (Infection Control Appendix 1) to assist healthcare settings in the planning for pandemic influenza by enhancing standard infection control practices.
 - See “Influenza Pandemic Plan Guide for Healthcare Facilities” (Healthcare Planning Appendix 1) to assist pandemic influenza planning efforts for medical provider organizations, healthcare systems, hospitals, long-term care facilities, community (home) health agencies, and other groups that will provide healthcare services as part of an influenza pandemic response.
 - See “Influenza Surge Capacity Guidance for General Hospitals” (Healthcare Planning Appendix 2) to help hospitals prepare for a surge in healthcare demand as a result of patients presenting with influenza.
 - See “Pandemic Preparedness Planning Template for Federally Qualified Health Centers (FQHC)” (Healthcare Planning Appendix 3) to provide a framework for healthcare preparedness planning and continued operation during an influenza pandemic.
 - See Action Item 4.6 in Clinical Guidelines “Action Level – Respond – 1” section for home care infection control guidance for influenza patients and household members.

C. ACTION LEVEL – RESPOND 1

Action Item 1: Update state decision makers.

- 1.1 CDS shares summaries, situational awareness, and CDC guidance with PHILEP and OHSP / Governor’s Office.
- 1.2 CDS and PHILEP assist OSHP / Governor’s Office to determine which scenario(s) in the OPLAN most closely match(es) the circumstances and which community mitigation measures to consider for implementation or what the triggers for implementation might be.

Action Item 2: Update stakeholder agencies.

- 2.1 The OPLAN outlines community mitigation measures under consideration with NJ's critical infrastructure sectors and state departments and agencies (and their county and local counterparts, if applicable).
- 2.2 PHILEP and CDS share community mitigation measures under consideration with medical partners.

Action Item 3: Inform the public.

- 3.1 CDS provides information to NJDOH Office of Communications (OCOM) for the development of community mitigation messages, including reasons and need for early, targeted community mitigation measures and their various layers. These messages are shared with all stakeholder agencies and medical partners for their dissemination.

D. ACTION LEVEL – RESPOND 2

Action Item 1: Update state decision makers.

- 1.1 CDS continues to share summaries, situational awareness, and CDC guidance with PHILEP and OHSP / Governor's Office.
- 1.2 CDS and PHILEP assist OSHP / Governor's Office to determine which community mitigation measures to implement.

Action Item 2: Update stakeholder agencies.

- 2.1 The OPLAN outlines community mitigation measures recommended for implementation with NJ's critical infrastructure sectors and state departments and agencies (and their county and local counterparts, if applicable), who implement measures as appropriate
- 2.2 PHILEP and CDS share community mitigation measures recommended for implementation with medical partners.

Action Item 3: Inform the public.

- 3.1 CDS provides information on community mitigation measures recommended for implementation to NJDOH Office of Communications (OCOM) for release to the public. These messages are shared with all stakeholder agencies and medical partners for their dissemination.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Update state decision makers.

- 1.1 CDS continues to share summaries, situational awareness, and CDC guidance with PHILEP and OHSP / Governor's Office.
- 1.2 CDS and PHILEP will assist OHSP / Governor's Office to determine which community mitigation measures to discontinue.

Action Item 2: Update stakeholder agencies.

- 2.1 The OPLAN outlines community mitigation measures recommended for cessation with NJ's critical infrastructure sectors and state departments and agencies (and their county and local counterparts, if applicable).
- 2.2 PHILEP and CDS share community mitigation measures recommended for cessation with medical partners.

Action Item 3: Inform the public.

- 3.1 CDS provides information on community mitigation measures recommended for cessation to NJDOH Office of Communications (OCOM) for release to the public. These messages are shared with all stakeholder agencies and medical partners for their dissemination.

F. ACTION LEVEL – RECOVER

Action Item 1: Demobilize response activities.

- 1.1 CDS continues to share summaries, situational awareness, and CDC guidance with PHILEP and OHSP / Governor's Office.
- 1.2 CDS and PHILEP assist OSHP / Governor's Office to discontinue community mitigation measures.

Action Item 2: Improve planning for next wave.

- 2.1 CDS and PHILEP assist OHSP / Governor's Office to examine the implementation of community mitigation measures and develop an After Action Report/Improvement Plan.
- 2.2 CDS and PHILEP revise the Community Mitigation section as appropriate.

11. PUBLIC HEALTH COMMUNICATIONS

NOTE: *The NJ Department of Health (NJDOH) Risk Communication Plan is an all-hazards approach to developing public health information in times of emergency. The plan specifies roles and responsibilities to ensure consistent communications for the duration of the emergency. This plan emphasizes the need to maintain consistent communications with external partners, such as the Centers for Disease Control and Prevention (CDC) and partners within NJ including: Local Information Network and Communications System (LINCS) agencies, the Governor’s Office, NJ Office of Homeland Security (NJOHSP), Office Emergency Management (NJOEM); NJDOH programs, including Communicable Disease Service (CDS), the Division of Public Health Infrastructure, Laboratories and Emergency Preparedness (PHILEP) and other affected divisions; and any other local health officials or administrators, in accordance with federal, state and local emergency plans.*

A. ACTION LEVEL – PLAN

Action Item 1: Ensure that the NJDOH Risk Communication Plan has been updated and is ready to be activated.

- 1.1 The PHILEP Risk Communications Manager, in conjunction with Communicable Disease Services (CDS) Health Educator, reviews existing public information materials. These include pre-approved messages, such as:
 - Press release templates
 - Fact Sheets
 - FAQs
 - Posters
 - Power Point Presentations.
- 1.2 The PHILEP Risk Communications Manager, in conjunction with the Communicable Disease Services (CDS) Health Educator reviews, and determines gaps in pre-approved public health information messages based on ongoing situational awareness briefings. Develops new messages based on situation.
- 1.3 The PHILEP Risk Communications Manager and IT will conduct all technology and conduct quarterly tests including:
 - Communicator exercise with local Health Educator/Risk Communicators (HERCs)
 - Review all URLs and websites to make sure they are active
 - Test for current email lists
 - Review/update conference call information.
- 1.4 The PHILEP Risk Communications Manager will update and increase a roster of spokespersons that have risk communications training.
 - Roster of trained spokespersons are in appendix

- Develop new program to train more spokespersons
- Update list of spokespersons.

B. ACTION LEVEL – PREPARE

Action Item 1: Activate the NJDOH Risk Communication Plan (Risk Communication Plan can be found on the NJDOH Intranet shared C drive).

- 1.1 The Office of Communications (OCOM) Director assisted by the PHILEP Risk Communications Manager and CDS subject matter experts will:
 - Notify NJDOH staff (including available backups)
 - Activate Risk Communication Approval Protocol
 - Develop message strategy:
 - 1st messages --- press release/briefing
 - Community outreach
 - Constituency outreach
 - Convene communications advisory committee consisting of local health, state communications and appropriate cabinet agencies/partners.
- 1.2 The OCOM Director or PHILEP Risk Communications Manager identifies the communication response team. Responsibilities include:
 - Message development
 - Rumor/misinformation management
 - Media triage/media calls
 - Web/Social Media
 - JIC staffing
 - HCC staffing
 - Hotlines
- 1.3 The PHILEP Risk Communications Manager, in conjunction with CDS Health Educator, reviews and updates public call center/healthcare provider call center protocols.
 - Update Standard Operating Procedures (SOP) for PCC
 - Update SOP for HCC
 - Update Just-in-Time Risk Communication Training
 - Ensure technology (phone #, phone banks, etc.) works at call center sites
- 1.4 Risk Communication Manager/OCOM in conjunction with CDS Health Educator will assess need for public awareness/education campaign. Develop appropriate materials that can include:
 - Public Service Announcements
 - Community Awareness/education program
 - Speakers Bureau

- 1.5 The Risk Communication Manager/OCOM in conjunction with Communicable Disease Services (CDS) Health Educator will begin to populate www.NJFluPandemic.gov, a dedicated website for pandemic information.
- 1.6 OCOM and the Risk Communications Manager will identify appropriate spokesperson(s) and train as needed.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: Provide situational updates.

- 1.1 The PHILEP Risk Communication Manager in conjunction with OCOM will distribute available situational awareness to partners using Health Alert Network (HAN), emails and Hippocrates.
 - Sister cabinet agencies
 - Local/county health agencies
 - Healthcare facilities
 - Professional trade organizations
 - Other organizations as necessary
- 1.2 The Risk Communications Manager / OCOM will distribute situational updates from World Health Organization (WHO) and Centers for Disease Control and CDC to appropriate partners via email.
- 1.3 OCOM and the Risk Communications Manager will participate in federal conference calls as applicable including those with the CDC, U.S. Department of Homeland Security and the Governor’s Office to:
 - Provide situation updates for media calls
 - Assess statewide communication needs
- 1.4 OCOM and the Risk Communications Manager will maintain ongoing conference calls with LINCS Agencies, local health departments, HERCs and other partners, as appropriate.
- 1.5 OCOM and the Risk Communications Manager will establish regular briefing schedules with partners including media partners.
- 1.6 OCOM and the Risk Communications Manager will develop and disseminate internal communications.

Action Item 2: Provide public health messages.

- 2.1 The Risk Communications Manager / OCOM in consultation with CDS subject matter experts will update and refine message templates:
 - Press releases
 - Talking Points

- Fact Sheets
 - Q and A
 - PSA (video/audio messages)
 - Posters, fliers, magnets, etc.
- 2.2 OCOM and the Risk Communications Manager will activate expedited review and approval process for public health messages.
- 2.3 OCOM and the Risk Communications Manager will develop key public health messages for each specific incident.
- 2.4 OCOM and the Risk Communications Manager will update messaging as needed.
- 2.5 The Risk Communications Manager will monitor media for effective messaging.
- 2.6 OCOM and the Risk Communications Manager will activate/update Flu website.
- 2.7 OCOM and the Risk Communications Manager will establish a media briefing schedule.

Action item 3: Provide risk/crisis communication support.

- 3.1 OCOM and the Risk Communications Manager will support risk communication efforts at the HCC and/or JIC.
- 3.2 OCOM and the Risk Communications Manager will provide crisis communication support to LHDs including potential on-site deployment.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: For the remainder of the response, communication activities will focus on the following:

- Staff Assignments:
 - Message development
 - Rumor/misinformation management
 - Media triage/media calls
 - Web/Social Media
 - JIC staffing
 - HCC staffing
 - Hotlines

- Message Development:
 - Press Releases
 - Web Content
 - Video/Audio

- Media content
- Talking Points
- Hotline Script
- Social Media

- Message Distribution:
 - Press Release – email/web
 - Video posting
 - Social Media Schedule
 - Press Briefing
 - Media Triage
 - Internal messages

- Partners Update:
 - Conference Calls
 - Emails
 - LINCS Message
 - Hippocrates Message

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Discontinue activities that are no longer needed.

F. RECOVER

Action Item 1: Demobilize response activities and return to normal operations.

Action Item 2: Review the After Action Report/Improvement Plan and revise the Public Health Communications section as appropriate.

12. PSYCHOSOCIAL CONSIDERATIONS

A. ACTION LEVEL – PLAN

Action Item 1: Develop mental health plans for an influenza pandemic.

1.1 The New Jersey Department of Human Services (DHS), Division of Mental Health and Addiction Services (DMHAS), Disaster and Terrorism Branch (DTB) staff within the Office of the Assistant Commissioner amends the DHS Mental Health All Hazards Response Plan and the corresponding county based mental health plans to include an influenza pandemic.

- DTB engages in joint planning and preparedness activities with other response partners including the New Jersey Office of Emergency Management (NJOEM), Office of the Attorney General (OAG), Department of Health (NJDOH), Department of Agriculture (NJDA), Volunteer Organizations Active in Disaster (VOAD) and other partners [Refer to “DTB Staff” (Appendix 1), “Response Partners” (Appendix 2), both on file with DTB]. DTB develops informational material for use by crisis counselors with animal/poultry workers and the general public, in collaboration with NJDOH Public Information Officers (PIOs) and Communicable Disease Service (CDS) staff, and other response partners, to address the emotional and physical consequences of public health emergencies. Refer to “DHS and NJDOH Public Information Officers” (Psychosocial Considerations Appendix 3), on file with DTB; see “Informational Materials” (Psychosocial Considerations Appendix 5).
- DTB re-issues information about the need for continuity of operations planning to human services providers in collaboration with County Mental Health Administrators (MHAs). See “NJ Association of County Mental Health Administrators” (Psychosocial Considerations Appendix 7).
- DTB advances the development of web based counseling options for future use. Refer to “DHS Website Keepers” (Psychosocial Considerations Appendix 4), on file with DTB; see “Description of Web Based and Tele Crisis Options and How to Access Them” (Psychosocial Considerations Appendix 6).

Action Item 2: Train Disaster Response Crisis Counselors.

2.1 Through the County MHAs, DTB trains Disaster Response Crisis Counselors, in collaboration with CDS staff, about influenza pandemics and their health and emotional consequences.

Action Item 3: Participate in exercises with response partners.

3.1 DTB participates in exercises with CDS staff and other response partners.

B. ACTION LEVEL – PREPARE

Action Item 1: Provide information in coordination with CDS staff, to the Disaster Response Crisis Counselors, other mental health professionals, and the public regarding potential influenza pandemic.

- 1.1 DTB participates in community forums in collaboration with Local Information Network and Communications System (LINCS) staff and County MHAs to provide information about physical and emotional issues and coping strategies.
- 1.2 DTB distributes written informational materials and provides information on websites in collaboration with other response partners, to educate people about influenza pandemics and strategies for coping.
- 1.3 DTB and NJDOH staff with responsibility for the respective websites creates linkages between the NJDOH and DTB websites to enhance sharing of information.

Action Item 2: Ensure availability of Disaster Response Crisis Counselors who are listed in the data base maintained by DMHAS and the MHANJ.

- 2.1 DTB meets with CDS to plan for Disaster Response Crisis Counselor staffing of distribution centers.
- 2.2 Provide situational awareness and update plans.
 - DTB updates County MHAs on the current situation and asks that they review and update information on county specific Disaster Response Crisis Counselor rosters in coordination with the DTB and the MHANJ, in order to assess availability of counselors. In collaboration with the County MHAs, DTB updates mental health plans for deployment of counselors at local levels based on existing state and county plans and protocols.
 - DTB meets with Disaster Response Crisis Counselors through regional forums to provide situational updates. DTB meets with MHANJ helpline staff (1-877-294-HELP) to ensure they have the most up to date information including how to assist callers to the helpline.
- 2.3 Continue and enhance training activities.
 - DTB continues training activities through the County MHAs, to ensure there is a large, available pool of trained Disaster Response Crisis Counselors.
 - In coordination with County Mental Health Administrators, and depending upon available funding, DTB recruits, trains and hires additional staff to maintain the MHANJ helpline on a 24-hour basis.
- 2.4 DTB develops a “go team” from the DTB staff and existing roster and begins to make assignments (for counseling at distribution and other sites as appropriate) through CDS staff and the County MHAs.

Action Item 3: Activate state and county mental health plans in coordination with the NJOEM, NJDOH and other response partners.

- 3.1 DTB updates staffing plans.

- DTB finalizes plans with CDS health educators for Disaster Response Crisis Counselor staffing at distribution centers.
- DTB finalizes assignment of Disaster Response Crisis Counselors from existing roster through the County Mental Health Administrators. DTB coordinates deployment of Disaster Response Crisis Counselors with the NJOEM as outlined in the DMHAS Mental Health All Hazards Response Plan, to ensure compliance with incident command system structures.
- DTB maintains Disaster Response Crisis Counselor staffing from the pool of trained counselors, at the MHANJ helpline.

3.2 DTB updates and promotes web based options.

- DTB updates web site and helpline information with current status and psycho-educational material.
- DTB maintains advertisement of web based options.

C. ACTION LEVEL – RESPOND – 1

Action Item 1: In coordination with NJDOH, implement state and county mental health plans based on assessed need as identified by state and county emergency management coordinators and mental health administrators.

1.1 DTB provides counseling.

- Based on communication from the NJOEM, and in coordination with CDS, DTB begins to deploy Disaster Response Crisis Counselors through the County Mental Health Administrators. In coordination with NJDOH (Office of Preparedness for Special Health Needs, Division of Public Health Infrastructure Laboratories and Emergency Preparedness (PHILEP) and CDS, DTB provides crisis counseling to general public, public health workers and identified vulnerable populations at locations where public education and other health-related services are still being offered.
- DTB promotes workforce resilience by providing stress management and self-care support for state staff, healthcare workers, families of healthcare workers, first responders and their families (including police, emergency personnel etc.), and crisis counselors.

1.2 DTB engages in public education.

- DTB provides media messages in coordination with NJDOH PIOs, CDS health educators, and DHS PIOs on how to cope with fear during a public health crisis. DTB intensifies advertisement of helpline information and web-based resources.
- DTB moves toward remote web based tele-crisis counseling services in coordination with MHANJ.
- DTB reduces potential stigma against healthcare workers and their families as part of public education. DTB updates websites and informational materials for distribution to the public in collaboration with CDS health educators and NJDOH and DHS PIOs.

- DTB continues to partner with CDS health educators and NJDOH and DHS PIOs on media messages to help reduce public panic DTB increases live media messages and public information television and radio spots in collaboration with NJDOH and DHS risk communications staff and PIOs.
- DTB participates in public community education forums to help prepare the public in collaboration with CDS health educators, LINCS and local health department staff and the County Mental Health Administrators.

1.3 DTB applies for federal grant funds.

- The Director of the DMHAS DTB applies for federal grant funds in collaboration with the County MHAs, as per the DMHAS Mental Health All Hazards Response Plan.

Action Item 2: Offer direct services to affected populations (animal/poultry workers) while maintaining and increasing preparedness and planning activities.

2.1 Plan for staffing of local public health events.

- DTB meets with CDS to plan for staffing of distribution centers and other mental health staff support for NJDOH. DTB meets with LINCS and local health department staff to develop a schedule of events such as community forums and distribution of informational materials in coordination with County MHAs.

2.2 Train response partners.

- Through the County MHAs and other response partners, DTB provides additional phase-specific training activities to address panic, including invitation to faith based organizations.

2.3 Provide counseling services.

- DTB offers crisis counseling services, in partnership with Department of Agriculture and CDS staff, to animal/poultry workers, food retail personnel and other identified populations through the County MHAs.
- The Mental Health Association in New Jersey (MHANJ) advertises the mental health helpline through the DHS and NJDOH public information officers and coordinates with NJDOH risk communications staff, the information that helpline staff will provide to the public.

2.4 Distribute materials.

- DTB disseminates informational materials about how to cope with stress during a public health crisis to the general public, in collaboration with NJDOH and NJDHS PIOs and CDS staff
- Through the County MHAs, DTB provides information on continuity of operations planning to community mental health centers, addictions services providers and psychiatric hospitals.

- DTB develops public media messages in coordination with NJDOH and NJDHS PIOs and CDS staff.

Action Item 3: Collaborate with response partners and continue to provide direct mental health and technical assistance services.

3.1 DTB plans for local outbreaks.

- DTB meets with CDS health educators and “Response Partners” (Psychosocial Considerations Appendix 2) to prepare for possibility of increased outbreaks in the United States

3.2 DTB increases Disaster Response Crisis Counselor staffing at helpline, depending on available funding, from the existing roster through the County Mental Health Administrators and in collaboration with the MHANJ.

3.3 DTB provides crisis counseling to general public concurrent with community education forums.

3.4 DTB participates in meetings with identified response partners to address issue of panic control.

D. ACTION LEVEL – RESPOND – 2

Action Item 1: Partner with NJDOH and other response agencies to contain public panic.

1.1 DTB prepares public media messages designed to help reduce panic, in coordination with NJDOH PIOs and CDS and Department of Human Services (DHS) PIOs.

1.2 DTB continues to distribute written information to the public through mailings, print media, websites and social media.

1.3 DTB organizes public community forums in coordination with LINCS, local health departments and County MHAs to provide education about the physical and emotional consequences of an influenza pandemic, including strategies for coping and preparedness.

1.4 DTB attends all forums held by identified response partners for the purpose of updating plans and protocols to address specific concerns.

1.5 Through the County MHAs, DTB expands training for human services professionals who work with the public, such as clergy, health care professionals, addictions counselors, etc. Topics include basic crisis counseling and psychological first aid with a focus on coping with public health emergencies, to assist them in their interactions with the public.

Action Item 2: Participate in or convene emergency meetings with NJDOH and other response partners as the situation progresses.

2.1 DTB focuses on how to handle panic control through media and dissemination of information.

- 2.2 DTB meets with helpline staff in collaboration with NJDOH PIOs and CDS health educators to ensure uniform messages and sharing of information regarding the status of the current situation.
- 2.3 DTB discusses mental health support for health care workers, NJDOH and other response partners listed in “Response Partners” (Psychosocial Considerations Appendix 2) including staff from other state departments and public and private partners such as Volunteer Organizations Active in Disasters, American Red Cross, Salvation Army, etc.

Action Item 3: Assess safety considerations for the mental health work force and move toward remote methods of service provision.

- 3.1 DTB updates plans for provision of counseling.
 - DTB partners with CDS in coordination with NJOEM to determine best method for deployment of counselors if appropriate, given safety considerations.
 - DTB communicates with County MHAs and response partners to discuss how public counseling needs can be met while protecting the health and safety of the mental health workforce.
 - DTB assesses availability of Disaster Crisis Counselors for provision of tele-crisis and web based services in coordination with Director of DMHAS helpline and the County MHAs as well as other provider agencies, such as Rutgers University Behavioral Health Care.
- 3.2 DTB begins delivery of remote counseling services.
 - DTB begins tele-crisis and web-based counseling approaches such as chat rooms and electronic mail as appropriate. DTB ensures adequate staffing of the MHANJ helpline with the assistance of the County MHAs.

Action Item 4: Continue assessment of mental health resources while limiting the provision of direct services to remote options.

- 4.1 DTB stays in communication with CDS staff and County MHAs for assistance with ongoing assessment of counseling resources and appropriate uses.
- 4.2 DTB evaluates ability to maintain level of services and have a mechanism to scale back as needed.
- 4.3 DTB limits crisis counseling to web based and tele-crisis approaches.
- 4.4 DTB continues to staff helpline and web based programs with available Disaster Response Crisis Counselors.
- 4.5 DTB provides information to the public through television and print media in coordination with NJDOH risk communications staff and NJDOH and DHS PIOs.

E. ACTION LEVEL – RESPOND – 3

Action Item 1: Continue response and planning efforts, as needed.

- 1.1 DTB continues web based and tele-crisis counseling approaches, maintenance of staff at helpline, provision of public information and coordination with NJDOH CDS staff as described in Psychosocial Considerations “Action Level – Respond – 2” section.
- 1.2 DTB stays in communication with County MHAs for assistance with ongoing assessment of counseling resources.
- 1.3 DTB begins planning with response partners for long-term recovery when first wave ends.
- 1.4 DTB prepares for next pandemic wave in coordination with all response partners using lessons learned from first experience.

Action Item 2: Discontinue activities that are no longer needed.

F. ACTION LEVEL – RECOVER

Action Item 1: Begin planning for successive wave(s).

- 1.1 DTB begins planning with response partners for long term-recovery when first wave ends.
- 1.2 DTB prepares for next pandemic wave in coordination with all response partners using lessons learned from first experience.
- 1.3 In coordination with response partners, DTB updates state and county preparedness plans and protocols based on lessons learned from the event.

Action Item 2: Review the After Action Report/Improvement Plan and revise Psychosocial Considerations section as appropriate.

- 2.1 DTB assesses the effectiveness of previous media messages in helping to reduce panic, based on lessons learned and anecdotal feedback, in coordination with NJDOH PIOs and CDS staff, with NJDOH staff revising messages as needed.
- 2.2 In coordination with response partners, DTB updates state and county preparedness, plans and protocols based on lessons learned from the event.

Action Item 3: Demobilize response activities and return to normal operations.

SECTION III. APPENDICES

1) Surveillance

- Appendix 1: Virologic and Disease Surveillance for Influenza
 - Attachment A: Job Action Sheet
 - Attachment B: Memo to Recruit Providers for Outpatient Influenza-like Illness Surveillance Network
 - Attachment C: Memo for Influenza-Like Illness Surveillance
 - Attachment D: Memo for Pediatric Influenza Surveillance
 - Attachment E: Weekly Influenza Report
 - Attachment F: Unexplained Deaths Project
- Appendix 2: Reporting of Cases of Severe Respiratory Illness of Unusual Presentation or Unknown Cause
- Appendix 3: Role of NJDOH in Animal Surveillance for Novel Influenza
- Appendix 4: Animal Exposure Guide
- Appendix 5: Animal Worker Surveillance for Novel Influenza
 - Attachment A: Worker Surveillance Data Collection Form
- Appendix 6: Communication Data
 - Attachment A: Communication Data Table
- Appendix 7: Outbreak Response Structure - Influenza Surveillance
 - Attachment A: Outbreak Response Structure
- Appendix 8: Epidemiologic Studies
- Appendix 9: Enhanced Passive Surveillance for Novel Strains of Influenza
- Appendix 10: Contact Tracing
- Appendix 11: Tracking Case Counts

2) Laboratory Diagnostics

- Appendix 1: Virologic Surveillance for Influenza
- Appendix 2: NJDOH Instructions for Collection, Testing, and Shipping of Influenza Specimens
- Appendix 3: PHEL Cross Training Procedure for Novel Influenza Testing
- Appendix 4: Supply List
- Appendix 5: Surge Capacity Plan for Eliminating Non-Essential Lab Services
- Appendix 6: QC Specimen Storage Requirements for Specimens Received but not Tested
- Appendix 7: QC Specimen Storage Requirements for Specimens already Tested

3) Healthcare Planning

- Appendix 1: Influenza Pandemic Plan Guide for Healthcare Facilities
- Appendix 2: Influenza Surge Capacity Guidance for General Hospitals
- Appendix 3: Pandemic Preparedness Planning Template for Federally Qualified Health Centers

4) Infection Control

- Appendix 1: Infection Control Guidelines in Healthcare Settings
- Appendix 2: Infection Control Guidelines in Non-Healthcare Settings

5) Clinical Guidelines Appendix List

6) Vaccine Distribution and Use

- Appendix 1: New Jersey Pandemic Influenza Vaccine Distribution and Administration Plan

7) Antiviral Drug Distribution and Use

- Appendix 1: Antiviral Distribution Plan
 - Attachment A: Antiviral Treatment/Prophylaxis Distribution Template
 - Attachment 1: Site Selection Considerations
 - Attachment 2: Antiviral Distribution Site Information Form
 - Attachment 3: Minimum Antiviral Distribution Site Equipment/Supplies
 - Attachment 4: LINCS Agency Antiviral Distribution Flow Chart
 - Attachment 5: Job Summaries
 - Attachment 6: Antiviral Distribution Household Intake Form
 - Attachment 7: Pediatric Instructions
 - Attachment 8: Standing Orders for Influenza Treatment and Post Exposure Prophylaxis During an Influenza Pandemic
 - Attachment 9: Antiviral Distribution Daily Report
 - Attachment B: LINCS Planning Guide for RSS Warehouse

8) Community Mitigation

- Appendix 1: EMI-Virtual Table Top Exercise (VTTX) - PANDEMIC INFLUENZA - Situation Manual

9) Psychosocial Considerations

- Appendix 1: NJ Division of Mental Health and Addiction Services – Disaster and Terrorism Branch Staff Telephone Numbers (on file)
- Appendix 2: Response Partners (on file)
- Appendix 3: DHS and NJDOH Public Information Officers (on file)
- Appendix 4: DHS Website Keepers (on file)
- Appendix 5: Informational Materials
- Appendix 6: Description of Web Based and Tele Crisis Options and How to Access Them
- Appendix 7: NJ Association of County Mental Health Administrators

VIROLOGIC AND DISEASE SURVEILLANCE FOR INFLUENZA

Overview

Influenza surveillance is designed to determine when and where influenza viruses are circulating, identify circulating strains, detect changes in the virus, monitor influenza-related illness, and measure the impact of influenza on deaths.

Surveillance systems will be expanded as the likelihood of an influenza pandemic becomes more imminent. In the early phases, surveillance systems will be expected to be sufficiently sensitive to detect initial cases of a novel pandemic strain. Once the pandemic has arrived, surveillance and laboratory resources will need to focus on the data most essential to public health decision-making (e.g., morbidity/mortality rates, age-specific attack rates, impact on the healthcare system, anti-viral resistance and vaccine efficacy).

Given the potential for extremely large numbers of cases and possible decrease in public health workforce during the peak of the pandemic, surveillance efforts will focus on monitoring disease trends, ideally using existing electronic data, as opposed to attempting to capture detailed information on every suspected or confirmed case. Rather, staff resources will be used to collect more detailed clinical and epidemiologic information on a subset of cases to inform public health decision-making and provide information to the medical community.

Objectives

- Monitor influenza-like illness (ILI) trends in New Jersey.
- Detect outbreaks in schools and institutional settings so that public health consultation can be provided on effective control measures.
- Detect the first human case of a novel influenza virus strain with pandemic potential in New Jersey.
- Monitor subtypes of influenza to ensure rapid detection of novel strains.
- Characterize morbidity and mortality and identify populations at increased risk for severe disease, complications, or death.
- Inform the public health response by tracking the progression of the pandemic in New Jersey.
- Assess transmissibility factors which reduce or promote spread of influenza to others in order to guide community containment strategies.
- Assess the sensitivity and specificity of laboratory diagnosis in detecting the pandemic strain.
- Conduct epidemiologic analysis to determine clinical, epidemiologic and/or treatment criteria associated with survival and improved outcomes.
- Monitor for emergence of the second pandemic wave and/or shifts in the pandemic strain.

INFLUENZA SURVEILLANCE COORDINATOR

New Jersey Department of Health (NJDOH) Communicable Disease Service (CDS) is responsible for the influenza surveillance program. CDS employs a full-time influenza surveillance coordinator (Job action sheet located in **Surveillance Appendix 1 - Attachment A**). The role of the coordinator is to:

- Maintain CDC initiated influenza surveillance.

- Maintain state initiated influenza surveillance.
- Promote year-round influenza surveillance.
- Remain in close contact with the CDC Influenza Branch.
- Maintain working relationship with stakeholders including laboratories, hospitals, physicians and local health department staff.

Virologic surveillance during Interpandemic influenza period

Laboratory Surveillance for influenza

CDS epidemiology staff work closely with NJDOH Division of Public Health and Environmental Laboratory (PHEL) staff on influenza surveillance initiatives. As a World Health Organization (WHO) Collaborating Laboratory, PHEL routinely conducts real-time RT-PCR for influenza A/H1, influenza A/H3 and influenza B. Additional molecular assays are also available to identify influenza A novel H1 (swine-like), H5 and H7 subtypes. PHEL can routinely process approximately 100 specimens per day using the seasonal influenza RT-PCR panel (AH1, AH3, B, A unsubtypeable) and approximately 40 specimens per day using the AH1 (swine-like) assay. Throughput for RT-PCR can be increased as demand increases. PHEL conducts testing for influenza year round, reports data weekly to CDC, and forwards a subset of specimens to CDC as requested. PHEL participates in the Public Health Laboratory Interoperability Project (PHLIP) and all reports are provided to CDC using this system.

In addition to samples collected from ILINet providers, NJDHSS partners with approximately 18 laboratories located within acute care facilities that participate in the Laboratory Response Network (LRN) for sample submission. Rapid antigen test kits and free shipping are provided as incentives to laboratories who agree to participate. Sentinel laboratories test and send two to three rapid antigen positive specimens per week to PHEL for subtyping.

As per NJAC 8:57-1.7 (b), specimens found positive for influenza must be reported to the Communicable Disease Reporting and Surveillance System (CDRSS) if the laboratory has an electronic connection to CDRSS.

Objectives of Laboratory Surveillance for Influenza:

- To monitor the percent positivity and type of influenza viruses identified on a weekly basis in New Jersey laboratories.
- To assist federal agencies in characterizing influenza virus strains to inform annual vaccine formulation and to identify potential pandemic strains.
- Identify other viral pathogens circulating in New Jersey.

Description of methods

CDS actively solicits data from select laboratories on rapid influenza test results on a weekly basis. Total number of samples tested, the number positive for influenza are recorded. Electronic laboratory reports of positive cases of influenza from PHEL and commercial laboratories (i.e., LabCorp, Quest) are transmitted to CDRSS where additional reporting and analysis can be performed. Laboratory data are also extracted from CDRSS and imported into a CDS Access database for compilation each week. This information is used in conjunction with other surveillance systems to describe the weekly influenza activity statewide. Information collected by this

surveillance system is included in the ILI weekly report as described below. Additional information on laboratory diagnostics can be found in the laboratory technical section.

Disease surveillance during Interpandemic influenza seasons

Overview

During the yearly influenza season, CDS maintains several surveillance systems to monitor influenza activity in NJ. Weekly summary reports are distributed via the Local Information Network and Communications System (LINCS) system and posted to NJDOH website. Current systems are detailed below.

Communicable Disease Reporting and Surveillance System (CDRSS)

Communicable Disease Reporting and Surveillance System (CDRSS) is a web-enabled patient-centric reporting system which electronically captures all reportable communicable disease and investigation information. In the 2006-2007 influenza season, ILI surveillance was added to CDRSS. The CDRSS ILI module allows data to be directly entered from reporting entities while still allowing for local health departments and LINCS epidemiologists to view data for their jurisdiction. Data are currently captured once a week, but the administration portion of this system is dynamic and under the direct control of IZDP, allowing alterations of reporting time frame (e.g., once a week, once a day) during the peak of the influenza season or during a pandemic. Several report features including percent ILI by county, region and state have also been built into this system.

In addition, individual cases of influenza, including novel influenza, can be tracked using the patient centric component of CDRSS. Here patient specific information on clinical and epidemiologic characteristics can be recorded on all reported patients. Several reporting features are built into the system allowing the majority of data fields to be exported from the system into an excel file. This file can be analyzed to obtain aggregate data (e.g., outcome status, length of hospitalization, signs/symptoms, demographic characteristics) from cases and a similar patient specific file can also generated and sent to CDC upon request.

Outpatient surveillance

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

NJ participates in passive influenza surveillance through the U.S. Influenza-like Illness Surveillance Network (ILINet), which is coordinated nationally by the CDC (<http://www.cdc.gov/flu/weekly/fluactivity.htm>). This system monitors nationwide ILI morbidity and includes a virologic surveillance component to assess circulating strains.

Objectives of the Influenza Sentinel Providers Surveillance Network:

- Estimate the impact of influenza on outpatient morbidity
- Provide epidemiologic information during the annual influenza season (e.g., disease rates by age category)
- Monitor antigenic changes in circulating viruses in order to provide information to CDC to guide decisions regarding the formulation of the next year's vaccine

Description of Methods

CDS in collaboration with LINCS/regional epidemiologists recruits health care providers to participate in the SPSN. CDC recommends each state enroll a minimum of one per 250,000 population which calculates to a minimum of 37 enrolled providers in NJ. To assist in recruitment, CDS creates surveillance memos and guidance documents. A sample of these documents can be found in **Surveillance Appendix 1 - Attachments B1 - B4**. NJDOH routinely meets or exceeds the minimum number of enrolled providers. Participation in the program is voluntary and not population based. While every attempt is made to enroll providers from every county to achieve even geographic distribution and a wide variety of practice specialties, some areas and specialties are disproportionately represented. Information collected by this surveillance system is included in the ILI weekly report as described below. Sentinel physicians are asked to participate in two areas.

Morbidity Reporting

CDC maintains an internet-based web reporting system to which each state's influenza surveillance coordinator is given access. The sentinel sites can submit report influenza morbidity reports in one of two ways. Providers can report information directly to the CDC (via internet or fax) on a weekly basis or they can report to their respective LINCS/regional epidemiologist who will file the report with the CDC. Providers are asked to report from Morbidity and Mortality Weekly Report (MMWR) week 40 to week 20 (approximately October to May); however, year round reporting is encouraged. The weekly transmission consists of the number of patients seen for ILI (fever and cough and/or sore throat) during a given week in each of four age categories: 0-4 years; 5-24 years; 25-49 years; 50-64 years and > 65 years; and the total number of patients seen for any reason at the sentinel site during that week.

Laboratory Component

All sentinel sites are asked to submit specimens to PHEL. CDS recommends, at a minimum, each site submits samples from the first case of influenza identified by the sentinel provider, any individual who has received the influenza vaccine but becomes infected with influenza, and then representative samples throughout the season. Collection kits are provided to sentinel providers as needed. Specimens are delivered to the PHEL with assistance from local health departments where Reverse Transcriptase-Polymerase Chain Reaction (RT-PCR) is performed. A subset of positive samples is sent to CDC for additional testing and subtyping.

Influenza-like Illness (ILI) Surveillance

It would be impossible to count every case of influenza. Using influenza-like illness reports coupled with more reliable surveillance data (i.e., laboratory results and outpatient visit data) can assist in tracking influenza. With the assistance and cooperation of local health officers and the coordinating efforts of the LINCS/regional epidemiologist, NJDOH receives weekly reports from schools, emergency departments (ED) and long term care facilities (LTCF) statewide regarding influenza like illness. Participation in the program is voluntary.

Objective of NJDOH ILI Surveillance

- To monitor trends of influenza-like illness activity in NJ
- Detect outbreaks in institutional settings in order to provide public health consultation on effective control measures.

Description of Methods

- The number of schools to be enrolled per county are selected based upon population (1 per 100,000 population), with a minimum of four schools per county. Many counties elected to include more than the requested number. The selection of a school does not indicate that influenza or respiratory illness is more likely to occur there compared to other schools in the area. CDS encourages all LTCFs and EDs to participate. A surveillance memo describing this surveillance is located in **Surveillance Appendix 1 - Attachment C**.
- Schools are being asked to provide the rate of absenteeism, as well as the predominant reason for absenteeism (respiratory illness, fever, gastrointestinal illness, etc.) occurring on Tuesday of every week.
- LTCFs are being asked to provide the number of residents ill with respiratory or ILI on Tuesday of every week.
- EDs provide the number of emergency department visits during a 24 hour period on the Tuesday of each week and the number of illnesses seen that were due to ILI (excluding asthma or other chronic lung conditions). This data is extracted from Hippocrates and EpiCenter. Data on ED visits and admission are also aggregated by week and included as a separate graphic in the weekly flu report.
- An ILI module within the Communicable Disease Reporting and Surveillance System (CDRSS) has been set up to capture all data collected. All entities are asked to report this information to the NJDOH by Friday of each week. The information is tabulated and incorporated in the ILI weekly report.

122 Cities Mortality Reporting System

Each week, CDC collects information from vital statistics offices in 122 cities. Each site reports the total number of death certificates filed and the number deaths categorized as either influenza or pneumonia related. NJ cities participating in this system include Camden, Elizabeth, Jersey City, Newark, Paterson and Trenton. The majority of Pneumonia & Influenza deaths are due to pneumonia, not influenza, as noted on the death certificate.

Objective of Influenza-Related Mortality Surveillance

- Assess trends in deaths that may be influenza-related

Description of Methods

Each week, vital statistics divisions of participating cities prepare a weekly report that includes the total number of death certificates filed that week and the number of deaths for which pneumonia or influenza was mentioned anywhere on the death certificate. Data is compiled and placed on CDC's website:

(<http://www.cdc.gov/mmwr/distrnds.html>)

CDS downloads the data from CDC and a NJ specific rate is calculated for pneumonia and influenza related deaths. Information regarding influenza morbidity and mortality are included in the ILI weekly report as described below.

Pediatric Influenza Surveillance

Subsequent to an unexpectedly high number of pediatric deaths due to influenza during the 2003-4 season, NJDOH implemented passive surveillance for mortality and severe complications due to influenza in pediatric patients. Pediatric influenza-related death was added to the national reportable disease list.

Objectives of Pediatric Influenza Mortality Surveillance

- To increase awareness among providers to report deaths and severe illness among children < 18 years that may be due to influenza illness
- To identify clinical and epidemiologic characteristics of fatal or severely ill cases of influenza among children
- To identify missed opportunities for vaccination and to guide national influenza vaccine policy

Description of Methods

At the start of each annual influenza season, CDS reminds infection control professionals to report any cases of children < 18 years of age with severe illness or death suspected to be due to influenza. Memo describing this surveillance can be found in **Surveillance Appendix 1- Attachment D**. Surveillance criteria are as follows:

Pediatric patients (i.e., less than 18 years of age) with laboratory confirmed influenza (e.g., rapid Enzyme Immunoassay [EIA], viral culture, Direct Fluorescent Assay [DFA], PCR, Immunohistochemistry [IHC], or hemagglutinin inhibition [HI]) meeting one of the following criteria.

- Influenza-related deaths (in which no period of complete recovery between the illness and death); OR
- Influenza encephalopathy (defined as altered mental status, or personality changes in patients lasting >24 hours and occurring within 5 days of the onset of an acute febrile respiratory illness; OR
- Severe illness defined as admission to an intensive care unit for influenza-related illness

Outreach to providers informing them of surveillance criteria is done via LINC messages targeted to health officers, epidemiologists and infection control practitioners at the beginning of the influenza season. Cases are reported via CDRSS with an additional survey to capture specific information is attached to each case. Information regarding NJDOH pediatric influenza reporting can be found at the following link: <http://nj.gov/health/flu/professionals.shtml>

Nosocomial Respiratory Outbreaks

Any outbreak of infectious illness, including suspected influenza, in a healthcare facility is reportable to the NJDOH under NJAC 8:57, 1.4-1.5. The NJDOH works with local health departments (LHDs) to provide consultation to long term care and acute care facilities experiencing influenza or respiratory outbreaks.

Objectives of Nosocomial Respiratory Outbreaks

- Provide consultation to facilities regarding antiviral prophylaxis and treatment, and reinforce infection control measures to minimize morbidity and mortality at affected institutions
- Obtain epidemiologic information regarding morbidity, mortality and effectiveness of vaccine and antivirals in long-term care facilities during the annual influenza season
- Characterize circulating strains of influenza virus

Description of Methods

CDS along with LHDs investigate reports of one or more laboratory-confirmed case of influenza or a cluster (two or more residents on one unit) of ILI at long-term care facilities as well as other residential living facilities. Medical consultation is provided to the facilities, regarding appropriate infection control measures, antiviral treatment and prophylaxis options. Information regarding these outbreaks is entered into an Access database which allows for tracking and analysis. Information regarding nosocomial outbreaks is included in the ILI weekly report as described below.

State-level assessments

Council of State and Territorial Epidemiologists (CSTE) Report

State health departments report the estimated level of influenza activity in their state each week to the CDC. The criteria used are as follows:

Objectives of State and Territorial Epidemiologists Report

- To classify, using a standard definition, the influenza activity in the NJ
- To compare influenza activity in NJ with influenza activity in other states

Description of Methods

Virologic and disease surveillance activities as described in the above sections are used to classify the influenza activity in NJ using standardized definitions. Information regarding State and Territorial Epidemiologists Reports are included in the ILI weekly report also sent weekly to CDC for inclusion in the national influenza activity report. A description of the influenza activity levels can be found at the following link: http://nj.gov/health/flu/documents/influenza_activity_levels.pdf

Weekly ILI Report

During the influenza season, CDS staff prepares a weekly, statewide, comprehensive report of ILI activity in the state.

Objective of Weekly ILI Report

- To provide a weekly report to stakeholders regarding current influenza activity in the state

Description of Methods

The above influenza surveillance systems are used to prepare a comprehensive report describing the influenza activity for the state. Two reports are prepared: one detailed report and one single page report. These reports are posted on the NJDOH website, distributed electronically via LINCSS to all public health and health care partners, and provided to the CDC. A copy of this report is located in **Surveillance Appendix 1 – Attachment E**. An annual summary report of the influenza season is also being created at the end of each influenza season.

OTHER NEW JERSEY SURVEILLANCE SYSTEMS

In addition to surveillance systems set up to monitor influenza like illness specifically, NJ has many other surveillance systems which can be used to verify or provide additional information to influenza surveillance systems. These systems are described below.

1. Respiratory Syncytial Virus (RSV) Surveillance

RSV is a common cause of bronchiolitis and pneumonia and has similar clinical features to influenza. During the 2003-2004 influenza season, laboratory surveillance for RSV was implemented. A minimum of one acute care hospital in each LINCSS jurisdiction reported weekly on both the number of RSV tests performed and the number that were positive. Weekly statewide reports were prepared and included in the ILI weekly report. Additionally ten acute care facilities in NJ provide data on RSV to the CDC's National Respiratory and Enteric Virus Surveillance System (NREVSS).

2. NJDOH Communicable Disease Reporting and Surveillance System (CDRSS)

CDRSS is a web-enabled system that is used to enter, update and track NJ's reportable communicable disease information. A patient-centric system, CDRSS has been designed to have multiple levels of security in order to maintain patient privacy and safeguard against unauthorized access. Along with the ability to enter cases in a real-time environment, CDRSS users (e.g., LEs, hospitals, health care providers, laboratories, health-related institutions) can run two types of reports on cases:

- Patient-specific Data - for individual cases that are within the county (jurisdiction) of the user; and
- Aggregate Data - statistical data that is compiled from individual cases and is used to show both statewide and county specific disease trends.

CDRSS has been introduced in all 21 counties, including over 560 users from Labs, hospitals, and laboratories. Data from CDRSS can be used to determine what other types of reportable respiratory illness having similar clinical symptoms to influenza might be occurring throughout the state.

3. Emergency Department Volume and Admissions Data

NJDOH conducts daily emergency department (ED) and Influenza-like illness (ILI) visits and admissions volume analysis and provides a daily summary email to local public health officials for alert notification. Data is collected from a survey hosted in Hippocrates for 11 hospitals and satellite EDs and from Epicenter for an additional 67 EDs. Blip notifications are generated using SAS 9.2 for ED and ILI visits and admissions data, reviewed and summarized into a report that includes alert notifications, responses and divert status by facility for local epidemiologists to either follow up with hospitals and/or use Epicenter to investigate the aberrations. A daily alert report for ILI is also posted in the Hippocrates gallery for stakeholders to review. With the increasing number of facilities in Epicenter, CDS is transitioning to fully utilizing Epicenter as a replacement for the daily email for alert notifications and instead provide a weekly summary report for situational awareness. NJDOH is also preparing to be a part of the national system for syndromic surveillance, BioSense 2.0. by providing access to data that EpiCenter already collects.

In addition, NJDOH has access to ED ILI visits and admission data by age for facilities who report via EpiCenter. This data is available real time and can be analyzed to assess burden of influenza associated hospitalizations.

4. Unexplained Death and Critical Illnesses Project (UNEX)

UNEX was initiated in 1995 as part of the CDC Emerging Infections Program (EIP). The purpose of this system is to conduct population based surveillance for possibly infectious deaths identified by health departments, medical examiners/coroners, pathologists, infectious control practitioners and clinicians. Criteria and forms for this project are located in **Surveillance Appendix 1 – Attachment F**.

Avian Surveillance

United States

- Animal surveillance for avian influenza, including wild birds and domestic poultry, is conducted by states, the poultry industry, and the U.S. Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS).
- Diagnostic testing is performed by state and industry laboratories, with confirmatory testing by USDA/APHIS Veterinary Services at the National Veterinary Services Laboratories in Ames, Iowa.

New Jersey

- New Jersey has a small to moderate size poultry industry. The New Jersey Department of Agriculture (NJDA) is responsible for the health of the state's livestock animals, including poultry, and works with the APHIS' regional office to perform avian influenza testing in live bird markets and other poultry venues in the state. Avian influenza in domestic poultry is required to be reported to the NJDA (NJAC 2:9).
- NJDOH has established a working relationship with the NJDA to assure timely notification of Avian Influenza (AI) outbreaks, particularly high-pathogenic AI, in the state. Notification will enable the NJDOH to investigate potential human exposures and implement prevention and control measures, as well as respond to inquiries from the media and the general public, as such an outbreak would likely be considered newsworthy and possibly alarming.
- The NJ Department of Environmental Protection (NJDEP) in conjunction with the USDA's regional Wildlife Services Office, conducts surveillance for avian influenza in wild birds, including Canadian geese, specific migratory species, and large or unusual wild bird die-offs. These agencies will immediately notify NJDOH in the event of a bird testing positive for high pathogenic avian influenza.
- Diagnostic testing for avian influenza is performed by the New Jersey Department of Agriculture's Veterinary Diagnostic Services laboratory with confirmatory testing performed at the National Veterinary Services Laboratories (NVSL) in Ames, Iowa.

Additional information regarding the role of NJDOH in animal surveillance can be found in **Surveillance Appendices 3, 4 and 5.**

Surveillance during the Pandemic Alert Period (phase 3 and 4)

Overview

The surveillance goals for the pandemic alert period are to rapidly detect and characterize circulating novel influenza viruses, track influenza cases and their contacts as they occur in New Jersey, contain the virus and limit the number of clusters, aid in the development of containment strategies and determine the effectiveness of containment strategies which have been implemented.

MONITORING FOR NOVEL STRAINS OF INFLUENZA

Enhanced Passive Surveillance for Novel Strains of Influenza

Once a novel influenza virus with documented human cases are detected anywhere in the world (e.g., H5N1 outbreaks in Asia in 1997, and 2004-present), enhanced surveillance to ensure rapid recognition of the first cases and their contacts will be implemented. Specific recommendations regarding identification, treatment and public health control measures will depend on the epidemiology of the virus, clinical characteristics and location of cases (inside US, outside US, in NJ). Surveillance will focus mainly on severely ill, hospitalized or ambulatory patients who meet certain epidemiologic and clinical criteria. The criteria will be modified to focus on the testing and reporting of hospitalized individuals with ILI (i.e., fever and cough and/or sore throat in the absence of another known cause) or individuals who comprised ILI clusters. CDRSS will be used to capture clinical and epidemiologic data on suspect, probable and confirmed cases of novel influenza. Data collected on cases will be sent to CDC as requested. Additional information on enhanced passive surveillance is located in **Surveillance Appendix 9.**

Contact Tracing

The capacity to do more detailed case and/or contact investigations will depend on staff resources, taking into account the potential impact on other agency priorities given the likelihood of an extended pandemic response. At the start of the pandemic in NJ, NJDOH will conduct case-based surveillance and obtain more detailed clinical and epidemiologic data on the initial cases.

Limited contact tracing and monitoring would only be considered for the initial cases at the start of the pandemic. Given the epidemiologic characteristics of influenza viruses (e.g., contagiousness before illness onset and potential for asymptomatic cases to shed virus), however, such tracking and use of NJDOH and local health department staff resources will not be an effective way to control the outbreak once there is evidence of sustained community transmission in the state. Therefore, contact investigations will not be conducted once resources become limited or when contact tracing becomes ineffective. Additional information on contact tracing methods can be found in **Surveillance Appendix 10**.

Evaluation of Seasonal Influenza Surveillance

Once a novel influenza virus is identified in NJ, current surveillance systems used for seasonal influenza will be used to monitor the progression on the novel virus. Depending on characteristics of the novel influenza virus that is circulating and the time of year that the novel influenza virus presents, the case definition and parameters used for routine seasonal influenza surveillance will be altered to ensure accurate reporting of cases associated with the novel influenza virus. ISP and clinical staff will evaluate case definitions based on current World Health Organization (WHO)/CDC guidance and revise the case definition as appropriate. Revisions to the case definition and/or surveillance systems will be communicated to local health authorities via LINCS.

Tracking Case Counts/Community Containment

As cases infected with the novel influenza virus increases, staff resources available to conduct investigations will become limited. Local health authorities will no longer be able follow up on individual cases of illness. When the public health system reaches this capacity, methodologies to track case counts rather than individual cases will be more realistic. In addition to tracking the number of cases, NJDOH will collect information on community containment measures being used by local health departments. Based on the information being provided, NJDOH can make recommendation on which community containment measures are most effective. During phase 4, mechanisms for implementation of a case counting procedures and collection of community containment measures will be developed. Once local health authorities reach capacity, this process will be implemented. Additional information on tracking case counts and community containment measures can be found in **Surveillance Appendix 11**.

[Preparedness planning for virologic and disease surveillance during a pandemic \(Heightened pandemic alert period WHO phase 5\)](#)

Eliminate Surveillance

As the pandemic progresses, some surveillance systems may provide more valuable information than others. Additionally, some surveillance systems can be labor intensive while others are simplistic. Surveillance systems like the sentinel provider surveillance system will likely not be sustainable during a pandemic as providers become overwhelmed caring for ill patients. Surveillance systems will be evaluated throughout the pandemic to determine which systems can no longer function in their intended manner. The evaluation process for surveillance systems will look at resources available to conduct the surveillance and the usefulness of the data being collected by that surveillance system to evaluate spread and effectiveness of community containment measures. It is impossible to prioritize surveillance systems prior to a pandemic. During Phase 4, surveillance systems being utilized will be evaluated, a prioritization of systems will be made and as resources decrease surveillance systems will be suspended.

[Scaled-back surveillance \(WHO Phase 6\)](#)

Once a novel influenza pandemic outbreak reaches Phase 6, health care providers will be overwhelmed dealing with ill patients. Health care providers will need to perform quick clinical assessments regarding patient conditions. While it would be ideal to collect and test each and every person meeting clinical criteria, it would not be practical as hospital and laboratory resources would quickly dwindle. Once a novel influenza virus has been identified, every person meeting clinical criteria will be considered to be infected with the virus. Laboratory testing of a portion of these patients will need to occur to monitor the novel virus for mutations or drug resistance (See Laboratory Diagnostics section). Basic data variables such as the number of cases seen in acute care facilities, the number hospitalized and the number who died will likely be the only data collected to track cases. Clinical and epidemiologic data will be collected from acute care facilities and medical chart review. For additional information see **Surveillance Appendix 8**.

JOB ACTION SHEET

POSITION TITLE: Influenza Surveillance Coordinator

Mission: Coordinate all activities related to influenza surveillance.

Daily Activities:

- Serve as a subject matter expert for influenza
- Provide consultation and technical assistance to surveillance partners (i.e., regional epidemiologist, sentinel providers, schools, emergency departments, long term care facilities) regarding enrollment, data submission, and other general influenza questions
- Provide consultation and technical assistance to the public regarding influenza
- Provide consultation and technical assistance to reporters (i.e., health care providers, laboratories) regarding reporting responsibilities related to influenza and other general influenza questions
- Monitor cases of reported pediatric cases, enter reported case into excel spreadsheet and follow up on cases meeting the case definition or those with unusual clinical presentation
- Manage and monitor all surveillance systems (e.g., data cleaning, updating, trend analysis)
- Respond to requests for additions (i.e., users, surveillance entities) to Communicable Disease Reporting and Surveillance System (CDRSS) Influenza-Like Illness (ILI) module and assist CDRSS help desk staff with questions related to the CDRSS ILI module.
- Other activities as deemed appropriate by Communicable Disease Service (CDS) management

Weekly Activities:

CDRSS

- Monitor reported cases of influenza
- Extract data weekly for inclusion in weekly report

CDRSS- ILI Module

- Run NJ Statistics Report and View Report in CDRSS ILI module
- Review data contained in report for possible data entry errors, contact reporters to verify spurious data
- Evaluate data to determine if parameters are above baseline
- Enter pertinent data to ILI weekly spreadsheet
- Evaluate data for identification of trend/pattern
- Prepare data for inclusion in the weekly report

U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

- Download data from Centers for Disease Control and Prevention (CDC) SPSN website
- Input data into ILI weekly spreadsheet
- Notify regional epidemiologist regarding non-reporters
- Prepare data for inclusion in the weekly report

Pediatric Surveillance

- Check CDRSS for reports of pediatric cases meeting case definition
- Ensure supplemental Hippocrates pediatric influenza survey is completed on all cases

- Import case data into excel spreadsheet
- Review cases reported to determine if the cases meet case definition
- Ensure all pertinent information is collected and entered into spreadsheet
- Follow up on cases with unusual presentation or missing information
- Prepare tally for inclusion in the weekly report
- Report cases meeting CDC case definition via CDC web reporting system
- Prepare end of season summary for distribution to stakeholders

Laboratory Surveillance

- Export influenza laboratory data from CDRSS and conduct data analysis on data
- Conduct follow up on reported cases to obtain necessary demographic information (i.e., age, gender, county of residence, outcome)
- Prepare data for inclusion in the weekly report

121 City Mortality Report

- Download data from CDC - 121 City Morality Report for 6 New Jersey cities
- Record pertinent data in excel spreadsheet
- Evaluate data for identification of trend
- Prepare data for inclusion in the weekly report

EpiCenter

- Evaluate influenza related anomaly reports
- Extract data for inclusion in CDRSS ILI Module
- Extract data for analysis of influenza-like illness hospitalizations

Weekly Influenza Report

- Determine influenza activity level based on Council of State and Territorial Epidemiologists (CSTE) defined criteria
- Create weekly graphs for influenza weekly report
- Prepare weekly influenza report
- Send report via Local Information Network and Communications System (LINCS) to stakeholders and post to NJDOH website

Seasonal Activities:

- Prepare seasonal surveillance memos that instruct stakeholders on the process for data submission
- Recruit sentinel providers for inclusion in the ILINet
- Work with regional epidemiologist to recruit ILI reporting entities
- Provide training to surveillance entities on use of the CDRSS ILI module
- Prepare seasonal influenza report and seasonal pediatric influenza report
- Identify CDRSS enhancements and report to CDRSS Steering Committee
- Prepare annual Respiratory Syncytial Virus (RSV) alert report
- Ensure pediatric influenza web-based reporting form has all pertinent information and is working properly
- Send of certificates of participation to sentinel providers

Ongoing Activities:

- Prepare guidance documents pertaining to the influenza surveillance (e.g., specimen collection, infection control)
- Assist health educators with the preparation of influenza education messages
- Collaborate with federal, regional, and state health agencies on influenza surveillance issues
- Provide training and education to stakeholders
- Keep up to date on information pertaining to novel influenza viruses
- Assist in preparation and update of pandemic influenza plans

Note: All letters that contain dates are examples of policies that may be used in the next response.



State of New Jersey

DEPARTMENT OF HEALTH

DIVISION OF EPIDEMIOLOGY, ENVIRONMENTAL AND OCCUPATIONAL HEALTH

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MARY E. O'DOWD, M.P.H.
Commissioner

TO: Regional Epidemiologists/County Influenza-like Illness Coordinators/Local Health Departments

FROM: Lisa McHugh, Influenza Surveillance Coordinator

DATE: September 11, 2013

SUBJECT: Recruiting Providers for the 2013-14 Outpatient Influenza-like Illness Surveillance Network

The Outpatient Influenza-like Illness Surveillance Network (ILINet) is a collaborative effort between New Jersey Department of Health (NJDOH) Influenza Surveillance Program (ISP), New Jersey local health departments, New Jersey's healthcare providers, and the Centers for Disease Control and Prevention (CDC). The purpose of this surveillance system is to monitor when influenza activity is occurring, what influenza viruses are circulating, and where the influenza activity is taking place. Through this reporting system, we are able to track New Jersey's influenza activity and compare information to other states around the country.

At the beginning of the 2012-2013 influenza season, New Jersey in collaboration with our local public health partners was able to enroll more than 90 providers into the sentinel provider program. NJ has consistently exceeded CDC's goal for enrollment of 37 providers. A certificate of appreciation from CDC was sent in July 2013 to all providers who actively participated in last season's program. I would like to take this opportunity to thank you for your commitment to this program and making last season a success.

As we approach the 2013-14 influenza season, it is again time to enroll provider sites. Your efforts in encouraging the providers already enrolled in the project to continue their participation and to recruit new providers in this program would be greatly appreciated. Regional epidemiologists, county ILI coordinators, and local health departments are encouraged to recruit enough sites to meet reporting goals (1 per 250,000 population or one provider per county where population is less than 250,000). This is very important since participation of providers from all of the counties will better reflect influenza activity of the state.

A limited number of rapid antigen test kits will again be offered as incentives for participation. Testing using rapid test kits is *not* a requirement for participation in the program. NJDOH will again be offering a rapid test kit manufactured by Binax. Please note that NJDOH offers kits as an incentive for participating in our program and should not be considered as the sole source provider of rapid testing kits for your facility. Once supplies at NJDOH are depleted, we will no longer be able to provide testing kits. Kits will not be distributed until sites demonstrate the ability to report on a regular basis.

In order to assist in the process of recruitment, several documents have been prepared and can be found at the end of this document. All providers interested in participating should complete the form entitled "Participation_agreement_13_14". The document "LHD_Instructions_for_Enrollment_13_14" should be used as a guide for enrollment. The document entitled "Sentinel_Program_FAQ_13_14" can be used as an enrollment tool to describe the sentinel provider program and the benefits of being enrolled. The remaining documents entitled "Providers_Reporting_instructions_13_14" and "Sentinel_provider_surveillance_form" should be given to any provider who signs up to participate in the program.

Please feel free to call me at (609) 826-5964 with any questions or concerns. Thank you once again for all your time and energy in making this program a success.

Note: All letters that contain dates are examples of policies that may be used in the next response.

Instructions for Enrollment of Sentinel Providers

1. NJDOH asks that *every* provider complete a participation agreement at the beginning of the season. This agreement describes what is expected of the provider. This document was also sent out with end of season certificates. NJDOH can make available forms already received from providers. Please review this document as it contains what NJDOH expects from all providers. Providers *will not* receive their CDC workbook until NJDOH receives this form.
2. NJDOH is asking every county to enroll enough providers to meet reporting goals (1 per 250,000 population or one provider per county where population is less than 250,000). The chart below describes the enrollment goals.
3. Providers can volunteer for the program at any time during the influenza season. **However, to ensure providers receive their workbooks and are able to begin reporting for MMWR week 40 (week ending October 8), NJDOH is asking that completed agreement forms be faxed (609-826-5972) or emailed (lisa.mchugh@doh.state.nj.us) by September 30, 2013.**
4. Provider information will be shared with CDC who will populate the ILI Sentinel Provider website and create provider workbooks with the provider ID and password. Workbooks will be sent to NJDOH and mailed to regional epidemiologist unless NJDOH is otherwise instructed to send elsewhere. Local health departments who will assist providers with data entry or would like access to their provider's records should copy the username and password from their provider workbook prior to delivering it to the provider.

Sentinel Provider Goals		
County	Population 2012 Census Estimate	Goal per County
Atlantic	275,422	1
Bergen	918,888	4
Burlington	451,336	2
Camden	513,539	2
Cape May	96,304	1
Cumberland	157,785	1
Essex	787,744	3
Gloucester	289,586	1
Hudson	652,302	3
Hunterdon	127,050	1
Mercer	368,303	1
Middlesex	823,041	3
Monmouth	629,384	3
Morris	497,999	2
Ocean	580,470	2
Passaic	502,885	2
Salem	65,774	1
Somerset	327,707	1
Sussex	147,442	1
Union	543,976	2
Warren	107,653	1
Total		37

Note: All letters that contain dates are examples of policies that may be used in the next response.

Information for providers on testing supplies/kits

- Providers who are not requesting rapid antigen test kits should try to submit 9 specimens from patients with ILI during the influenza season. Three specimens should be from the beginning, middle and end of the influenza season. NJDOH will provide media tubes, swabs, shipping containers and access to UPS account to these providers.
- Providers who requested influenza rapid antigen test kits can expect to receive them in October or November. In addition to the test kits, providers will receive information on how to collect and properly package and ship specimens **positive by rapid test kit** to the New Jersey Public Health and Environmental Laboratories. Providers who request rapid antigen test kits will receive rapid test kits, media tubes, swabs, shipping containers and access to UPS account to these providers. *Please note that NJDOH cannot be considered the sole supplier of rapid test kits for a practice. NJDOH will make every effort to ship back shipping containers in a timely manner. At times of heavy volume, these containers may be delayed.*
- Providers who request rapid antigen test kits **must**:
 - Submit 2-3 specimens **positive by rapid antigen test kit** per week to the New Jersey Public Health and Environmental Laboratories (PHEL)
 - Ensure specimen is properly labeled and the appropriate paperwork is properly completed
 - Provide necessary patient demographics and epidemiologic information upon request
 - Ensure employees are trained to package and ship specimens
 - Providers are responsible for ensuring they meet USDOT regulations for shipping these specimens. Additional information on shipping regulations can be found at: http://www.access.gpo.gov/nara/cfr/waisidx_06/49cfr178_06.html
 - Be registered with the state to conduct CLIA waived tests

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PLEASE FAX COMPLETED
FORM TO **609-826-5972**



NEW JERSEY DEPARTMENT OF HEALTH
SENTINEL PROVIDER ENROLLMENT/AGREEMENT

The NJ Influenza Sentinel Surveillance program is part of a larger national program conducted by the Centers for Disease Control and Prevention called the Outpatient Influenza-like Illness Surveillance Network (ILINet). In order to ensure that we meet all requirements for participation in the program and to ensure that specimens are collected and shipped in the appropriate manner, providers need to meet the following criteria to participate in this program.

- Providers must be able to submit year-round data on total office visits and office visits due to ILI (fever >37.8°C (100°F) plus cough and/or sore throat in the absence of another known cause) by CDC defined age groups each week.
- Providers who are *not* requesting rapid antigen test kits should try to submit 9 specimens during the influenza season. Three specimens should be from the beginning, middle and end of the influenza season.
- Providers who request rapid antigen test kits **must**:
 - Submit specimens (~1-2 per week) to the New Jersey Public Health and Environmental Laboratories (PHEL)
 - Provide necessary patient demographics and epidemiologic information upon request
 - Ensure employees are trained to package and ship specimens
 - Be registered with the state to conduct CLIA waived tests

Laboratory supplies and shipping to conduct the above activities will be provided free of charge. If you are willing and able to conduct the above activities and want to participate in the NJ sentinel provider program, please provide the following information. If you are no longer interested in participating, simply write your practice name and the word inactivate next to it.

Physician/Practice Name:	
CDC Provider ID (if known):	Email:
Address:	
Phone:	Fax:
Primary contact person in office:	
Name that should appear on your end of season certificate:	
Practice type: <input type="checkbox"/> Emergency medicine <input type="checkbox"/> Family practice <input type="checkbox"/> Infectious disease <input type="checkbox"/> Internal medicine <input type="checkbox"/> OB/GYN <input type="checkbox"/> Pediatrician <input type="checkbox"/> Student health <input type="checkbox"/> Urgent Care <input type="checkbox"/> Other, explain:	
Number of physicians in your practice:	Approximate number of active patients in practice:
Approximate number of weekly patient visits:	Do you use electronic medical records? <input type="checkbox"/> Yes <input type="checkbox"/> No
Are you interested in receiving rapid antigen test kits (NOTE: See requirements above. The number of kits allotted per provided depends on the number of providers enrolled. There is not an unlimited supply of kits.)? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Would you like to use free UPS shipping services if offered by NJDOH? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Should additional surveillance activities associated with novel influenza or other respiratory viruses be necessary (e.g., daily surveillance, additional age group reporting, additional testing) would you be willing to assist in these activities? <input type="checkbox"/> Yes <input type="checkbox"/> No	

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New Jersey Department of Health

Outpatient Influenza-like Illness Surveillance Network (ILINet)

Your help is needed

ILINet providers are essential to influenza surveillance. They provide information which allows us to track the progression of seasonal influenza and can assist in the detection of novel influenza viruses. It was ILINet providers that identified the first cases of 2009 H1N1. Please consider having your clinic/practice represented in this vital public health program.

Most sentinel providers report that it takes them **between 20 and 40 minutes a week** to compile and report their surveillance data.

What is an influenza sentinel provider?

- An ILINet provider conducts surveillance for influenza-like illness (ILI) in collaboration with the New Jersey Department of Health (NJDOH), local health departments and the Centers for Disease Control and Prevention (CDC).
- Data reported by ILINet providers, in combination with other influenza surveillance data, provide a national picture of influenza virus and ILI activity in the United States.
- New Jersey would like to enroll 40 providers throughout New Jersey.
- Year-round surveillance is encouraged in order to monitor for a novel influenza virus that could show up at any time and possibly signal a pandemic.

Who can be an influenza sentinel provider?

- Providers of any specialty (e.g., family practice, internal medicine, pediatrics, infectious disease) are eligible to be sentinel providers.
- Providers in any type of practice (e.g., private practice, public health clinic, urgent care center, emergency room, university student health center) are eligible to be sentinel providers.

What data do sentinel providers collect and how is this information reported?

- Sentinel providers report the total number of patient visits each week and number of patient visits for influenza-like illness by age group (0-4 years, 5-24 years, 25-49 years, 50-64 years, > 64 years).
- These data are transmitted once a week via the internet or fax to a central data repository at CDC, which NJDOH and local public health agencies can access and use to track disease levels.

Why volunteer?

- Health care providers represent the first line of defense in the recognition of an unusual case or cluster of influenza. This system helps to integrate physicians into public health functions.
- Influenza viruses cause substantial morbidity and mortality (approximately 36,000 deaths) each year. This program is critical for monitoring the impact of influenza at the community level.
- In combination with other influenza surveillance data, ILINet data can be used to guide prevention and control activities, vaccine strain selection, and patient care. This information is critical for protecting the public's health.
- Sentinel providers will be offered specimen collection kits and commercial rapid antigen detection kits for influenza – **FREE OF CHARGE**.
- NJDOH can assist with the delivery of select influenza specimens to NJDOH Public Health and Environmental Laboratories for PCR and viral isolation.
- All participating providers who report information during the year will receive a participation certificate from the CDC along with optional subscriptions to Morbidity and Mortality Weekly (MMWR) and Emerging Infectious Disease Journal.

For more information, contact your local health department or the NJDOH, Influenza Surveillance Program at **(609) 826-5964**.



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New Jersey Department of Health
Influenza Sentinel Provider Reporting

- Every provider wishing to enroll in the program should complete an enrollment form. This includes providers who have been enrolled and reported in previous seasons. Once enrolled, each provider will receive a packet from CDC containing his/her user name, password, reporting booklet and instructions on reporting. CDC asks that providers make every effort to submit reports via the CDC Influenza Sentinel website by Tuesday at noon. Alternatively, a fax is acceptable but web reporting is preferred. NJDOH asks providers to make every effort to report data in a timely fashion even if there are no patients with ILI to report.
- Local health departments can provide assistance with this reporting upon request. If a local health department is asked to assist in reporting, the provider should share their username and password with them to facilitate electronic reporting.
- Providers who requested influenza rapid antigen test kits can expect to receive them in October or November. In addition to the test kits, providers will receive information on how to collect and properly package and ship specimens **positive by rapid test kit** to the New Jersey Public Health and Environmental Laboratories. Providers are asked to submit a **minimum** of 3 samples at the beginning, middle, and end of the influenza season. If a provider wishes to submit samples more than 3 times per year they are asked to limit the number of samples sent to 2-3 per week. Providers who do not submit any samples for testing during the influenza season will **NOT** be offered kits in the future. Please note that rapid test kits are being provided as an incentive and NJDOH should not be considered the sole source of rapid testing kits for your practice.
- Providers are responsible for ensuring they meet USDOT regulations for shipping these specimens. Additional information on shipping regulations can be found at: http://www.access.gpo.gov/nara/cfr/waisidx_06/49cfr178_06.html
- The “**Sentinel Provider Surveillance Form**” has been created to assist providers in reporting weekly ILI information. All the data that needs to be captured on an individual patient (i.e., influenza-like illness [ILI] case definition, age category, evaluation date) is located on the form. This form can be kept in a central location or an exam room and completed for each patient who meets the ILI case definition. Forms can be consolidated at the end of the week, and the number of forms tallied and reported. NJDOH does not require use of this form but merely provides it as a way to assist in data collection. This form should **not** be used to fax information to CDC. Information provided in the CDC workbook will guide providers on how to properly submit information to CDC.
- Some practices may prefer to use electronic medical records to report cases of ILI. While the CDC does not formally recommend ICD codes that should be used for this purpose, a list of ICD-9 and ICD-10 codes for influenza and influenza-like illness are listed below. Each clinic/practice should evaluate the case definition for ILI and try to identify the most commonly used codes to describe patients meeting the ILI case definition. NJDOH would be glad to assist any practice/clinic who has additional questions regarding use of

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ICD codes. NJDOH may ask providers to modify reporting codes once data is received to ensure consistency in reporting.

ICD-9 code	Description
487 (all subcodes)	Influenza
462 (all subcodes)	Acute pharyngitis
780.6	Fever
786.2	Cough
780.7	Malaise and fatigue

ICD-10 code	Description
J10 (all subcodes)	Influenza
J11 (all subcodes)	Influenza virus not identified
J02.9, J02.9	Acute pharyngitis
R50, R50.9	Fever, Fever unspecified
R05	Cough
R53	Malaise and fatigue

If you have any questions or concerns, please contact your local health department or NJDOH Influenza Surveillance Program at 609-826-5964.

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CDC Provider ID



Sentinel Provider Surveillance Form

Does the patient meet the influenza-like illness (ILI) criteria? Yes No

If yes, complete the following:

- 0-4 years 5-24 years
 25-49 years 50-64 years
 >64 years

Date evaluated: ___/___/___

Influenza-like illness (ILI) is defined as:

Patient experiencing Fever ($\geq 100^{\circ}\text{F}$, oral or equivalent) AND cough and/or sore throat (in absence of known cause).

NOTE:

- The presence or absence of other symptoms, such as body aches, fatigue, or vomiting, should be disregarded when classifying a patient as having an ILI. Although this clinical definition by itself is very general, when combined with other information on circulating viruses, the information on influenza-like illness activity provides an excellent picture of influenza activity in the United States.
- Fever is often difficult to measure in elderly individuals. Therefore, the definition of fever to be used for ILI surveillance in elderly residents of long-term care facilities is a temperature $\geq 100^{\circ}\text{F}$ OR 2 degrees above established baseline for that resident.

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State of New Jersey

DEPARTMENT OF HEALTH

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Commissioner

To: Health Officers/ Regional Epidemiologists/ILI Coordinators

From: Lisa McHugh, MPH
Influenza Surveillance Coordinator

Date: September 11, 2013

Subject: 2013-2014 Influenza-Like Illness (ILI) Surveillance

The New Jersey Department of Health (NJDOH), along with our public health partners, has been collecting information on influenza via an active influenza surveillance system for several years. All entities involved in this surveillance are encouraged to report information year round. This system incorporates information from long-term care facilities, hospital emergency departments, and schools, and is one of the major components used to determine statewide influenza activity.

Data collection for the 2013-2014 influenza season will remain similar to previous seasons. NJDOH encourages you to read this memo carefully to ensure all reporting requirements for your jurisdiction are being met. This memo also serves as a reminder to assess all entities enrolled in the ILI surveillance program to determine if they will continue to participate and to begin enrolling new entities to meet required goals.

Enrollment

NJDOH requests each county to enroll the following number of reporting entities.

- One school per 100,000 population, with a minimum of four schools per county.
- All hospital emergency departments and all long-term care facilities in each county.
- Respiratory syncytial virus (RSV) reports from at least one hospital per county.
- Rapid antigen influenza testing reports from all hospitals.

The following considerations/recommendations should be used when enrolling new entities.

- Health officers, regional epidemiologists and ILI coordinators should work together to identify entities which will participate in the upcoming season. Entities should be well distributed throughout the county and not all located in one municipality or one geographic area.
- A contact person and back up responsible for providing the necessary information should be established within each reporting entity.

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- Each LINCS agency should designate a contact person and backup for ILI reporting. This person will be responsible for collecting and transmitting data to NJDOH. Contact information for this person should also be given to all reporting entities and NJDOH.

Data Collection

Data collection will be similar to previous years. It is imperative that this information be communicated to all reporting entities to ensure consistency of the data being collected.

Schools: Enrolled schools should report the total student population and the number of students absent on Tuesday of each week. Schools are encouraged to report if absences fall into one of the following categories: respiratory, gastrointestinal, fever or other. If a school does not collect this type of information, a report of “unknown category” should be indicated on the report. Unusual activity (e.g. large number of absences due to a field trip or standardized testing) should be noted in the comments section of the Communicable Disease Reporting and Surveillance Systems (CDRSS).

Long-term care facilities: Enrolled facilities should report the number of residents in the facility and the number ill with ILI on Tuesday of each week. The case definition that should be used to determine ILI is below.

- Residents experiencing an illness that is characterized by fever and symptoms compatible with influenza (headache, change in mental status, lethargy, productive or non-productive cough, sore throat, runny or stuffy nose, or muscle aches). Please note that fever is often difficult to measure in elderly residents, therefore, the definition of fever to be used for ILI surveillance is a resident experiencing a temperature $\geq 100^{\circ}$ F **OR** 2 degrees above established baseline for that resident.

Hospital Emergency Departments: The total number of emergency department visits and the total number of visits due to ILI are currently being collected via a daily Hippocrates survey or via data downloaded from the EpiCenter system. Facilities who do not need to report visit and admission information via Hippocrates have been notified that their information is being extracted from the EpiCenter system. Facility responses recorded in Hippocrates from Tuesday each week are recorded in CDRSS by NJDOH staff. Regardless of which system the facility is using to report their data, no additional data entry is required by the local health department or health care facilities.

Respiratory Syncytial Virus (RSV): Enrolled entities should provide the total number of RSV tests performed and the total number of RSV testing that were positive for the prior week (Sunday to Saturday). These data should be forwarded by the entity to the local ILI reporting contact no later than noon on Tuesday following the reporting week. If there are no tests performed or no tests are positive, a zero value should be forwarded instead of not reporting.

Influenza Rapid Antigen Testing: Enrolled entities should provide the total number of influenza tests performed and the total number of tests positive by influenza type for the prior week (Sunday to Saturday). These data should be forwarded by the entity to the local ILI reporting

Note: All letters that contain dates are examples of policies that may be used in the next response.

contact no later than noon on Tuesday following the reporting week. If there are no tests performed or no tests are positive, a zero value should be forwarded instead of not reporting.

Reporting

NJDOH encourages all entities to report data **year round**. Data will be reported based on the Morbidity and Mortality Weekly Report (MMWR) weeks set up by the Centers for Disease Control and Prevention (CDC).

NJDOH will continue to utilize the ILI surveillance module located within the CDRSS. Each entity can begin entering data on Monday at 12 am and can continue to enter data until Thursday at 5pm. Entries submitted after the weekly deadline need to be forwarded to NJDOH for entry (InfluenzaAdvisoryGroup@doh.state.nj.us). Data submitted late for entry will not appear in the weekly ILI report; however, statistics will be generated based on late data and can be shared with reporting entities upon request. Statewide summary reports and statistical information are viewable by everyone with access to the CDRSS ILI module.

CDRSS has a field for both RSV and influenza rapid antigen testing data. Data should be entered on the appropriate data entry line and not in the comments sections. Please remember that RSV and rapid antigen test data will be reported with a one week lag. RSV and rapid antigen test data will be reported with data for the week in which it was collected and included in the following week's summary.

Additional user access or changes/additions to reporting entities within CDRSS should be sent to NJDOH at InfluenzaAdvisoryGroup@doh.state.nj.us. When requesting additions to CDRSS, you should include the name and address of the entity in the email. It is the decision of the LINC agency and regional epidemiologist whether to centrally collect and input surveillance data or to allow reporting entities to input information directly into CDRSS. Additionally, entities who are no longer reporting should be sent to NJDOH so they can be inactivated from the reporting system.

Reports

A weekly influenza report will be produced each week which details state and regional activity. The report will be distributed no later than Wednesday for the previous MMWR week. Reports will be sent via LINC and will also be posted to the NJDOH website (<http://nj.gov/health/flu/fluinfo.shtml>). This information will be included in the influenza weekly report and can also be found on the CDC website (<http://www.cdc.gov/flu/weekly>).

Thank you for your continued cooperation in this surveillance project. Should there be any questions, please feel free to contact Lisa McHugh at 609-826-5964.

Note: All letters that contain dates are examples of policies that may be used in the next response.



State of New Jersey
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 DIVISION OF EPIDEMIOLOGY, ENVIRONMENTAL AND OCCUPATIONAL HEALTH
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KIM GUADAGNO
Lt. Governor

MARY E. O'DOWD, M.P.H.
Commissioner

To: Health Officers, Regional Epidemiologists, State and County Medical Examiners, Hospital Infection Preventionist, Pediatric Practitioners

From: Lisa McHugh, MPH
 Influenza Surveillance Coordinator

Date: October 7, 2013

Subject: NJDOH Pediatric Influenza Surveillance

Surveillance for pediatric cases of influenza was initiated during the 2003-2004 influenza season when several influenza deaths were reported in children. These reports generated concern that children were disproportionately affected by influenza during that season. In response, CDC requested that states increase their efforts to collect and report information on pediatric influenza cases. Influenza-associated pediatric mortality was added to New Jersey's reportable disease list in 2009. To further assess the burden of influenza-associated severe illness and death in the pediatric population and to gather data that might influence influenza-related policy, the New Jersey Department of Health (NJDOH) is requesting reports of cases of severe or fatal influenza in hospitalized pediatric patients. Health care providers and facilities should report cases of:

- Pediatric patients (i.e., less than 18 years of age) with laboratory confirmed influenza* AND
- Influenza-related deaths (in which there is no period of complete recovery between illness and death); OR
- Influenza encephalopathy (defined as altered mental status or personality changes in patients lasting more than 24 hours and occurring within 5 days of the onset of an acute febrile respiratory illness); OR
- Severe illness defined as admission to an intensive care unit for influenza-related illness

NJDOH requests patients meeting the above criteria be entered into the Communicable Disease Reporting and Surveillance System (CDRSS) by the acute care facility or local health department where the patient resides within 24 hours of the case-patients' discharge or death. A supplemental survey form is requested on all cases reported to CDRSS. This survey can be accessed directly from CDRSS by selecting "PED_FLU_13_14" from the "Outbreak #" drop down list located in the "Outbreak/Investigation Information" section on the epidemiology tab. Directions and screen shots of the reporting process can be found in the attached document.

Reporters are reminded that pediatric influenza reporting is a *year-round initiative* and should be reported even when influenza virus is not actively circulating. Arrangements can be made for additional testing on specimens from cases meeting the above definition. NJDOH appreciates your cooperation in this surveillance activity. If you have any additional questions about reporting cases, please contact Lisa McHugh at 609-826-5964. Thank you for your assistance.

*Laboratory testing for influenza virus infection may be done on pre- or post-mortem clinical specimens, and includes identification of influenza A or B virus infections by a positive result by at least one of the following methods:

- Influenza virus isolation in tissue cell culture from respiratory specimens
- Reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens
- Immunofluorescent antibody staining (direct or indirect) of respiratory specimens
- Rapid influenza diagnostic testing of respiratory specimens
- Immunohistochemical (IHC) staining for influenza viral antigens in respiratory tract tissue from autopsy specimens
- Four-fold rise in influenza hemagglutination inhibition (HI) antibody titer in paired acute and convalescent sera (single serum samples are not interpretable)

Note: All letters that contain dates are examples of policies that may be used in the next response.

Reporting of Severe and Fatal Pediatric Influenza
New Jersey Department of Health
2013-2014 Influenza Season

Patients meeting the below criteria should be entered into the Communicable Disease Reporting and Surveillance System (CDRSS) within 24 hours of the case-patients' discharge or death. A supplemental questionnaire has been created as a survey in the Hippocrates system and is now linked to CDRSS by selecting "PED_FLU_13_14" from the "Outbreak #" drop down list located in the "Outbreak/Investigation Information" section on the epidemiology tab (see below). This replaces the previous web based questionnaire and should be completed on all patients meeting the reporting criteria. Once the survey is submitted, it becomes part of the CDRSS record and is available for viewing and editing in the case patients CDRSS record. A Hippocrates account is not required to complete the survey. Instructions on what information should be recorded in CDRSS and how to submit the supplemental survey can be found below.

Reporting Criteria

The New Jersey Department of Health (NJDOH) is requesting reports of cases of severe or fatal influenza in hospitalized pediatric patients. Health care providers and facilities should report cases meeting the following clinical and laboratory criteria.

Clinical

- Pediatric patients (i.e., less than 18 years of age) with laboratory confirmed influenza **AND**
- Influenza-related deaths (in which there is no period of complete recovery between illness and death); **OR**
- Influenza encephalopathy (defined as altered mental status or personality changes in patients lasting more than 24 hours and occurring within 5 days of the onset of an acute febrile respiratory illness); **OR**
- Severe illness defined as admission to an intensive care unit for influenza-related illness

Laboratory

Laboratory confirmation for influenza virus infection may be done on pre- or post-mortem clinical specimens, and includes identification of influenza A or B virus infections by a positive result by at least one of the following methods:

- Influenza virus isolation in tissue cell culture from respiratory specimens
- Reverse-transcriptase polymerase chain reaction (RT-PCR) testing of respiratory specimens

Note: All letters that contain dates are examples of policies that may be used in the next response.

- Immunofluorescent antibody staining (direct or indirect) of respiratory specimens
- Rapid influenza diagnostic testing of respiratory specimens
- Immunohistochemical (IHC) staining for influenza viral antigens in respiratory tract tissue from autopsy specimens
- Four-fold rise in influenza hemagglutination inhibition (HI) antibody titer in paired acute and convalescent sera (single serum samples are not interpretable)

CDRSS Entry

All cases meeting the above criteria should be entered into CDRSS by the acute care facility or by the local health department where the patient resides. At a minimum, the following information should be entered in CDRSS.

1. Patient information Tab
 - a. Disease – Influenza, Human Isolates should be selected for all influenza reports.
 - b. Subgroup- Subgroup should be selected based on the patients test results.

► Patient Information

Disease Information:	
Disease:	INFLUENZA, HUMAN ISOLATES
Subgroup:	Select Subgroup
Date Reported to State:	Pending
Local Health Department:	NOVEL INFLUENZA A
	TYPE 2009 H1N1
	TYPE A (SUBTYPING NOT DONE)
Patient Personal Information:	
Prefix:	TYPE A H1
	TYPE A H3
	TYPE B

Onset Date: []

First Name: []

Last Name: []

1. Pending
 - a. Select pending if the test has been conducted but the result of the test remains unknown.
2. Novel Influenza A
 - a. Select this from the drop down list if an influenza virus has been identified which cannot be subtyped by standard laboratory methods (i.e., unsubtypeable).
3. Type 2009 H1N1
 - a. Select this from the drop down list if a 2009 H1N1 influenza virus has been identified
4. Type A (Subtyping not done)
 - a. Select this from the drop down list if an influenza A virus has been identified but an influenza subtype has not been identified. (NOTE: This is not the same as A

Note: All letters that contain dates are examples of policies that may be used in the next response.

- Unsubtypeable) This includes test conducted by rapid antigen test which are positive for influenza A.
5. Type AH1
 - a. Select this from the drop down list if an influenza AH1 virus has been identified.
 6. Type AH3
 - a. Select this from the drop down list if an influenza AH3 virus has been identified.
 7. Type B
 - a. Select this from the drop down list if an influenza B virus has been identified.
- c. Onset Date – Enter the date which signs and symptoms first began.
 - d. First and Last Name- Enter the first and last name of the case patient.
 - e. Current address information – Enter the address where the patient currently resides.
 - f. Gender, Race, Ethnicity – Enter the gender, race and ethnicity of the case patient.
2. Clinical Status Tab
 - a. Medical Facilities – Ensure both admission and discharge dates are included.
 - b. Physicians – Enter all physicians associated with the case.
 - c. Pre-existing conditions – Enter any pre-existing conditions the patient had prior to illness onset.
 - d. Treatment - Enter any treatment the patient had prior to or during illness.
 - e. Mortality - Select yes if the patient died and enter any death specific information (i.e., date of death, autopsy information) available.
 3. Signs/symptoms Tab
 - a. Select the signs/symptoms that were associated with the case patients illness.
 4. Laboratory Evaluation Tab
 - a. Include any influenza laboratories that were conducted including rapid influenza diagnostics tests.
 5. Case Comments Tab– Enter any relevant comments associated with the investigation of the illness.
 6. Epidemiology Tab – The supplemental survey can be accessed from this tab. Please see instructions below for using the Hippocrates survey for additional case reporting.
 7. Case Classification Tab – Assign the correct case and report status for the case.
 - a. Confirmed - A clinically compatible case that is laboratory confirmed (see clinical and laboratory criteria above).

Note: All letters that contain dates are examples of policies that may be used in the next response.

- b. Not a case – A case not meeting the confirmed case definition.

Supplemental Hippocrates Survey from CDRSS

Providers reporting a patient meeting the above reporting criteria should follow the directions below and also complete the Hippocrates survey in addition to the CDRSS fields requested above. The survey can be completed by following the step by step instructions provided below.

1. Go to the Epidemiology Tab



2. Under the “Outbreak/Investigation Information” section, select the drop down arrow for “Outbreak #”
- Select PED_FLU_13_14 if you are reporting a pediatric case associated with any influenza virus.

Epidemiology:

Route of Transmission: AIRBORNE
BLOODBORNE
CONGENITAL
CONTACT

Method of Import: [Dropdown]

Method of Case Detection: ACTIVE SURVEILLANCE
CASE OR OUTBREAK INVESTIGATION
CONTACT INVESTIGATION
LABORATORY REPORT

Case Investigators and Addresses:

Last Name	First Name	Address	History	Remove
ADD NEW INVESTIGATOR				

Investigation:

Interviewed: Unknown [Dropdown] Reason not interviewed: [Dropdown]

Other Control Measures:

Patient's Role/Function: [Dropdown]

ADD NEW

Observation Status: [Dropdown]

Observation Address: [Text Field]

EDIT OBSERVATION ADDRESS

Outbreak/Investigation Information:

Outbreak #: [Dropdown] Investigation #: PED_FLU_13_14....10/07/2013 [Dropdown]

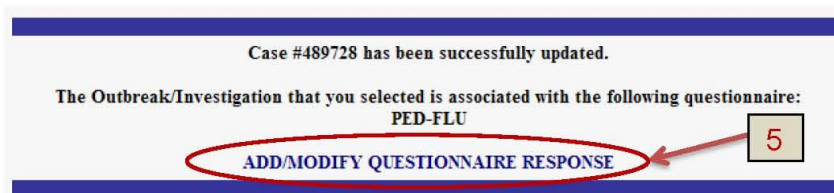
Note: All letters that contain dates are examples of policies that may be used in the next response.

- Once you select the correct “Outbreak #”, a description of the outbreak will appear below your selection.

- Complete the remaining tabs of the CDRSS record. Assign the correct case and report status and then submit the case.

Note: All letters that contain dates are examples of policies that may be used in the next response.

- Upon submission of the CDRSS record, the following message will appear along with a selectable field called “ADD/MODIFY QUESTIONNAIRE RESPONSE”. Select this new field.



- The Hippocrates survey will appear in a new window.

- Respond to each question requested in the survey. This is a conditional survey which means that your responses define which additional questions will appear on the remainder of the survey. NOTE: Some conditional questions may take a moment or two to load, please be patient and allow the questions to load before responding.

Note: All letters that contain dates are examples of policies that may be used in the next response.

DEATH INFORMATION

1 Did the patient die?
 Yes No

If the death occurred in the hospital, what was the date of ADMISSION?

Location of death:
 Outside the Hospital (e.g. home or in transit to hospital)
 Emergency Dept (ED)
 Inpatient ward
 ICU
 Other

If other, please specify:
 (Alpha-numeric)

Did cardiac/respiratory arrest occur outside of the hospital?
 Yes
 No
 Unknown

Was an autopsy performed?
 Yes
 No
 Unknown

Date of Death:

7 – Example of conditional questions
 This is an example of conditional responses – you will only see these questions if you respond “yes” to question 1.

8. At the end of the survey, please indicate who is submitting the survey and who we may follow up with if additional questions arise. After all questions have been responded to click submit at the end of the survey.

CONTACT INFORMATION

1 Submitted By:
 (Alpha-numeric)

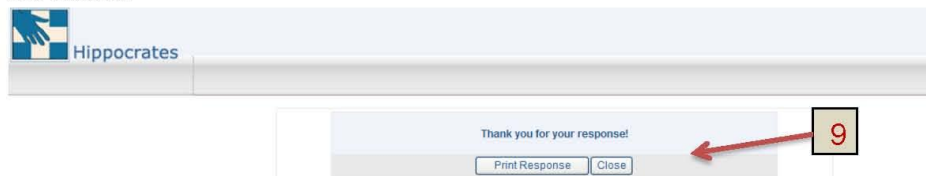
2 Date:
 (D/T-EST)

3 Phone Number:
 (Alpha-numeric)

4 Email Address:
 (Alpha-numeric)

Note: All letters that contain dates are examples of policies that may be used in the next response.

9. After you submit the record you can either print your responses or simply close the record.



10. You will now be returned back to CDRSS and can continue

Modifying Survey Responses

1. After the CDRSS record has been submitted, you can access the survey responses by opening the CDRSS record and clicking on the epidemiology tab. Select "ADD/MODIFY QUESTIONNAIRE RESPONSE" to view or modify any survey response.

Number: **PED_FLU_13_14**

Start Date: **09/30/2011** End Date:

Location Name:

Street: Apartment:

City: State: **NJ**

County: **UNKNOWN** Municipality: **OTHER/UNKNOWN**

Zip:

Description: **This E# will capture severe and fatal pediatric influenza cases occurring in the 2013-14 influenza season.**

Associated Questionnaire: **PED-FLU**

ADD/MODIFY QUESTIONNAIRE RESPONSE

2. You will also have the opportunity to access the survey after re-submitting the CDRSS case in the same fashion as described above.

Case #489728 has been successfully updated.

The Outbreak/Investigation that you selected is associated with the following questionnaire:
PED-FLU

ADD/MODIFY QUESTIONNAIRE RESPONSE

Weekly Influenza Report

The New Jersey Department of Health (NJDOH) produces a weekly report detailing influenza virus circulation and its' impact on the New Jersey population. This report is produced through the season but is posted publically from October to May when the likelihood of influenza circulation is greatest. An abbreviated report is produced from June to September and sent only to local health departments and regional epidemiologists. This report can be accessed from the following website: <http://nj.gov/health/flu/fluinfo.shtml>

Unexplained Deaths Project

The Centers for Disease Control and Prevention (CDC), Infectious Disease Pathology Branch (IDPB) can assist when deaths associated with a respiratory illness occur for which no etiology has been identified using currently available testing modalities. Protocols for working with IDPB including clinical consultation and specimen collection are available on the following website:

<http://www.cdc.gov/nceid/dhcpp/idpb/unexplained-deaths/index.html>

Reporting of Cases of Severe Respiratory Illness of Unusual Presentation or Unknown Cause

Overview

NJ Department of Health (NJDOH) conducts both disease and virologic surveillance for influenza year-round. This surveillance allows NJDOH to determine when and where influenza viruses are circulating, detect circulating strains, identify changes in the virus, and monitor influenza-related illness. Individual cases of influenza are not reportable. In addition, NJDOH also conducts surveillance on individual cases and outbreaks diagnosed with specific respiratory illness (e.g., legionellosis, invasive pneumococcal disease).

While these surveillance systems capture a large number of respiratory illnesses, severe or unusual cases of unknown respiratory illness may not be reported. It is important to quickly identify severe cases of unknown respiratory illness so that public health control measures can be enacted in a timely manner.

Objective

The objective of the heightened respiratory surveillance is to detect unusual occurrences of severe respiratory infections that have the potential for large-scale epidemics and to facilitate rapid implementation of infection control and public health measures.

Surveillance Criteria

A person admitted to hospital with respiratory symptoms, i.e.:

- Fever (over 38 degrees Celsius) AND new onset of (or exacerbation of chronic) cough or breathing difficulty

AND

Evidence of severe illness progression, i.e.:

- Radiographic evidence of infiltrates consistent with pneumonia or acute respiratory distress syndrome (ARDS) **OR**
- Severe ILI, which may also include complications such as encephalitis or other severe and life threatening complications

AND

No alternate diagnosis within the first 72 hours of hospitalization, i.e.:

- Results of preliminary clinical and/or laboratory investigations, within the first 72 hours of hospitalization with no response to treatment, cannot ascertain a diagnosis that reasonably explains the illness.

A deceased person with a history of respiratory symptoms, i.e.:

- History of unexplained acute respiratory illness (including fever, and new onset of [or exacerbation of chronic] cough or breathing difficulty) resulting in death

AND

Autopsy performed with findings consistent with severe respiratory illness, i.e.:

- Autopsy findings consistent with the pathology of ARDS without an identifiable cause

AND

No alternate diagnosis that explains the illness.

Reporting

Cases meeting the above surveillance criteria should be reported **IMMEDIATELY** to the local health department (LHD) where the patient resides. If LHD personnel are unavailable, health care providers should report the case to the New Jersey Department of Health Communicable Disease Service (NJDOH CDS) at 609-826-5964, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings and holidays, NJDOH CDS can be reached at (609) 392-2020.

Resources

1. Early Detection of Severe or Emerging Respiratory Infections through Severe Respiratory Illness (SRI) Surveillance. Health Canada, February 4, 2004. Available at: http://www.phac-aspc.gc.ca/sars-sras/pdf/hc-ri-enhanced-surveillance-pop_e.pdf
2. Enhanced Severe Respiratory Illness Surveillance Plan (Phase 0: no known circulating SARS). Capital Health, Public Health Division, December 11, 2003. Available at: http://www.capitalhealth.ca/nr/rdonlyres/e3r4e56c7dngjrk6tbgmywtevwjgofmkbbm6ugq74vajx2gxfkohesa4c4kyihbtazqjsv575ouxifmybtvnj3fzwcb/sars_surveillance_plan_phase0.pdf

Role of NJDOH in Animal Surveillance for Novel Influenza

Overview

Commonly, novel viruses originate from the mutation an influenza virus commonly found in animals and then obtain the ability to transmit the virus to humans. Influenza viruses from swine and avian origins have recently been of greatest concern.

Avian influenza (AI), or “bird flu”, is a contagious disease of animals caused by viruses that normally infect only birds and less commonly other mammals such as pigs. Some birds, notably waterfowl, are believed to be the reservoirs of AI and can shed the virus in their feces without clinical signs of disease. Similar to the human population, each year there is a flu season affecting different birds in varying ways. AI viruses are highly species-specific but on rare occasions have crossed the species barrier to infect humans.

In domestic poultry, infection with avian influenza viruses causes two main forms of disease, distinguished by low and high extremes of virulence. The “low pathogenic” form commonly causes only mild symptoms (ruffled feathers, a drop in egg production) and may easily go undetected. The highly pathogenic form is far more dramatic causing a high mortality rate (almost 100%) in a short period of time (often less 48 hours).

The widespread persistence of high pathogenic AI in poultry populations poses two main risks for human health. The first is the risk of direct infection when the virus passes from animals to humans. While this is a rare event, disease can occur from both high and low pathogenic AI viruses. Similar to disease in animals, human infection with a low pathogenic AI virus tends to be mild. However, human infection with a high pathogenic AI virus can result in a severe infection with high fatality rate. Because of this, human infection with a high pathogenic AI virus is a concern. Of the few AI viruses that have crossed the species barrier to infect humans, two viruses have been responsible for high a large number of cases of severe disease and death in humans. Influenza AH5N1 emerged in 2005 and AH7N9 emerged in 2013. Unlike normal seasonal influenza, where infection causes only mild respiratory symptoms in most people, the disease caused by H5N1 and H7N9 follows an unusually aggressive clinical course, with rapid deterioration and high fatality. Of these cases, there have been only a few instances of possible secondary human transmission. The second risk is that the virus will mutate into a form that is highly infectious to humans and will spread easily from person to person. Such a change could mark the start of a global pandemic.

Similar to avian influenza viruses, swine influenza viruses start with disease in animals. Influenza in swine is common and often only causes minor clinical signs of illness in pigs. Like humans, there is a time of year when influenza predominately circulates in pigs. To date, disease in humans with swine influenza tends to be mild with low fatality rates. Transmission of swine viruses tend to be from direct exposure to swine that are ill.

Both avian and swine are passed to humans by prolong direct contact with infected animals. Basic hygiene steps such as hand washing when around animals can significantly the risk of disease transmission from animal to humans.

Because of the potential threat to human health posed by outbreaks in animals, it is important to monitor animal populations for illness in New Jersey. Animal surveillance is a collaborative effort of local, state and federal agencies. The New Jersey Department of Agriculture (NJDA) and the US Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS) and NJ Department of Environmental Protection (NJDEP) all play critical roles in the identification of animal diseases with the potential to impact humans. Additional information on the surveillance that is conducted by each of these agencies can be found at the websites listed in the resource section of this appendix.

The primary role of NJDOH is to monitor humans who may have been in contact with animals suspected of being infected with a novel virus. In order to fulfill this role, NJDOH works closely with the other agencies involved in animal surveillance to ensure appropriate agencies are notified in a timely manner of reports regarding suspicious animals. Timely notification and investigation of suspicious animal reports will subsequently lead to timely notification to NJDOH of any humans who may be exposed to these animals.

Objective

- To ensure responsible agencies are notified in a timely manner of suspected animal cases potentially infected with avian influenza to appropriate agencies.

Description of Methods

While the primary role of NJDOH is not to respond to suspicious animal die offs or outbreaks in animal populations, occasionally the public and local health agencies will contact NJDOH to report such events. When NJDOH receives calls from the public or local health agencies, the information is collected and forwarded to NJDEP, USDA WS, and NJDA via email. These agencies make the determination as to whether these events need to be investigated further. Guidance documents will be created shared with stakeholders as the diseases which may cause animal die offs are identified.

Resources

1. USDA's website for influenza in animals:
http://www.usda.gov/wps/portal/usda/usdahome?navid=INFLUENZA_FLU
2. USDA APHIS' website for avian influenza:
http://www.aphis.usda.gov/newsroom/hot_issues/avian_influenza/avian_influenza.shtml
3. USDA APHIS' website for swine influenza:
http://www.aphis.usda.gov/animal_health/animal_dis_spec/swine/
4. NJDA's website for avian influenza:
http://www.nj.gov/agriculture/divisions/ah/diseases/avian_influenza.html
5. NJDEP's Division of Fish and Wildlife website: <http://www.state.nj.us/dep/fgw/birdflu07.htm>

Animal Exposure Guide

Novel influenza does not usually infect humans but rare cases of human illness caused by avian and swine-origin influenza viruses have been documented throughout the world, including in the United States. Individuals involved in occupations/activities that routinely handle animals and/or animal products are at increased risk for infection. The following are general PPE and infection control guidelines for use by individuals who routinely handle animals and animal products.

Personal Protective Equipment (PPE) and Basic Infection Control

The following is an excerpt from CDC guidelines regarding PPE and infection control used by persons involved in activities to control and eradicate outbreaks of avian influenza among poultry. While this document applies to avian influenza, the information can be applied to other animal exposures. The full document can be found at <http://www.cdc.gov/flu/avian/professional/protect-guid.htm>.

- Understand and adhere to proper hand hygiene after contact with infected or exposed animals, contact with contaminated surfaces, or after removing gloves. Hand hygiene should consist of washing with soap and water for 15-20 seconds or the use of other standard hand-disinfection procedures as specified by state government, industry, or USDA outbreak-response guidelines.
- Disposable gloves made of lightweight nitrile, vinyl or heavy duty rubber work gloves that can be disinfected should be worn.
- Protective clothing, preferably disposable outer garments or coveralls, an impermeable apron or surgical gowns with long cuffed sleeves, plus an impermeable apron should be worn.
- Disposable protective shoe covers or rubber or polyurethane boots that can be cleaned and disinfected should be worn.
- Safety goggles should be worn to protect the mucous membranes of eyes.
- Appropriate respiratory protection should be worn based upon the activity being performed. Additional information regarding appropriate respiratory protection can be found at the websites indicated in the resources section of this appendix.
- Disposable PPE should be properly discarded, and non-disposable PPE should be cleaned and disinfected as specified in state government, industry, or USDA outbreak-response guidelines. Hand hygiene measures should be performed after removal of PPE.

NJDOH will work with occupational health and safety agencies (i.e., Occupational Safety and Health Administration [OSHA], Public Employees Occupational Safety and Health [PEOSH]) Program) to develop specific guidelines regarding worker safety once an animal outbreak occurs in New Jersey.

VACCINATION WITH SEASONAL INFLUENZA VACCINE

- Unvaccinated workers should receive the current season's influenza vaccine to reduce the possibility of dual infection with avian and human influenza viruses.
- Vaccination of all residents of affected areas is not necessary.

Resources

1. CDC's Interim Guidance for Protection of Persons Involved in US Avian Influenza Outbreak Disease Control and Eradication Activities. Available at: <http://www.cdc.gov/flu/avian/professional/protect-guid.htm>
2. Avian Influenza - Protecting Poultry Workers at Risk. OSHA Safety and Health Information Bulletin, December 13, 2004. Available at: <http://www.osha.gov/dts/shib/shib121304.pdf>
3. Influenza in Workers and Pigs: Guidance for Commercial Swine Farmers and pork Producers. OSHA Fact Sheet, October 2010. Available at: <https://www.osha.gov/Publications/influenza-workers-pigs-factsheet.pdf>

Animal Worker Surveillance for Novel Influenza

Overview

Once an outbreak of influenza among animals is detected in New Jersey, individuals exposed to the animals will need to be monitored closely for development of signs and symptoms. NJ Department of Agriculture (NJDA) will be the lead agency in animal activities and NJDOH will be the lead agency for human surveillance. Both agencies will need to work together to ensure that the response goals of each agency are met.

Methods

Surveillance and Monitoring of Workers

- NJDOH will work with local health agencies to collect basic information about workers involved in control and eradication activities. A draft can be found in Surveillance Appendix 5 - Attachment A.
- Workers should be instructed to be vigilant for the development of fever, respiratory symptoms, and/or conjunctivitis (i.e., eye infections) for 10 days after last exposure to infected animals.

Evaluation of Ill Workers

- Individuals who become ill should be instructed to inform public health officials and seek medical care. Employers should instruct ill employees to notify their health care provider prior to arrival that they may have been exposed to animal associated influenza.
- Workers who develop a febrile respiratory illness should be medically evaluated. If the worker is determined to be a case, guidance regarding case reporting and treatment found in Surveillance Appendix 9 should be followed.

Administration of Antiviral Drugs for Prophylaxis

- The decision to provide workers with prophylactic medications will be made based on the supply and the effectiveness of the therapy. Ideally, workers should receive an influenza antiviral drug daily for the duration of time during which direct contact with infected poultry or contaminated surfaces occurs. The choice of antiviral drug should be based on current recommendations set forth by the CDC, and are available at: <http://www.cdc.gov/flu/professionals/treatment/>

Resources

1. CDC's Interim Guidance for Protection of Persons Involved in US Avian Influenza Outbreak Disease Control and Eradication Activities. Available at: <http://www.cdc.gov/flu/avian/professional/protect-guid.htm>
2. Avian Influenza - Protecting Poultry Workers at Risk. OSHA Safety and Health Information Bulletin, December 13, 2004. Available at: <http://www.osha.gov/dts/shib/shib121304.pdf>

OR:

<http://www.osha.gov/dts/shib/shib121304.html>

Surveillance - Appendix 5 - Attachment A

Worker Surveillance Data Collection Form

Location: _____ Date: _____ Interviewer: _____

Name	Address	Contact Information	Age	DOB	Gender	Seasonal Flu Vaccine ¹	PPE ²	Novel Vaccine ³	Anti-virals ⁴
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N
				/ /	M / F	Y / N	Y / N	Y / N	Y / N

1= Did the person receive seasonal influenza vaccine in past 12 months? 2=While performing job duties, was PPE worn? 3= If novel influenza vaccine available, has the person received it? 4= Is the person currently on antiviral prophylaxis?

Communication Data

Overview

During public health emergencies, timely and accurate communication among NJ Department of Health (NJDOH), the public, and stakeholders is imperative. The NJDOH Office of Communications (OCOM) along with Communicable Disease Service (CDS) staff will craft messages to ensure stakeholders are receiving timely and accurate information. The Influenza Surveillance Program (ISP) will ensure that CDS/OCOM staff has the necessary surveillance and epidemiologic data to craft these messages.

It is expected that there will be significant public and media interest in the first few NJ cases during a pandemic. As the number of cases increases, it will not be feasible for ISP staff to provide individual case patient data. A data reporting template containing aggregate level data relevant to the pandemic will be implemented to ensure CDS/ OCOM receive data needed to craft messages.

Methods

ISP and OCOM will jointly agree upon a data template which will be used to share pertinent data during the pandemic. The mechanism by which data is transmitted to OCOM data will be determined by internal protocols developed by OCOM in collaboration with CDS. A data template can be found in Surveillance Appendix 6 - Attachment A. Definition of data elements contained on the data template will also be provided along with this template. This template will be implemented when individual case level data can no longer be supplied or when staff resources are no long available to update CDS/ OCOM on individual cases. Once a decision is made to utilize the data template, CDS, OCOM and ISP will jointly agree upon the deadline for data template submission to OCOM (i.e., specific times, once or twice daily) and the cutoff for data reported (i.e., data reports will likely reflect a cutoff time on the previous day). To protect patient confidentiality, individual patient level data including municipality of residence will not be shared with OCOM. The county of residence and other data elements may be shared with OCOM if deemed appropriate by CDS. No information which allows for identification of potential cases will be shared publically.

Surveillance - Appendix 6 - Attachment A • Communication Data Table

Total number under investigation	
Onset range- all cases under investigation	

CDC Case Status	# Ill	# hosp	# died
# Confirmed			
# Probable			
# Possible			
# Suspect			
# Under investigation			
Total			

Average Age (Median age)	x(x)		
Age Range	x to x		
Onset Range	date to date		

	# ill	# hosp	# died
ATLANTIC			
BERGEN			
BURLINGTON			
CAMDEN			
CAPE MAY			
CUMBERLAND			
ESSEX			
GLOUCESTER			
HUDSON			
HUNTERDON			
MERCER			
MIDDLESEX			
MONMOUTH			
MORRIS			
OCEAN			
PASSAIC			
SALEM			
SOMERSET			
SUSSEX			
UNION			
WARREN			
TOTAL			

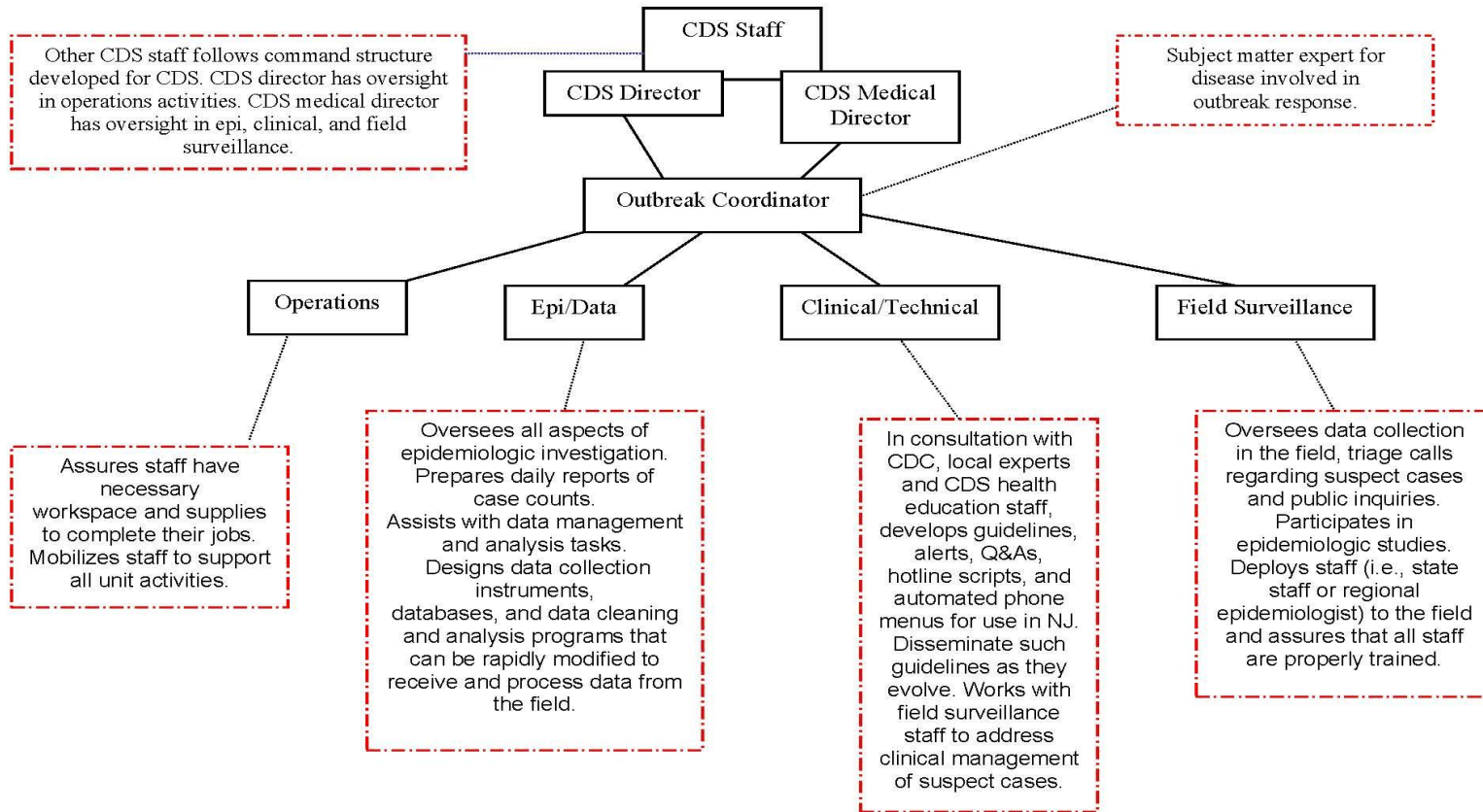
Outbreak Response Structure - Influenza Surveillance

New Jersey Department of Health (NJDOH) Communicable Disease Service (CDS) is responsible for the influenza surveillance program. CDS employs a full-time influenza surveillance coordinator (Job action sheet located in Surveillance Appendix 1- Attachment A).

The initial response to outbreaks and situations involving CDS would follow the incident command structure located in Surveillance Appendix 7- Attachment A. As the outbreak requires additional resources, the incident command structure of CDS and business continuity plans will be implemented. The overall ICS plans for CDS fit into the global NJDOH ICS structure.

Outbreak Response Structure

New Jersey Department of Health
Communicable Disease Service



Epidemiologic Studies

Overview

At the start of the pandemic in NJ, NJ Department of Health (NJDOH) and local health departments will conduct case-based surveillance and obtain detailed clinical and epidemiologic data on the initial cases. As the pandemic progresses and there is evidence of sustained community transmission in the state, tracking clinical and epidemiologic data on individual cases will no longer be feasible. However, clinical and epidemiologic data will still be needed to ensure NJDOH can develop accurate guidelines regarding clinical care, produce information regarding outcomes, and track changes in the virus. NJDOH will utilize information collected from acute care facilities during a pandemic as well as conduct epidemiologic studies in between pandemic waves to capture these data.

Methods

The following describes two methodologies which will be used to gather necessary clinical and epidemiologic data.

Electronic reporting

NJDOH will rely on acute care facilities to provide basic data on individuals seen at their facility. The Communicable Disease Reporting and Surveillance System (CDRSS) has the ability to track individual data element (e.g., clinical, vaccination, demographics, outcomes, contacts) on cases with suspect or confirmed influenza. This system will be used to monitor clinical and demographics factors associated with novel influenza.

NJDOH will request clinical and epidemiologic data from all initial cases. As the pandemic progresses, it will no longer be necessary nor feasible to track this information on all cases. NJDOH will determine which cases are most important to track and will ask facilities to report on this subset of cases. For example, clinical and epidemiologic data may be requested on patient admitted to intensive care units, who are not responding to treatment or who have unusual clinical presentations.

Medical Chart review

During the height of the initial wave of a pandemic, resources will likely not allow for local health departments or hospital personnel to conduct medical chart review on individual cases. However, this data can be valuable for determining the best clinical care and tracking changes in the virus. Medical chart reviews will be conducted retrospectively on a subset of influenza patients between the waves of the pandemic to obtain this information. Data obtained from these medical chart reviews will allow for more accurate clinical guidance to be produced for subsequent waves. It is expected that local health agencies will work with the acute care facilities in their jurisdiction to conduct these chart reviews. Guidance documents on the number of charts which need to be reviewed and type of information which needs to be collected will be produced to assist in this process.

Data Evaluation

Data collected from surveillance (described in Surveillance Appendix 1) or using the above methods will need to be summarized and reported. The timing of these reports is dictated by the reporting entity. A description of potential reporters and potential data elements are described below.

- NJDOH internal staff
 - Information need to crafting of public health messages, message for other stakeholder (e.g., press, other state agencies), and information to be used to decision making will be shared. This can include case specific information or aggregate information depending on request and purpose of data usage. This can include attack rates, case fatality rates, number of ED visits and hospitalizations by age, deaths on reported cases, number of potential contacts.
- Public Health Stakeholders (local health departments, physicians, hospitals, laboratories)
 - Data on aggregate clinical and epidemiologic feature of circulating virus will be shared weekly via LINCIS and by regular web postings to NJDOH web.
- CDC
 - Aggregate data can be shared with CDC as requested. Additional data (e.g., attack rates, case fatality rates, number of ED visits and hospitalizations by age, deaths on reported cases, number of potential contacts) can be shared with CDC as requested.

Enhanced Passive Surveillance for Novel Strains of Influenza

Overview

Once a novel influenza virus with documented human cases are detected anywhere in the world, enhanced surveillance to ensure rapid recognition of the first cases and their contacts will be implemented. Specific recommendations regarding identification, treatment and public health control measures will depend on the epidemiology of the virus, clinical characteristics and location of cases (inside US, outside US, in NJ). Surveillance will focus mainly on severely ill, hospitalized or ambulatory patients who meet certain epidemiologic and clinical criteria. The criteria will be modified to focus on the testing and reporting of hospitalized individuals with ILI (i.e., fever and cough and/or sore throat in the absence of another known cause) or individuals who comprised ILI clusters. CDRSS will be used to capture clinical and epidemiologic data on suspect, probable and confirmed cases of novel influenza. Data collected on cases will be sent to CDC as requested.

Objectives

- To quickly identify the introduction of a novel influenza viral strain with pandemic potential in NJ
- To educate healthcare providers about the novel virus and the need to screen patients presenting with fever and respiratory symptoms for travel history to the affected area(s) or other risk factors, and to report all suspect cases meeting surveillance criteria to their health department
- To quickly identify and monitor contacts on novel influenza cases

Methods

The following information will be included in any outreach to health care providers regarding the need to remain alert for travel-related cases, and how to detect, manage, and report any patients suspected to be infected with a novel influenza virus:

- Clinical signs/symptoms of cases
- Epidemiology of novel virus (strain type, infectivity rate, demographics of affected individuals, and up-to-date information on currently affected countries)
- Guidance regarding triage of patients presenting with fever and respiratory symptoms and importance of obtaining travel histories
- NJDOH criteria for reporting suspect cases
- Reporting tools required to request testing and report clinical and epidemiologic data regarding case patients
- Guidelines for the initial management of suspect/probable cases being cared for health care providers including diagnosis (specimen collection and laboratory testing), infection control measures, antiviral treatment, and monitoring of contacts (See links below for examples of guidance)
 - Laboratory testing for the novel virus will be coordinated by Public Health and Environmental Laboratories (PHEL), and either tested locally if reagents and capacity exists, or forwarded to the Centers for Disease Control and Prevention (CDC)
- Autopsies will be requested for fatal cases of influenza or unexplained pneumonia or severe respiratory diseases occurring among travelers to affected areas overseas. Assistance will be requested from the New Jersey Medical Examiner's Office and tissues will be sent for laboratory testing, including viral and immunohistochemical staining of autopsy tissues.
- Guidelines for initial tracking and management of close contacts (household, health care workers) of more highly suspect and laboratory confirmed cases (e.g., contact with known novel influenza case

- overseas or direct contact with infected animals) including implementing fever watch to detect secondary transmission.
- Travel advisory(ies) to affected area(s), if implemented by CDC or World Health Organization (WHO)

Additional guidance for management of case as the pandemic progresses will be produced when new information becomes available about the clinical management of cases.

Outreach methods

Outreach methods will include Local Information Network and Communications System (LINCS) messages to local health departments, laboratories, hospitals and providers, as well as maintaining updated guidelines on the NJDOH website.

All guidelines and surveillance criteria will be considered interim as NJDOH recommendations will need to be adjusted according to the epidemiology of illness caused by the novel viral strain. Updated LINCS messages and clinical guidelines will be distributed to healthcare partners as deemed necessary by NJDOH. If the novel virus persists but does not demonstrate pandemic potential, then periodic reminders may be needed to maintain awareness among health care providers to screen patients with febrile and respiratory illness for and exposure criteria.

Example of Guidance Documents

The following guidance has been produced and will be used as a template to craft new guidance based on clinical and epidemiologic data of novel virus.

- http://nj.gov/health/cd/mers/documents/clinical_screening_h7n9.pdf
- http://nj.gov/health/cd/mers/documents/nj_h3n2v.pdf
- http://www.state.nj.us/health/flu/documents/testing_avianflu_a.pdf

Initial cases will likely be investigated using novel influenza forms provided by CDC. The following form has been produced and will be modified new forms as the situation warrants: <http://www.state.nj.us/health/forms/cds-25.pdf>

Case Tracking

Communicable Disease Reporting and Surveillance System (CDRSS) is a web-enabled patient-centric reporting system which electronically captures all reportable communicable disease and investigation information. Individual cases of influenza, including novel influenza, can be tracked using the patient centric component of CDRSS. Here patient specific information on clinical and epidemiologic characteristics can be recorded on all reported patients. Several reporting features are built into the system allowing the majority of data fields to be exported from the system into an excel file. This file can be analyzed to obtain aggregate data (e.g., outcome status, length of hospitalization, signs/symptoms, demographic characteristics) from cases and a similar patient specific file can also generated and sent to CDC upon request. In addition to case patient data, data on patient contacts can also be recorded in CDRSS. Additional details on contact tracing can be found in Surveillance Appendix 10.

Contact Tracing

Overview

NJ Department of Health (NJDOH) personnel will assist local health departments and healthcare providers in identifying and monitoring close contacts of suspected or confirmed novel influenza patients. Such contacts might include household and social contacts, family members, workplace or school contacts, and/or healthcare providers who had unprotected close contact (i.e., did not use recommended precautions) starting 24 hours prior to the patient's symptom onset. The goal of timely case and contact identification is to limit the spread of the novel influenza in order to buy time before therapies (i.e., vaccine, antivirals) are available and to limit the impact on the health care system.

The capacity to do more detailed case and/or contact investigations will depend on staff resources, taking into account the potential impact on other agency priorities given the likelihood of an extended pandemic response. At the start of the pandemic in NJ, NJDOH and local health departments will conduct case-based surveillance and obtain more detailed clinical and epidemiologic data on the initial cases.

Contact tracing and monitoring would only be considered for the initial cases at the start of the pandemic. Given the epidemiologic characteristics of influenza viruses (e.g., contagiousness before illness onset and potential for asymptomatic cases to shed virus), however, such tracking and use of NJDOH and local health department staff resources will not be an effective way to control the outbreak once there is evidence of sustained community transmission in the state. Therefore, contact investigations will not be conducted once resources become limited or when contact tracing becomes ineffective.

Contact Tracing Methods

Case Definition of Contact

The definition of a contact will be developed between surveillance and clinical staff and will be based on available information of the circulating novel virus. Examples of individuals who might be considered contacts would include household and social contacts, family members, workplace or school contacts, and/or healthcare providers who had unprotected close contact (i.e., did not use recommended precautions).

Contact Identification

Cases will be identified using methods described in Surveillance Appendix 9. The case screening form in Surveillance Appendix 9 will be modified to include questions regarding contacts as appropriate. Contact information based on the contact definition will be collected from identified cases.

Management of contacts

Asymptomatic contacts should be asked to take their temperature at least twice daily. NJDOH in conjunction with local health departments will monitor asymptomatic contacts by telephone or home visit daily for 10 days after their last contact with the suspected case-patient to assess for development of symptoms consistent with the novel influenza identified. The decision to quarantine asymptomatic contacts at home or in another facility will be made based on epidemiologic characteristics of the novel influenza virus responsible for the outbreak.

The decision to provide asymptomatic contacts with prophylactic medications will be made based on the supply and the effectiveness of the therapy. (Additional information on contact management can be found in the Clinical Guidelines section)

Symptomatic contacts of suspected patients should seek medical attention immediately when symptoms develop and should notify their healthcare provider of recent contact with a suspected influenza case. Recommendations available for the treatment of cases patients should be followed for contacts that develop symptoms. (Additional information on the treatment and case of case patients can be found in the Clinical Guidelines section).

Reporting

Any contact that develops fever symptoms consistent with the novel influenza identified should be reported **IMMEDIATELY** to the local health department (LHD) where the patient resides. If LHD personnel are unavailable, health care providers should report the case to the NJDOH Communicable Disease Service (CDS) at 609-588-7500, Monday through Friday 8:00 AM - 5:00 PM. On weekends, evenings and holidays, CDS can be reached at (609) 392-2020.

Contact Tracking

CDRSS has the ability to track contacts associated with cases. Contacts can be updated within CDRSS which allows for relevant information (i.e., temperature/symptom check, prophylaxis treatment, vaccinations) on each contact to be recorded. Should contacts become symptomatic, CDRSS easily allows for contacts to be created as case patients within the system.

Evaluation

Contact tracing will begin when the initial case of novel virus is identified. Contact tracing is a labor intensive activity and consequently is not sustainable for a long period of time. The effectiveness of contact tracing is based on two factors. The first is the ability to maintain staffing levels to perform necessary case and contact follow up. The second is the ability to identify and quarantine contacts to prevent disease spread. Once there is evidence of sustained community transmission in the state, contact tracing efforts will provide little benefit in controlling disease spread. At this point, the use of broad community containment measures (e.g., social distancing, school closures) which require fewer resources will provide the most benefit in controlling the spread. For additional information on community containment efforts, see the Community Disease Control and Prevention (Including Travel) section. Continuous evaluation of both resources and disease spread will be monitored to determine when these broad community containment measures should be implemented.

Resources

While it is expected that much of the information collected will be recorded in CDRSS, templates have been created for recording relevant information in contact investigations. This may be helpful in field investigations or to provide paper documentation to contacts who may be conducting regular symptom checks. These templates are on file with CDS.

Tracking Case Counts

Overview

New Jersey communicable disease regulations (NJAC 8:57) require laboratories and health care providers to report all strains of novel influenza immediately by telephone to NJDOH. These regulations also require all reporters to utilize the Communicable Disease Reporting and Surveillance System (CDRSS) as their primary source of reporting case information.

Methods

Initial cases of novel influenza will likely be reported via telephone once identified and entered into CDRSS by the reporting facility. Communicable Disease Reporting and Surveillance System (CDRSS) is a web-enabled patient-centric reporting system which electronically captures all reportable communicable disease and investigation information. Individual cases of influenza, including novel influenza, can be tracked using the patient centric component of CDRSS. Here patient specific information on clinical and epidemiologic characteristics can be recorded on all reported patients. In addition to manual entry of cases, many laboratories, including the state public health laboratory, have the ability to upload lab results electronically.

Once cases are reported into CDRSS, several reporting features are built into the system allowing for the generation of statistics reports and data exports. The exported data files can be analyzed to obtain aggregate data (e.g., outcome status, length of hospitalization, signs/symptoms, demographic characteristics) from cases and a similar patient specific file can also generated and sent to CDC upon request. In addition to case patient data, data on patient contacts can also be recorded in CDRSS.

Limitations

CDRSS will likely capture a large majority of laboratory confirmed cases. However, those who visit a healthcare provider for novel influenza but who are not tested may not get reported. Other mechanisms for ILI surveillance (see Surveillance Appendix 1) will be used to track the occurrence of these ILI visits.

Dissemination of Case Counts

Aggregate data counts will be shared with the Office of Communications (see Surveillance Appendix 6) which will be used for media inquiries and posted publically to the NJDOH website. It is expected that case counts will be posted daily at the beginning of the pandemic but may become less frequent as the pandemic progresses. NJDOH will also provide aggregate data to CDC at timeframes requests. Weekly influenza reports highlighting all aspects of influenza surveillance which is being conducted during the pandemic will continue to be disseminated via LINCS and NJDOH website.

Virologic Surveillance for Influenza

I. Rationale

- a. Monitor the local spread of the disease and gauge the effectiveness of interventions.
- b. Enhance the opportunity in New Jersey to identify earliest case involving a novel or pandemic strain of influenza
- c. Refer isolates to CDC in order to monitor antiviral resistance and other characteristics of circulating strains
- d. Provide physicians and hospitals with assistance in the form of laboratory testing assistance to aid them in rendering a diagnosis.

II. Current New Jersey Department of Health Division of Public Health and Environmental Laboratories (PHEL) Testing Capabilities

- PHEL is prepared to isolate/grow on tissue culture and identify by type and subtype human influenza strains that may be or are currently circulating in North America, including A/H1, A/H3, A/H5 and B.
- PHEL BSL2 laboratory will inoculate patient specimen material onto tubes seeded with RhMK, observe cultures over a 10 day period for CPE and, as warranted, perform DFA/IFA to identify pathogen for flu type/subtype.
- PHEL will concurrently perform real time PCR assay (APHL protocol) for same.
- PHEL, as warranted, will perform a Rapid Antigen Assay on patient samples to determine flu type. This assay type is a useful tool when a timely result is deemed a necessity since turnaround time for test results is less than an hour. The caveats with assays are well documented particularly regarding sensitivity and positive/negative predictive value.
- Determine presence of A/H7 in the event that routine subtyping does not yield a definitive diagnosis. Inform DHSS's Communicable Disease Service (CDS) and CDC if H7 is identified in patient clinical sample.

III. PHEL Laboratory Testing Methods

- a. Isolation: Growing the viral strain in cell culture is the "gold standard" for influenza diagnostics because it confirms that the virus is viable. Virus isolation followed by antigenic and genetic (sequencing) analysis is used to characterize influenza isolates, as well as to monitor virus for novel strains. As a collaborating laboratory in the WHO Global Influenza Surveillance Network, PHEL's Virology Program uses virus isolation followed by DFA, IFA staining, or RT-PCR to monitor circulating seasonal strains of influenza.
- b. Real-time PCR: Influenza specimens can be typed and subtyped using RT-PCR, which does not require *in vitro* growth or isolation of the virus. Protocols/reagents, provided through the Laboratory Response Network (LRN) for confirmatory level laboratories, will be used by PHEL for the identification of this pathogen in a clinical sample.
- c. Rapid Antigen Testing: Several rapid diagnostic test kits based on antigen detection are commercially available for influenza. The specificity and, in particular, the sensitivity of rapid tests are lower than for viral culture and vary by test and specimen tested. The majority of rapid tests are >70% sensitive and >90% specific. Thus, as many as 30% of samples that would be positive for influenza by viral

culture may give a negative rapid test result with these assays. The PHEL uses a rapid diagnostic kit that detects both influenza A and B viruses from a variety of specimen types. Like RT-PCR, rapid diagnostic tests do not require *in vitro* growth or isolation of virus.

IV. Select Agent Regulation

- a. The Select Agent Regulation, in its various forms, includes a list of agents which are believed to represent the highest threats to public health. The list includes (1) Reconstructed replication competent forms of the 1918 pandemic Influenza virus containing any portion of the coding regions of all eight gene segments (covered under 42 CFR Part 73); and (2) Avian Influenza virus (H5:N1) (covered under 9 CFR 121). The only way a novel influenza virus would be considered a Select Agent is if it falls under either HHS-CDC-DSAT or USDA-APHIS rules or if the rules are amended to include it. These rules may be amended if a novel Influenza virus strain demonstrates significant morbidity and mortality. The PHEL will maintain preparedness for all Influenza virus types and will update its standard operating procedures to reflect the possibility that a novel pandemic strain may be classified as a Select Agent by either HHS-CDC-DSAT or USDA-APHIS.
- b. PHEL uses state-of-the-art technology to rapidly identify and characterize Influenza virus strains. These efforts are conducted in collaboration with the NJDOH Communicable Disease Service (CDS). PHEL takes advantage of the Influenza Reagent Resource (<http://www.influenzareagentresource.org/>) and implements standard laboratory protocols. The Roche MagNA Pure LC & MagNA Pure Compact workstations, and Qiagen BioRobot platforms are available to isolate nucleic acids in an automated, high-throughput format. The FDA-approved ABI 7500 Dx Real-time PCR instrument is used to amplify, identify and characterize Influenza virus strains. BSL-2+ and BSL-3 laboratory units are available for Influenza virus testing.
- c. Influenza A virus causes a significant level of morbidity and mortality, with seasonal epidemics resulting in three to five million severe cases per year worldwide. Two classes of drugs are available to treat influenza infections, M2 blockers (adamantanes; including amantadine and rimantadine) and neuraminidase inhibitors (NAIs; including oseltamivir and zanamivir). Influenza viruses that are resistant to these drugs can emerge via genome mutation or recombination. If widespread, these viruses pose a significant public health threat, as these viruses are not susceptible to the available drugs. Extensive surveillance of specific viral mutations associated with antiviral drug resistance is necessary to detect new resistant strains, determine new trends in drug resistant viral spread, and make clinical recommendations for drug use. Multiple methods can be used to detect these mutations, but pyrosequencing has recently been recommended as it is able to accurately quantify single nucleotide polymorphisms (SNPs), is easy to interpret, and can be used to detect multiple mutations within the same region of the viral genome. PHEL is collaborating with the CDC to expand antiviral resistance surveillance to the Mid-Atlantic region. A Qiagen PyroMark Q96ID system has been purchased.

New Jersey Department of Health
Instructions for Collection, Testing, and Shipping of Influenza Specimens

The New Jersey Department of Health Public Health and Environmental Laboratories (PHEL) has the ability to conduct PCR testing for both seasonal and novel influenza viruses. The following is a guide on appropriate collection, testing and shipping of influenza specimens to PHEL.

General Considerations

- Appropriate infection control procedures should be followed when collecting samples: <http://www.cdc.gov/flu/professionals/infectioncontrol/healthcaresettings.htm>
- Detection of influenza viruses is more likely from specimens collected within the first 3-4 days of illness onset.
- The following should be collected as soon as possible after illness onset: nasopharyngeal swab, nasal aspirate or wash or a combined nasopharyngeal swab with oropharyngeal swab. If these specimens cannot be collected, a nasal swab or oropharyngeal swab is acceptable. For patients who are intubated, an endotracheal aspirate should also be collected. Bronchoalveolar lavage (BAL) and sputum specimens are also acceptable. Collection instructions can be found below.
- Ideally, swab specimens should be collected using swabs with synthetic tips (e.g., polyester or Dacron®) and an aluminum or plastic shaft. Swabs with cotton tips and wooden shafts are not recommended. Specimens collected with swabs made of calcium alginate are not acceptable. The swab specimen collection vials should contain 1-3 ml of viral transport medium (e.g., containing protein stabilizer and antibiotics to discourage bacterial and fungal growth; buffer solution).
- Specimens should be placed into sterile viral transport media and immediately placed on refrigerant gel-packs or at 4°C (refrigerator) for transport to PHEL.
- The positive predictive value increases as the disease incidence increases. However, test results on samples collected early in the season are important to understand which strains of influenza are circulating. It would be impossible for health care providers to test every person presenting with influenza-like illness; however, health care providers are encouraged to submit samples early in the influenza season (initial patients presenting with influenza like illness regardless of rapid test result), during the peak of the season, and towards the end of the season. This will help to characterize influenza strains throughout the influenza season.
- Rapid influenza diagnostic tests (RIDTs) have unknown sensitivity and specificity to detect novel influenza viruses such as Influenza A 2009 H1N1 or Influenza A (H3N2)v virus in clinical specimens. Negative results from these tests do not exclude influenza virus infection in patients with signs and symptoms suggestive of influenza. Therefore, a negative test result could be a false negative and should not preclude further diagnostic testing such as PCR.
- All specimens collected and sent to PHEL should be labeled with a minimum of two unique patient identifiers. Patient identifiers can include: patient's first and last name, date of birth, medical record number, date of collection, and specimen type. Ideally every specimen should include all of this information.

Specimen Collection

Nasopharyngeal (NP)

- Materials
 - Sterile Dacron/nylon swab
 - Viral transport media tube (3 ml)
- Procedure
 - Collect specimen with a sterile Dacron/nylon swab with a non-wooden shaft (do NOT use calcium alginate swabs or swabs with wooden sticks as they may contain substances which can inactivate viruses or interfere with PCR testing).
 - Insert the swab through the nostril, parallel to the palate to the posterior nasopharynx (distance from the nostrils to the external opening of the ear). The swab should be left in place for a few seconds to absorb secretions. Slowly withdraw the swab with a rotating motion. Swab both nostrils with the same swab.
 - Put the tip of the swab into the plastic vial containing 3 ml of viral transport media and cut off the applicator stick.

Nasopharyngeal aspirates/wash

- Materials
 - Suction apparatus
 - Sterile suction catheter
 - Sterile saline
 - Viral transport media
- Procedure
 - Aspirate nasopharyngeal secretions through a catheter connected to a mucus trap and fitted to a vacuum source.
 - For NP wash, have the patient sit with head tilted slightly backward. Instill 1ml-1.5ml of nonbacteriostatic saline (pH 7.0) into one nostril. No saline is used for an aspirate.
 - Insert the catheter into the nostril parallel to the palate. Apply the vacuum and slowly withdrawn the catheter with a rotating motion. Mucus from the other nostril should be collected the same way. Specimen should be placed in a sterile vial.

Nasal swab

- Materials
 - Dry polyester swab
 - Viral transport media tube (3 ml)
- Procedure
 - Insert a dry polyester swab into the nostril. Using a gentle rotation, push the swab until resistance is met at the level of the turbinates (less than 1 inch into the nostril). Rotate the swab a few times against the nasal wall. Repeat in the other nostril using the same swab.
 - Put the tip of the swab into the plastic vial containing 3 ml of viral transport media and cut off the applicator stick.

Combined nasopharyngeal and oropharyngeal (throat) swab

- Materials
 - Dry polyester swab
 - Sterile Dacron/nylon swab
 - Viral transport media tube (3 ml)
- Procedure
 - Collect specimens with sterile Dacron/nylon or polyester swabs with a non-wooden shaft (do NOT use calcium alginate swabs or swabs with wooden sticks as they may contain substances which can inactivate viruses or interfere with PCR testing).
 - Insert the swab through the nostril, parallel to the palate to the posterior nasopharynx (distance from the nostrils to the external opening of the ear). The swab should be left in place for a few seconds to absorb secretions. Slowly withdraw the swab with a rotating motion. Swab both nostrils with the same swab.
 - Put the tip of the swab into the plastic vial containing 3 ml of viral transport media and cut off the applicator stick.
 - For oropharyngeal specimen collection, swab the posterior pharynx and tonsillar areas, avoiding the tongue using the second swab.
 - Put the tip of the swab into the same plastic vial containing the nasopharyngeal swab and break or cut off the applicator stick.

Bronchoalveolar lavage or tracheal aspirate

- During bronchoalveolar lavage or tracheal aspirate, use a double-tube system to maximize shielding from oropharyngeal secretions.
 - Centrifuge half of the specimen, and fix the cell pellet in formalin. Place the remaining unspun fluid in sterile vials with external caps and internal O-ring seals. If there is no internal O-ring seal, then seal tightly with the available cap and secure with Parafilm®.
- For fatal cases associated with possible influenza infection, autopsy and collection of appropriate postmortem specimens should be performed. Additional information is available at: <http://www.hhs.gov/pandemicflu/plan/sup2.html#app5>.

Use of Rapid Antigen Test Kits

If a rapid antigen test is positive or if a rapid antigen test was not performed but influenza is suspected, a second sample should be sent to PHEL for additional testing. Each site can send a maximum of 3 specimens per week to PHEL. In order to ensure that consistent testing is performed at both the physicians' office and reference laboratories, PHEL recommends collecting two samples at the same time as indicated in the instructions above. All samples should be labeled, stored and packaged appropriately as described below.

Storage, Packaging and Shipping

- The **vial containing the collected specimen** should be labeled with a minimum of two unique patient identifiers. Patient identifiers can include: patient's first and last name, date of birth, medical record number, date of collection, and specimen type. Ideally every specimen should include all of this information. **Samples which are not labeled correctly will not be accepted for testing.**
- Respiratory specimens should be kept at 4°C for no longer than 3 days. Specimens can alternatively be

frozen at $\leq -70^{\circ}\text{C}$. Avoid freezing and thawing specimens if at all possible.

- The SRD-1 form (available at <http://www.state.nj.us/health/forms/srd-1.pdf>) should be completely filled out for each specimen that is sent.
- Commercial carriers can be used to ship samples, which should be handled as Biologic Substance, Category B. Samples should be packaged in accordance with DOT regulation 49 CFR 178.199 utilizing packaging meeting DOT specifications for biological substances. Please include a frozen cold pack with the specimens to maintain the cold chain during shipment. Information on shipping regulations for these carriers can be found at www.iata.org or www.hazmat.dot.gov.
- Facilities should ensure that the specimen will be received at PHEL during normal business hour Monday through Friday. Samples collected on Friday or Saturday should be held in refrigeration and shipped on Sunday or Monday.
- Specimens should be mailed to the following address:

New Jersey Public Health, Environmental and Agricultural Laboratories
Health and Agriculture Building
3 Schwarzkopf Drive
Ewing, NJ 08628
Attn: Margaret Kirkuff

Resources

General guidance

<http://www.cdc.gov/flu/swineflu/influenza-variant-viruses-h3n2v.htm>

Specimen collection

<http://vimeo.com/7748371>

<http://www.youtube.com/watch?v=DVJNWefmHjE>

<http://www.cdc.gov/pertussis/clinical/diagnostic-testing/specimen-collection.html>

Directions to NJDOH PHEL

<http://www.state.nj.us/health/forms/vir-16inst.shtml>

<http://nj.gov/health/phel/documents/contact.pdf>

PHEAL Cross Training Procedure for Novel Influenza Testing

Goal: Expand the range of the laboratory capabilities for the following assay below:

Rationale: Provide continuity of operations in the event of a flu pandemic in order to have the capability of performing testing in this area regardless of the circumstances.

Focus area of cross training:

LRN Influenza A/H5 Protocol.

- Nucleic Acid Extraction
- Preparation of Master Mix
- Preparation of plates for PCR testing
- Amplification using the ABI 7500Dx Fast
- Data analysis on ABI instruments
- Use of the Bio robots to perform nucleic acid extraction and to load plates for PCR testing

Procedure:

Staff has been shown how to do the assay by a trained team member. The trainee will perform the assay themselves with the trainer present to answer questions regarding the test. When trainer/trainee feels confident a competency proficiency test will be administered by the trainer consisting of 5 samples. Test results will be analyzed and scored by the trainer. In the event that the PT is not passed, remedial training will be provided and a re-test will be administered. PT testing will be an on-going part of the trainees experience to demonstrate competency with this assay.

Staff to be trained:

Staff will be selected for training. This process has already been initiated and currently PHEAL has three staff members familiar with the assay described above. This group will be augmented over time as staffing and work-load allow up to five technologists.

Supply ListSupply List for Real Time PCR Assay

<u>Surveillance</u>	VENDOR	SUPPLY	BACKUP
QIAamp Viral RNA Mini Kit	Qiagen	3 Kits	No – sole source
Ethanol Absolute	Sigma	51 Bottles	VWR,
Nuclease Free Water	Amreso	6 Bottles	Fisher
P200 plugged tips	VWR	11 Cases	Thomas Scientific
P1000 plugged tips	VWR	10 Cases	Thomas Scientific
Life Tech Platinum SSIII Master Mix	IRR	6 Kits	Invitrogen
10mM Tris	Sigma	1 Bottle	Fisher
Optical 96 Well Plates	IRR	2 Cases	Life Technologies
Sterile microcentrifuge tubes	VWR	28 Boxes	Thomas Scientific

<u>Surge (additional to surveillance)</u>	VENDOR	SUPPLY	BACKUP
QIAamp Viral RNA Mini Kit	Qiagen	2 Kits	No – sole source
Ethanol Absolute	Sigma	30 Bottles	VWR,
Nuclease Free Water	Amreso	3 Bottles	Fisher
P200 plugged tips	VWR	6 Cases	Thomas Scientific
P1000 plugged tips	VWR	5 Cases	Thomas Scientific
Life Tech Platinum SSIII Master Mix	IRR	3 Kits	Invitrogen
10mM Tris	Sigma	1 Bottle	Fisher
Optical 96 Well Plates	IRR	1 Case	Life Technologies
Sterile microcentrifuge tubes	VWR	15 Boxes	Thomas Scientific

Equipment List for RT Real Time PCR Assay**ITEM**

Bio Robots (2) each
 7500DxFast Life Technology detection instruments (4) each
 Dead air hood (2) each
 Biosafety Cabinets (3)
 Freezer -80°C (4) each
 Refrigerator – Large capacity 4°C (1) each

Additional equipment may be made available through consultation with the Laboratory Service Directors.

Surge Capacity Plan for Eliminating Non-Essential Lab Services

VIROLOGY PROGRAM

Note: Regardless of whether or not a lab or a particular test is deemed essential, samples in all areas listed below can be frozen and then tested at a later time. Hence, the only thing affected would be turn-around-time. As evidence below we describe samples coming from clinics. Activity at these clinics may be curtailed or temporarily suspended during a flu pandemic. If the latter is the case, the need to determine whether a lab is essential or not may be made for us.

List of Prioritized Virology Laboratory Services:

1. Molecular Virology
 2. Rabies
 3. Viral Serology
 4. Viral isolation
 5. HIV
1. Molecular Virology: This laboratory would be the testing lab during a flu pandemic, as real time PCR testing is the current assay of choice for identification of influenza types/subtypes. This laboratory services state mosquito agencies during the summer/fall months providing surveillance data on arboviral pathogens, particularly West Nile virus and Eastern Equine Encephalitis virus. This data in turn is used to direct mosquito abatement in order to prevent human exposure to these mosquito borne viral pathogens. If a pandemic were occurring during mosquito transmission season a decision would have to be made regarding this testing.
 2. Rabies: Testing of potentially rabid animals involved in human exposures would need to be continued regardless of the circumstances. When or if testing is not possible the recommendation would be to proceed with rabies prophylaxis for those individuals involved. Further, elimination of submission of no bite, no exposure animals and surveillance specimens could be warranted at this time.
 3. Viral Serology: Archive samples at -20°C until normal activity is restored. Any outbreak events would be supported with timely testing.

Curtailling lab activity as outlined above for the Virology Program would free 6-10 Virology staff to perform tasks related to pan flu. The current assay of choice is real time PCR at the present time. An assay has been authored by LRN staff to identify the H5N1& H7 viruses. Available staff would perform the following tasks:

Sample Processing

This involves transferring the sample from its shipping container into a 2-dram vial. This must be done aseptically in a biosafety cabinet, and in a manner preventing the creation of aerosols. Gloves should be changed after handling each specimen to avoid contaminating the next sample. Samples will be sorted into batches for PCR testing. Three workstations on the laboratory's 3rd floor will be used for this purpose. Staff will be assigned to this task depending on incoming sample volume.

Nucleic Acid Extraction

Batched samples will be processed manually if sample volume allows. Two work stations exist in L325 for this purpose. If sample volume dictates two 9604 BioRobots will be employed to perform viral nucleic acid extraction. One technician would be required to run the Robots.

Master Mix Preparation


This could be accomplished at a single workstation or expanded as necessary.

Plate Preparation for PCR Testing

This task could be done manually, but only if the number of incoming samples is low. For higher sample throughput the 9604 BioRobots will be employed to load PCR plates with sample and master mix.

PCR Amplification/Detection

PHEL has five ABI 7000 Sequence Detection Systems. One is located in the MDS Lab and four are located in the modular laboratory. These instruments operate in a 96-well format and can test 9 samples in one run. If higher thru-put is required virology has two ABI 7900 Sequence detection Systems which work on a 384-well platform. On this instrument 96 samples could be run at one time. All these instruments are walk-away requiring no technician intervention during operation.

 <p>Public Health and Environmental Laboratories 3 Schwarzkopf Drive, Ewing, NJ 08628</p> <p>POLICIES AND PROCEDURES</p>				
Program: Virology	QC Specimen Storage Requirements for Specimens Received but not Tested Pandemic Flu Plan			
Version: 1.0 Replaces Version:	<table border="1" style="width: 100%;"> <tr> <td>Author: Patricia Bryant</td> <td>Date: 01-12-2014</td> <td>Effective Date:</td> </tr> </table>	Author: Patricia Bryant	Date: 01-12-2014	Effective Date:
Author: Patricia Bryant	Date: 01-12-2014	Effective Date:		

QC Specimen Storage Requirements for Specimens Received but not Tested.

- Materials needed for long time storage (greater than 90 days)
- Documenting QC Readings and criteria for temperature documentation
- Acceptable QC Results
- Room location for long term hold of specimens received but not tested

1. Materials Needed:
 - (2) -80 degree C ultra-low Revco
 - (2) NIST Calibrated Maximum Read Thermometer
2. QC Readings and criteria for documenting temperature:
 - The reading from the maximum read thermometer must be taken daily.
 - The Max Read Thermometer Temp. (°C) will be recorded on the QC Temperature Form. Tech Initials = initials of the person recording the information and clearly visible on the outside of the Revco. Comments = Additional information or comments can be documented here, e.g. if a QC was out of range you can write "Quality Event Form" filled out.
3. Acceptable QC Results:
 - Acceptable range for Max Read Thermometer Temp. is -60° C to -90° C.
4. Room Location for long term hold of specimens received but not tested:
 - (2) -80° C ultra-low Revco's are located in room L351.


Attestation Statement

Laboratory: Molecular Virology

SOP Title: QC Specimen Storage Requirements for Specimens Received but not Tested Pandemic Flu Plan

Version 1.0

I acknowledge that I have read the above mentioned SOP in its entirety and I fully understand and will perform the practices outlined in this procedure.

	Public Health and Environmental Laboratories 3 Schwarzkopf Drive, Ewing, NJ 08628 POLICIES AND PROCEDURES		
Program: Virology	QC Specimen Storage Requirements for Specimens Received but not Tested Pandemic Flu Plan		
Version: 1.0 Replaces Version:	Author: Patricia Bryant	Date: 01-12-2014	Effective Date:

QC Specimen Storage Requirements for Specimens already Tested.

- Materials needed for short term (up to 90 days) storage
- Documenting QC Readings and criteria for temperature documentation
- Acceptable QC Results
- Room Location for long term hold of specimens received but not tested priority

1. Materials Needed:
 - 4 degrees C Walk-in/Cold room refrigerator
 - (2) -80 degree C ultra-low Revco for surge storage
 - (2) NIST Calibrated Maximum Read Thermometer
2. QC Readings and criteria for documenting temperature:
 - The reading from the maximum read thermometer must be taken daily.
 - The Max Read Thermometer Temp. (°C) will be recorded on the QC Temperature Form. Tech Initials = initials of the person recording the information and clearly visible on the outside of the Revco. Comments = Additional information or comments can be documented here, e.g. if a QC was out of range you can write "Quality Event Form" filled out.
3. Acceptable QC Results:
 - Acceptable range for Walk-in/Cold Room Refrigerator Max Read Thermometer Temperature is 2 degrees C to 8 degrees C.
 - Acceptable range for Revco Max Read Thermometer Temperature is -60 degrees C to -90 degrees C.
4. Room Location for long term hold of specimens received but not tested:
 - 4 degrees C Walk-in/Cold room refrigerator is located in room L376.
 - (2) -80 degree C ultra-low Revcos are located in room L370A.



**Influenza Pandemic Plan Guide for Healthcare Facilities
November 2013**

Introduction

This Healthcare System Guide is intended to assist pandemic influenza planning efforts for medical provider organizations, health care systems, hospitals, long-term care facilities, community (home) health agencies, and other groups that will provide health care services as part of an influenza pandemic response.

Objectives:

- To promote and facilitate the development of written pandemic influenza preparedness and response plans by health care organizations, integrated with other emergency planning efforts.
- To promote and facilitate coordination and collaboration between state and local health departments and private health care organizations.
- To identify key health care preparedness issues and provide guidance on approaches to optimally address them in written preparedness and response plans.

Preparing for Pandemic Influenza

1. Getting started

Rationale:

Pandemic preparedness is not easy. Human resources are needed to write a plan, and some preventive measures require considerable investments in time and resources. To ensure that decision-makers are willing and able to make difficult choices before and during a pandemic is essential. The plan should be as facility-specific and as realistic as possible.

Questions to be addressed:

Is there recognition of the potential human, social, and economic impact of a pandemic at the highest levels of administration? Is there a clear strategy on how to deal with these issues?

Check:

- The importance of influenza pandemic planning should be recognized at the appropriate levels of administration, and the aim of preparedness should be acknowledged.
- Resources should be committed relative to the anticipated preparedness planning.
- A realistic timeline for completion of the various stages of the plan should be established.

- Identify individuals and representatives from appropriate areas that will produce and revise the plan. Participants may include representatives from administration, legal, medical staff, nursing, infection control, emergency department, respiratory therapy, laboratory, occupational health, education and training, public relations, radiology, transportation, human resources, pharmacy, engineering, and environmental services personnel. The plan may be developed by existing multidisciplinary committees at the facility. Including representatives from state and local health departments and coordinating with other health care facilities are important to strengthen preparedness planning.
- There must be agreement on the roles and responsibilities in the planning process from all participating individuals and groups.

2. Command and Control

Rationale:

In order to be able to make clear and timely decisions and to have a uniform policy that is endorsed by all, it is essential to know who is in charge of different activities, and how that might change if a limited outbreak becomes a declared state of emergency. In addition, it is essential to know who is in charge of key elements of response.

Questions to be addressed:

Who is making the decisions in the event of an influenza pandemic? What are the roles and responsibilities of federal, state, and local health agencies? Does everyone know what his/her role will be and what to do?

Check:

- A command and control structure is in place outlining the management and decision-making process of all organizations involved in response to a health emergency and the role the particular facility will play.
- Existing structures for emergency command and control should be optimally used and respected.
- Everyone involved should know his/her role and responsibilities during a pandemic, including back-up individuals. This should be reflected in the operational plans of the facility.

3. Risk assessment

Rationale:

In order to better focus on the strategy, it is recommended that the expected impact of the pandemic be estimated for the particular facility. Influenza epidemics occur annually and usually peak between December and March in temperate regions in the Northern Hemisphere. In the United States (U.S.), annual influenza epidemics are associated with an average of 36,000 excess deaths and more than 110,000 excess hospitalizations. Health care demands are likely to increase substantially during a pandemic.

Based on previous pandemics, attack rates for influenza infection in a community during a pandemic are likely to be as high as 35% (i.e., one third of the population is likely to become infected). Although influenza cases and deaths are likely to occur over a several month period throughout the U.S., within any community most of the impact is likely to occur within 4 to 8 weeks. Community-level estimates suggest that demand for inpatient and intensive care unit beds and for assisted ventilation may increase by more than 25% during a pandemic. This excess demand, in the context of a U.S. health care system where trends have been toward a decreased number of admissions and hospital beds, will likely lead to critical shortages.

In addition to the increased overall need for health care services, morbidity and mortality patterns during a pandemic may differ substantially from those seen during non-pandemic years when older adults and persons

with compromised immune systems primarily are at risk for serious disease and death. During the three pandemics of the 20th century, a substantial portion of the total mortality occurred among persons younger than 65 years who would not be considered at high risk during non-pandemic years. In such a setting, health care workers (HCWs) may be particularly vulnerable given their frequent occupational exposure. High rates of work absenteeism are likely to occur as HCWs become ill or need to care for ill family members. Thus, adequately staffed hospital beds may be larger limitation than bed availability alone.

The Centers for Disease Control and Prevention (CDC) FluSurge software is a spreadsheet-based model which provides hospitals and public health officials with estimates of the surge in demand for hospital-based services during an influenza pandemic. FluSurge does not provide estimates of personnel needs. FluSurge is available at <http://www.cdc.gov/flu/pandemic-resources/tools>

Questions to be addressed:

How will an influenza pandemic impact services at the facility? What is the expected increase in emergency department visits, hospital admissions, and intensive care unit services? How many patients will need ventilatory support? What number of staff is necessary to maintain essential services?

Check:

- Conduct modeling studies on the impact of an influenza pandemic based on varying attack rates and patterns of attack. Impact measures can include the estimated number of HCWs, hospital admissions, deaths, intensive care unit admissions, and need for ventilatory support.
- An assessment of the economic impact to the facility may be helpful to justify the resources expended on preparedness efforts.
- Consider the potential interventions with antiviral medication and/or pandemic strain influenza vaccine in HCWs and the general public.

4. Communication

Rationale:

Communication strategies are an important component in managing any infectious disease outbreak, and are essential in the event of a pandemic. Accurate and timely information at all levels is critical in order to minimize unwanted and unforeseen disruption and economic consequences and to maximize the effective outcome of the response.

Questions to be addressed:

Is there a plan for communication with staff as well as the public? Is there an inventory of all available communication resources? What is the chain of responsibility, and who are the designated spokespersons?

Check:

Public Communication

- Develop a communication plan that addresses different target groups that may be health care consumers at the facility. This might include the production of materials in languages appropriate for the community.
- Develop a communication plan that addresses the needs of health care consumers at the time of the pandemic. This might include the worried well in the community.
- Ensure that media messages are consistent with those of public health officials.

Staff Communication

- Ensure a communication plan that addresses all staff at the facility.
- Ensure a communication plan that addresses community providers who may care for patients at the facility.
- Ensure a mechanism for the timely and consistent dissemination of information from state and federal agencies to the staff.

Communication with outside agencies/organizations

- Ensure mechanisms for communication with local, state, and federal agencies that will play a role in response.

5. Response plan by pandemic phase

Rationale:

To facilitate quick and adequate response during a crisis, all those concerned should know what to do and in what order. The World Health Organization has developed phases to help guide response planning for pandemic influenza. The phases are as follows:

• Interpandemic/Postpandemic Period

- o 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.
- o 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

- o Phase 3
Human infection(s) with a new subtype, but no human-to-human contact spread, or at most rare instances of spread to close contacts.
- o 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.
- o Phase 5
Larger cluster(s), but human-to-human spread is still localized, suggesting that the virus is becoming increasingly better-adapted to humans, but may not be fully transmissible (substantial pandemic risk).

• Pandemic Period

- o Phase 6
Pandemic phase: increased and sustained transmission in general population.

Questions to be addressed:

Is there a response plan in place that identifies the responsibilities and tasks at varying stages of the pandemic?

Check:

- Address the issues below for each pandemic period. The list is not comprehensive. The issues need not be discussed equally in each pandemic period.

Considerations	Interpandemic/ Postpandemic Period (Phase 1 and 2)	Pandemic Alert Period (Phase 3, 4, and 5)	Pandemic Period (Phase 6)
Decision making and coordination			
Surveillance and laboratory testing			
Triage of patients o Infection control issues			
Clinical evaluation of patients			
Human resources for patient care o Staffing <ul style="list-style-type: none"> ➤ Time-off policies ➤ Issues of childcare, eldercare, and staff absenteeism ➤ Use of staff not usually involved in patient care activities ➤ Use of volunteer health professionals ➤ Use of community volunteers ➤ Staffing related to non-traditional facilities 			
Physical resources for patient care o Bed availability including intensive care o Equipment and supplies o Use of ancillary areas for patient care, e.g. hallways o Medical care at non-traditional facilities			
Education and training			
Influenza vaccination of staff			
Antiviral agents for staff			
Care of Deceased o Morgue capacity o Religious /cultural issues surrounding death o Issues surrounding autopsies o Infection control issues			
Mental health issues for patients and staff			
Business continuity			

<p>Infection Control</p> <ul style="list-style-type: none"> ○ Standard and droplet precautions ○ Respiratory hygiene/cough etiquette ○ Staff education ○ Bed management ○ Patient Transport ○ Cleaning, disinfection, and sterilization ○ Patient education ○ Visitation policy ○ Contact tracing ○ Health care workers with influenza-like illness ○ Elective utilization of healthcare ○ Facilities ○ Home health care ○ Outbreak control 			
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6. Implementation, testing, and revision of the plan

Rationale:

To ensure full implementation of the plan at all levels, it is important to set targets or define progress indicators that can be used to measure progress. A pandemic plan needs to remain a dynamic document to ensure that it is widely available and disseminated, even several years after implementation. This can only be achieved if the plan is tested and revised regularly.

Questions to be addressed:

Is there a mechanism in place to ensure that the plan is being implemented? How is the level of implementation being measured? Is the plan tested? Is there a system to ensure updating of the plan in the absence of a pandemic, and reviewing it after outbreaks of comparable diseases or threats such as SARS? Is there a method to ensure that the plan reflects existing federal, state, and local statutes, regulations and guidelines?

Check:

- Set targets, define indicators or develop a benchmark system that can be used to assess progress in implementation. Define who is responsible for supervision of the progress.
- Consider a table-top review of the preparedness and response plan, or carry out a simulation exercise, focusing on specific aspects of the response plan.
- Utilize or create opportunities to test components of the plan, e.g., during the regular influenza season especially as it related to HCW vaccination.
- Revise the plan based on experience obtained during exercises or real-life events; ensure that changes are communicated to key stakeholders within and outside the facility.
- Revise the plan to reflect changes in federal, state, and local statutes, regulations and guidelines.
- In the absence of a pandemic, define a period after which the plan will be revised.

Additional resources:

- *Influenza Pandemic Plan*, New Jersey Department of Health (NJDOH) at <http://nj.gov/health/flu/plan.shtml>
- *Influenza Surge Capacity Guidance for General Hospitals*, NJDOH at http://nj.gov/health/flu/pand_healthcareprof.shtml
- World Health Organization (WHO) Pandemic Preparedness available at www.who.int/csr/disease/influenza/pandemic/en
- Health and Human Services Pandemic Influenza Response and Preparedness Plan available at www.dhhs.gov/nvpo/pandemicplan

Revised November 2013

Note: All letters that contain dates are examples of policies that may be used in the next response.



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KIM GUADAGNO
Lt. Governor

MARY E. O'DOWD, M.P.H.
Commissioner

February 2014

Influenza Surge Capacity Guidance for General Hospitals

The purpose of this document is to provide guidance to general hospitals to better enable them to prepare for a surge in health care demand as a result of patients presenting with influenza.

Every year hospitals in New Jersey experience a surge in demand for services at the height of influenza season. It is not possible to predict the severity of an influenza season or its impact on an individual hospital. The implementation of strategies to best manage surging patient volume is dependent on multiple factors. Administrators need to take into account both the absolute number of patients seeking medical attention, the intensity of services required by these patients, and the availability of staff and appropriate supplies. Much of the guidance offered below should be helpful in dealing with this expected seasonal surge. With the ever-present threat of an influenza pandemic, New Jersey hospitals need to be ready to deal not only with the normal seasonal increase in volume of hospital patients, but also with the potential for a more significant increase, which could be felt locally, regionally or statewide.

Should the increase in demand for the hospital's services be so large that it significantly impairs the ability of a hospital to offer its full array of regular services; the Department expects that the hospital will, as a result, activate its disaster plan and curtail all admissions for elective procedures. Should a hospital activate its disaster plan, it must notify the Department immediately at 1-800-792-9770. At the time of notification, the hospital should discuss with the Department any measures it plans to take that deviate from licensure standards. The Department will work cooperatively with facilities that have activated their disaster plans to ensure they have the maximum flexibility consistent with patient safety to respond to extraordinary service demands. Any anticipated deviation from the Emergency Medical Treatment and Labor Act (EMTALA) should be discussed with the Centers for Medicare and Medicaid Services (CMS), Region II at 1-212-264-1590.

In the guidance below, those recommendations that might entail deviations from licensure standards and presume an activated disaster plan are presented separately.

Surveillance

Health care facilities will play a key role in surveillance for influenza. Health care providers need to be alert to the signs and symptoms of influenza in patients presenting to their facility. Diagnostic testing for influenza should be considered in any individual presenting with pneumonia, severe respiratory illnesses, or influenza-like illnesses (ILI). Health care providers should receive education regarding the type of influenza testing available in the facility and the proper method of specimen collection. Diagnostic testing methods include the use of rapid diagnostic tests as well as more sensitive techniques, including polymerase chain reaction (PCR) and viral isolation. (<http://www.cdc.gov/flu/professionals/labdiagnosis.htm>) Rapid diagnostic tests are valuable because they allow the provider to make more informed and timely decisions regarding patient treatment and disposition. In addition, rapid testing might influence a provider's decision to offer antiviral prophylaxis to high risk contacts of the patient. Early identification is valuable to the public health community and might help to avert more wide-spread disease. The

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Influenza Surge Capacity for General hospitals 2.14 v1 Page 2

Infection control professional should play an active role in surveillance and should be alerted to any positive influenza test result, any patient with suspected influenza, and any suspected death related to influenza in the facility.

Local health departments and the NJDOH Communicable Disease Service are available for consultation, regarding outbreak identification and management; NJDOH reminds health care facilities that any suspect or confirmed outbreak is reportable to local health departments, per N.J.A.C. 8:57. Finally, NJDOH encourages health care facilities to regularly visit its website on influenza, including the influenza surveillance page (<http://www.state.nj.us/health/flu/surveillance.shtml>), for updated information on statewide ILI activity (including data from emergency departments) and new surveillance initiatives.

Transmission and Infection Control Strategies in the Health Care Facility

Observational studies and observations in hospitals indicate that transmission from one patient to others occurs most often in persons nearest the infected patient and that health care workers are important vehicles of transmission to patients on the same or different wards. These observations suggest that instituting contact and droplet precautions might be helpful. There is less data to support the clinical importance of isolation procedures (such as negative pressure rooms) to limit airborne transmission in the setting of normal air exchange. Further, the number of such rooms is limited and likely would be insufficient to handle the number of hospitalized patients expected with a surge in volume. Influenza viruses are known to survive on non-porous surfaces for up to 24 – 48 hours after contamination and on porous surfaces (tissues, cloth, paper) for up to 8 – 12 hours. Viable virus can be transferred from non-porous surfaces to hands for up to 24 hours after contact and from tissues to hands for up to 15 minutes after contact. The typical incubation period for influenza is two days (range one to four days). Viral shedding, and the period during which a person might be infectious to others, generally peaks on the second day of symptoms, but might begin the day before symptoms start, and typically lasts five to seven days in adults.

Recommended infection control precautions:

- Patients with ILI should be placed in a private room. When a private room is not available, patients with ILI may be cohorted. In an outbreak of influenza, most patients with suspected influenza will not have a specific laboratory diagnosis; such patients should be cohorted with other patients who have or might have influenza. If cohorting is not achievable, at least 3 feet spatial separation should be maintained between the infected patient and other patients and visitors. Special air handling and ventilation are not required.
- Health care personnel should use standard precautions and droplet precautions. These precautions include hand washing, use of gloves, gowns, masks and eye protection as outlined by the CDC. (<http://www.cdc.gov/flu/professionals/infectioncontrol>).
- Currently available federal guidance suggests that surgical masks provide adequate protection against seasonal influenza. However, an individual health care provider may choose to use a higher level of respiratory protection, such as an N-95 respirator. All individuals should wear a mask upon entering the patient's room or when working within 3 feet of the patient. Remove the mask when leaving the patient's room and dispose of the mask in a waste container. Individuals should wash their hands after mask removal.
- Limit the movement and transport of patients from the room for essential purposes only. If transport or movement is necessary, minimize patient dispersal of droplets by having the patient wear a surgical mask.
- The appropriate method and sequence of donning and doffing personal protective equipment should be reviewed with the staff.
- The facility should redouble efforts to comply with requirements to clean surfaces that have been contaminated with respiratory secretions with which staff or patients might subsequently come in contact (e.g., bedside tables, telephones).
- Staff should be educated about the epidemiology and prevention of influenza. Education should be a regularly scheduled event and should be repeated and reared toward a wide audience. Additional methods of education, including teleconferencing and mass mailing, may be considered. Extra effort should be made to ensure that all staff participated in this program, including nurses who work on a part-

Note: All letters that contain dates are examples of policies that may be used in the next response.

Influenza Surge Capacity for General hospitals 2.14 v1 Page 3

time basis, other staff who might not routinely care for patients but might be required to do so, volunteers, and non-patient care staff (e.g., staff who work in administrative, medical records, food service, environmental services departments, engineering, maintenance).

- Education should be provided to patients. Information on Universal Respiratory Precautions (<http://www.nj.gov/health/flu/education.shtml>) or Respiratory Etiquette (<http://www.cdc.gov/flu/protect/covercough.htm>) should be posted widely throughout the facility. Tissues and stations to facilitate hand hygiene should be made available throughout the facility.
- Visitors with ILI should be asked not to visit hospitalized patients. Signs should be posted outside the facility asking visitors with symptoms of influenza to defer visiting. Visitors with symptoms should be handed a mask or tissues at the door, if they must enter the facility, and be instructed on appropriate infection control practices.
- Visitors to an area with influenza-infected patients should receive education material, should follow appropriate infection control practices, and be provided with appropriate PPE. Consideration should be given to restricting visits from children.

Isolation and quarantine are not recommended. They can be very effective in preventing the spread of infectious conditions but several substantial challenges may limit their usefulness during an influenza outbreak.

- The short incubation period for influenza makes it difficult to identify and quarantine contacts of influenza-infected case-patients before they become ill and have spread infection to others. By contrast, the longer incubation periods for smallpox (about 14 days) and SARS (up to 10 days) make this a more effective control strategy for those infections.
- The high rate of asymptomatic influenza illness (the majority of those infected) means that many potential disseminators of influenza will not be identified nor will their contacts.
- The wide range of clinical symptoms that might be expressed by influenza infected persons are common to many different pathogens and would necessitate isolation and quarantine of large numbers of persons, many of who would not be infected with influenza.

Emergency Department and Hospital-based Ambulatory Clinic Settings

As patient volume surges, crowded waiting areas might be a source of influenza transmission. Therefore, strict adherence to infection control practices in these settings is paramount. To prevent the transmission of influenza, it is important to implement infection control measures at the first point of contact. Personnel well trained in triage are vital. These individuals will play a key role in maintaining the integrity of the health care delivery system.

Potential strategies to help manage influenza patients in these settings include:

A. Minimal Interventions to Prevent Exposure

- At a minimum, patients should be asked to self-report influenza-like symptoms immediately upon arrival. Signs, in appropriate languages, should be posted instructing individuals with fever and respiratory symptoms to alert the staff immediately. These patients should be asked to wear a mask or use tissues to cover their mouth and nose while in the facility. In ambulatory settings, patients who call for an appointment should be asked if they have ILI; this will enable the staff to make arrangements for minimizing exposure of others (e.g., arrival through a separate door directly into an exam room).
- Consider the installation of plexiglass barriers at the point of triage or registration to protect healthcare personnel from contact with respiratory droplets.
- Waiting areas should have information on “Universal Respiratory Protection” or “Respiratory Etiquette.” The waiting areas should have an ample supply of tissues with proper receptacles for disposal. These receptacles should be emptied regularly. The waiting areas should have hand sanitizers available, disposable towelettes or pump bottles, if hand washing facilities are not available.
- Patients with respiratory illnesses should be kept as far from other patients as possible (at least 3 feet) if they cannot be removed from the common space. Patients reporting ILI should be evaluated as expeditiously as possible. Staff caring for these individuals should wear appropriate personal

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Influenza Surge Capacity for General hospitals 2.14 v1 Page 4

protective equipment (PPE). The use of objects shared by patients, such as pens, pencils and clip boards, should be evaluated and procedures should be put in place to minimize contamination (disposable pens or pencil, wipes for clipboards).

- Movement of patients with ILI through the facility should be limited. Portable radiographs should be considered. Normal administrative procedures, such as registration, might be altered to restrict patient movement and limit the time in the facility. Standing orders for the basic laboratory evaluation of a suspected influenza case-patient might be created to speed progress through the system.

B. Alternate Emergency Department and Hospital-based Ambulatory Clinic Triage Stations

- Space permitting, facilities could consider having a triage station outside the usual waiting area.
- A standard set of questions should be used to screen patients.
- Patients presenting with ILI would be directed to wait in a room separate from individuals presenting with illnesses thought not to be infectious. Since many of the individuals presenting with ILI will not be diagnosed with influenza, these individuals should be asked to follow the precautions as outlined in “A”.

C. External Emergency Department Triage Stations

This type of measure should be considered only in conjunction with activation of a hospital’s disaster plan.

- The hospital might utilize locations outside the emergency department for triage and evaluation of patients with influenza-like illnesses. These might include administrative buildings, trailers, etc.
- Those patients with ILI who are stable and thought not to need acute care would be directed to another external structure for evaluation. Those patients who present with non-infectious complaints or those with ILI thought to need acute care could be sent to the main building (wearing masks).
- The location used for patient evaluation should have as much diagnostic capability as possible. Considerations should be given to the availability of portable radiography, phlebotomy, pulse oximetry and arterial blood gas assessment. Again, the infection control precautions as outlined in “A” are still appropriate.

Deferred Hospitalization

Hospitals should, in conjunction with their medical staff, develop policies and recommendations for physicians concerning criteria for deferring admissions of patients when the hospital is experiencing a high volume of influenza-related admissions. With scarce hospital resources and the potential for nosocomial transmission, deferred admissions might be prudent, unless patient care would truly be compromised. Those individuals with solid home supports would be ideal candidates for home management. Hospitals, in conjunction with their medical staff, should encourage development of systems and partnerships in advance, to assure appropriate home management of care.

- Detailed written instructions should be prepared describing what the patient can expect in terms of the clinical course and where to direct questions and concerns.
- Written instructions should stress the importance and methods of maintaining hydration.
- Written instructions should include information (e.g., infection control guidance) for the household care provider on how to best manage the infected individual as well as measures to protect his/her own health and others in the household.
- Partnerships with home health agencies should be encouraged. These agencies would be a valuable resource in caring for patients at home.
- Partnerships with other community providers should be encouraged to ensure that patients receive adequate follow-up and that there is continuity of care.
- Systems for follow-up for those patients who do not have primary care providers should be planned. This may entail the establishment of a follow-up influenza clinic/session at the facility.
- The availability of social services should be ascertained to help coordinate efforts for optimal patient care and safe discharges.
- Partnerships with public health, volunteer organizations, meal delivery services, and mental health providers might be encouraged or strengthened as well.
- “Short stay” outpatient areas within the hospital should be considered for patients to receive hydration, intravenous antibiotics, or monitoring.
- **In the event the hospital’s disaster plan is activated**, use of unlicensed areas outside the main hospital

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Influenza Surge Capacity for General hospitals 2.14 v1 Page 5

building could be considered for these “short stay” areas discussed above.

Intensive Care

The ability to provide intensive care will likely be the rate-limiting step in a facility’s ability to handle a significant surge in patient volume. It is estimated that, at the peak of a flu epidemic, approximately 21 percent of patients hospitalized with influenza will require care in an intensive care setting. Of those patients, 50 percent will require ventilatory support. In the event of a large surge in patient volume secondary to influenza, intensive care resources, including skilled nursing staff and ventilators, will be stressed. Once again, it is prudent to establish policies and partnerships in advance to deal with the following:

- Developing and/or reviewing policies for cohorting patients.
- Reviewing criteria for admission into and transfer out of the intensive care unit. Given that resources may be stressed, criteria may be considered that differ from those normally in place at the facility.
- Minimizing, to the extent possible, invasive respiratory procedures, such as bronchoscopy and sputum induction. During the SARS outbreak, staff who participated in the performance of invasive respiratory procedures were more likely to have become infected. In one study, greater than 60% of the health care workers affected by
- SARS had either performed procedures associated with aerosolization of secretions, or were present in the room at the time of the procedures.
- Considering intubation procedures. If intubation is being considered, an effort should be made to do it electively. This will enable the procedure to be performed in a controlled environment with the staff wearing appropriate PPE. Emergent intubation might be associated with more nosocomial transmission.
- Considering the ethical and religious issues involved with the allocation of limited resources. The institution’s ethics committee and clergy, along with the clinical staff, will need to play a key role in making difficult decisions expeditiously.
- **If a hospital’s disaster plan is activated**, unconventional settings could be utilized to increase intensive care capacity. Ambulatory and inpatient surgery units as well as recovery rooms might be utilized for this purpose.

Facility Planning for Inpatient Care

As mentioned previously, patients should be maintained at home if feasible. Hospital administrators, facility managers and clinical staff need to complete an assessment of their facilities and devise a plan for dealing with increasing numbers of patients with influenza.

- Influenza patients may be cohorted if the supply of private rooms is exhausted.
- Standing orders for patients with influenza should be considered to expedite transfer from the Emergency department to the floor.
- If more than a few patients with influenza are admitted to the facility at a given time, it is prudent to designate a particular area, unit or floor for the care of these individuals. Limiting the geographic area will make it easier to optimize infection control measures and limit the number of staff exposed to the virus. If possible, the area chosen should not be highly trafficked and should not be adjacent to areas where patients at high risk for influenza-associated complications are admitted (e.g., labor and delivery, HIV wards, hemodialysis units, oncology units). The area chosen should have the potential for expansion as patient numbers increase. For instance, patients may be placed on one floor of a particular building in the hospital complex with the expectation that, as patient volume increases, the entire building will be used to cohort influenza patients by adding one floor at a time. Patients without influenza would be cared for in another building of the hospital complex. Obviously, the choice of location will depend on each facility’s layout and resources. The plan should not necessitate moving large numbers of influenza-infected patients to a distant site because patient volume has outgrown the originally designated area; relocation of patients would only increase the risk of nosocomial transmission.
- The transportation of patients outside this designated area should be discouraged. Efforts should be made to provide as many clinical services on site as possible (e.g., physical therapy, radiology, PICC line placement). Each patient should be provided with a mask when leaving his/her room.
- Care should be taken to screen *all patients* admitted to other areas of the hospital for influenza

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Influenza Surge Capacity for General hospitals 2.14 v1 Page 6

symptoms before arriving on the floor or presenting for elective procedures. This would include patients scheduled for elective surgery and women who present in labor. If patient care would not be compromised, patients with ILI should be cared for with other influenza-infected patients. If it is not feasible, strict infection control precautions need to be in place at the site of patient care.

- Policies to expedite the discharge or appropriate transfer and transport of patients not infected with influenza to alternate care sites should be considered. Discharge planning, social and transportation services should be readily available to the clinical staff on a daily basis to allow for the expeditious and safe transfer and discharge of patients.
- Identification should be made of alternate space in the hospital that could be used for patient care **after activation of a hospital's disaster plan**. This might include areas not typically used for patient care (administrative offices, conference rooms) as well as external structures, such as trailers. Ambulatory and inpatient surgical suites, endoscopy suites, recovery rooms and day-stay units should become available if elective medical and surgical procedures are cancelled as part of the disaster plan.

Staffing Issues

Human resources are likely to be scarce if there is a large outbreak of influenza. Not only will the volume of patients increase at health care facilities, but staff members might not be able to work because of personal or family illness. Thus, provisions should be made for how best to maintain patient care in the face of scarce human resources.

- The facility's time-off policies and procedures should adequately consider staffing needs during the expected peak influenza season.
- The facility should identify, in advance, staff that might have scheduling difficulty because of child or elder care responsibilities and make appropriate accommodations.
- If possible, staff members caring for patients with ILI should not be used to care for patients without influenza-like illnesses. Rotating staff to different services is more likely to spread influenza throughout the facility.
- The facility's employee health service, in conjunction with management, should play an active role in developing policies during this time. Consider developing procedures to screen employees reporting to work for symptoms of ILI and establishing policies in advance for accepting employees back to work after an ILI. Rapid influenza testing of symptomatic employees may help to make better-informed staffing decisions as well as help to make more effective use of scarce antivirals and vaccine (<http://www.cdc.gov/flu/professionals>).
- When the employee health service determines a staff member is symptomatic with influenza, that individual should be sent and remain home until afebrile (T <100.5) and symptomatically improved. Employees who meet criteria for pneumococcal vaccine should be encouraged to be vaccinated.
- The facility should consider using clinically trained administrative staff not usually engaged in patient care services. Consider "refresher courses" in advance for these staff members and be sure to comply with licensure standards regarding qualifications and orientation.
- Staff should be advised to maintain personal care kits, including necessary personal items and medications, in the event there is an unforeseen emergent circumstance that requires them stay beyond a scheduled shift. Note that rules limiting the imposition of mandatory overtime will not be relaxed unless the situation clearly qualifies as one of the exceptions provided for under the law governing mandatory overtime.
- **In the event that the hospital's disaster plan has been activated**, the facility should consider identifying a family member or friend of each inpatient to help with personal care of the patient, thus alleviating the need for hospital personnel to perform non-medical duties. These individuals must receive instruction in and practice infection control precautions.

Nosocomial Transmission

If an outbreak of influenza occurs, transmission within the facility is more likely to occur because of the large number of persons (patients, staff and visitors) who will be infected. There may be difficulties implementing optimal infection control practices due to increased patient loads, staff shortages, and use of non-routine or volunteer staff. Active surveillance for nosocomial influenza infection needs to be implemented by the initiation of enhanced

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Influenza Surge Capacity for General hospitals 2.14 v1 Page 7

infection control measures.

- Implementation of surveillance for nosocomial onset of acute febrile respiratory illness or pneumonia (onset > 48 hours after admission). The former would include documenting new onset of fever > 100.5 F, with or without myalgia, malaise, or headache and with one or more of the following symptoms: sore throat, cough, rhinorrhea, or nasal congestion. When a suspect case or cluster of cases is identified, obtain specimens for viral testing. Rapid testing should be considered for more expeditious diagnosis.
- Investigation by infection control personnel to identify potential causes of the outbreak or factors that contribute to ongoing spread. These investigations might identify a specific area of the facility that is the focus, determine whether infected health care workers might be transmitting the virus, and assess how well infection control practices are being implemented.
- Control measures should be implemented. These might include cohorting patients, educating staff members, placing staff on leave or changing their patient-care responsibilities, and use of vaccine or antiviral prophylaxis, if available.
- Communicating with the local health department for assistance with coordination. Patients might need to be diverted to other facilities until the internal chain of transmission is broken.

Other Issues

- The facility should ensure that adequate security is available to handle high volumes of patients in the emergency department
- The facility should redouble efforts to ensure compliance with licensure standards requiring that all patients age 65 and over shall be screened and, if eligible, offered vaccination against pneumococcal disease. Providers in ambulatory settings could review the guidelines for pneumococcal vaccine and offer vaccine to high-risk individuals (<http://www.cdc.gov/mmwr/PDF/rr/rr4608.pdf>).
- The facility might need to request additional supplies (ventilators, intubation equipment, intravenous catheters, intravenous pumps) from new sources. These supplies may not be those normally used in the facility and might have to bypass normal committee and clinical engineering review. The hospital should make arrangements in advance for the use of these supplies.
- The facility should partner with community providers. Patients with identified primary care physicians should be encouraged to contact their provider prior to presenting to an acute care facility. Primary care providers should make every effort to accommodate patients; physician groups might consider providing extended evening or weekend hours to alleviate the volume at acute care facilities.
- The facility should ensure that the staff, patients, and visitors receive accurate information; the information should be consistent with the messages from local and state health agencies.
- Mental health providers should be available to help patients and staff deal with heightened stress and anxiety levels.
- Facilities should review policies regarding ambulance diversion. Ambulance diversion is a response to overcrowding that should be used sparingly; it is an advisory status, not a mandate. In the event of a surge in patient volume as a result of influenza, all hospitals in the region are likely to be experiencing similar stresses; therefore, diversion will only place a greater stress on the overall health care delivery system.

References

Centers for Disease Control and Prevention. Respiratory hygiene/cough etiquette in healthcare setting. December 17, 2003. Available at: <http://www.cdc.gov/flu/professionals/infectioncontrol/resphgiene.htm>.

Centers for Disease Control and Prevention. Guidelines and Recommendations, Influenza Antiviral Medications: 2004-2005 Interim Chemoprophylaxis and Treatment Guidelines. October 18, 2004. Available at: <http://www.cdc.gov/flu/professionals>

Centers for Disease Control and Prevention. Influenza, Lab Diagnosis. Available at:

Note: All letters that contain dates are examples of policies that may be used in the next response.

Influenza Surge Capacity for General hospitals 2.14 v1 Page 8

<http://www.cdc.gov/flu/professionals/labdiagnosis.htm>.

Centers for Disease Control and Prevention. MMWR. April 7, 1997; Vol. 46, No. RR-8. Available at: <http://www.cdc.gov/mmwr/PDF/rr/rr4608.pdf>.

Department of Health and Human Services. Pandemic Influenza Response and Preparedness Plan. August 26, 2004. Available at: <http://www.os.dhhs.gov>

Dwosh, HA; Hong, HH; Austgarden, D; et al. Identification and containment of an outbreak of SARS in a community hospital. CMAJ. May 27, 2003; 168 (11). Available at: <http://www.cmaj.ca/cgi/content/full/168/11/1415>

Loutfy, MR; Wallington, T; Rutledge, T; et al. Hospital Preparedness and SARS. Emerging Infectious Diseases. May 2004; Vol. 10, No. 5. Available at: <http://www.cdc.gov/ncidod/EID/vol10no5/03-0717.htm>.

Loeb, M; McGeer, A; Henry, B; et al. SARS among Critical Care Nurses, Toronto. Emerging Infectious Diseases. Feb. 2004; Vol. 10, No. 2. Available at: <http://www.cdc.gov/eid>.

McDonald, LC; Simor, AE; Su I; et al. SARS in Healthcare Facilities, Toronto and Taiwan. Emerging Infectious Diseases, May 2004; Vol. 10, No. 5. Available at: <http://www.cdc.gov/eid>.

Naylor, CD; Chantler, C; Griffiths, S. Learning from SARS in Hong Kong and Toronto. JAMA. May 26, 2004; Vol. 291, No. 20.

New Jersey Department of Health and Senior Services. Influenza, Educational Materials. Available at: <http://www.nj.gov/health/flu>.

New Jersey Hospital Association. A FULL HOUSE: Updated Hospital Diversion Guidelines Defined. January 2002.

Seto, WH; Tsang, D; Yung, RWH; et al. Effectiveness of precautions against droplets and contact in prevention of nosocomial transmission of severe acute respiratory syndrome (SARS). The Lancet. May 3, 2003; Vol. 361; 1519-20. Available at: <http://www.thelancet.com>.

Thorne, CD; Khozin, S; McDiarmid, M. Using the Hierarchy of Control Technologies to Improve Healthcare Facility Infection Control: Lessons From Severe Acute Respiratory Syndrome. JOEM. 2004;46:613-622

Varia, M; Wilson, S; Sarwal, S; et al. Investigation of a nosocomial outbreak of severe acute respiratory syndrome (SARS) in Toronto, Canada. CMAJ. August 19, 2003; 169 (4). Available at: <http://www.cmaj.ca/cgi/content/full/169/4/285>.

Weinstein, RA. Planning for Epidemics – The Lessons of SARS. NEJM. June 3, 2004; Vol. 350(23); 2332-2334.

Zimmerman, P; Shepard, H; Kalafut, C; et al. Preventing Spread of SARS. Journal of Emergency Nursing. Feb. 2004; Vol. 30(1), p 71-72.

**Pandemic Preparedness Planning Template
for
Federally Qualified Health Centers (FQHC)**

November 2013

**I Background
Purpose/Scope/ Responsibilities**

The purpose of this template is to provide to Federally Qualified Health Centers (FQHC) with a framework for health care preparedness planning and continued operation during an influenza pandemic. The information and tools in this template should be adapted for each health center and take into account the specific roles within the scope of practice of each FQHC during an influenza pandemic to include:

- specific role in providing triage and outpatient care (surge capacity as an alternate care site) of patients with influenza-like illness (ILI) while still providing for the ongoing medical care of all patients
- responsibility to distribute influenza vaccine and/or antiviral medications if appropriate
- responsibility to perform influenza rapid antigen testing as part of ILI surveillance and/or treatment decisions, if appropriate
- coordination with on-going local, regional and state planning efforts

This template is a starting point. Plans need to be specific each FQHC and should address all aspects of health care and surge capacity as they apply to each pandemic planning phase while:

- maintaining, to the extent possible, the provision of health care services to meet the needs of FQHC patients during and influenza pandemic
- maximizing the FQHC's ability to respond to patients' health care needs (and surge care demands) resulting from an influenza pandemic
- provide for FQHC staff and patient prophylaxis and vaccine considerations

II Situation

An influenza pandemic has the potential to cause widespread illness and death. Planning and preparedness before the next pandemic strikes are critical for an effective response.

The increased demand for health care services during an influenza pandemic will challenge existing health care services in New Jersey to a level not previously experienced. A pandemic will require a sustained health response for months or years. Planning for this kind of sustained response presents a unique challenge to hospitals and other health care providers and will require collaboration and integration among all health care partners.

Lessons learned from the 2009 Pandemic Flu (H1N1) and Superstorm Sandy in 2012 have demonstrated that special populations/individuals with access and functional needs (AFN) have difficulty accessing and utilizing medical services in both public and private sectors. FQHCs must continue the effort to identify and include in their pandemic planning, populations with AFN as well as mechanisms to ensure their receipt of services.

III Assumptions

Because of activities funded through the Centers for Disease Control and Prevention's (CDC) Bioterrorism Preparedness and Response Cooperative Agreement and since 2006, when the Pandemic and all-Hazards Preparedness Act established the Assistant Secretary for Preparedness and Response (ASPR's) Hospital Preparedness Program (HPP), formerly overseen by the Health Resources and Services Administration's National Bioterrorism HPP, infrastructure and key linkages among these agencies have been maintained. Many aspects of planning for pandemic influenza use much the same infrastructure as that needed for response to bioterrorism events.

Planning assumptions include:

- An influenza pandemic will cause simultaneous outbreaks in communities across New Jersey and the United States;
- There will be an overwhelming number of ill persons requiring hospitalization and/or outpatient medical care;
- The New Jersey Department of Health (NJDOH) will activate its risk communication strategies and disseminate public health advisories and alerts based on information received from the CDC and other credible sources;
- The ability of the federal government to support New Jersey will be limited at the onset of a pandemic and may continue to be limited for an extended period;
- Health care providers, including FQHC (within the scope of their practice) must be prepared to manage the surge of pandemic influenza patients presenting for care;
- Effective outpatient management may reduce the demand for inpatient care. Home-based treatment provided by families, and supported by primary care practitioners, home health agencies, and other professionals, will be essential during a pandemic;
- FQHC patients have a high rate of chronic diseases, thus are disproportionately more vulnerable to the effects of influenza pandemic. Attempts to meet the special needs of these populations and those with access and functional needs should be addressed in planning;
- There will be shortages and delays in the availability of vaccine and antiviral medications;
- Public, private and non-profit sector partners have been brought into the planning process and are encouraged to develop plans for some period of self-sustained operation;
- Pandemic influenza planning will be integrated into other preparedness activities;
- Up to 30 percent of the workforce will be too sick to come to work at some point during the pandemic. Rates of absenteeism may be driven to 40 percent during the peak weeks of a community outbreak. This could continue well into the post-pandemic (recovery) period. Therefore, planning for continuity of operations is an essential component of pandemic influenza preparedness;
- Supplies, equipment and pharmaceuticals will be in short supply during an influenza pandemic;
- Traditional standards of care may need to be altered to maximize health care resources and benefits;
- ILI surveillance will already be in place.

These assumptions were based on available information about past pandemics, especially the severe 1918 pandemic. It is important to recognize that we cannot predict many aspects of a pandemic and any plan must include the flexibility to the characteristics of an actual pandemic.

IV Concept of Operations

A Command and Control

Existing command and control structures should be applied to pandemic influenza.

- Identify operational priorities
- Identify key leadership positions and all essential functions
- Identify personnel 3-deep for all of these positions
- Develop training programs for all these positions/individuals

B WHO Global Pandemic Phases (WHO Global Influenza Preparedness Plan, 2013 - http://www.who.int/influenza/preparedness/pandemic/GIP_PandemicInfluenzaRiskManagementInterimGuidance_Jun2013.pdf)

Interpandemic Period – no new influenza subtypes have been detected in humans, but a novel subtype that could cause human infection may be present and circulating in animals.

Pandemic Alert Period – Human infections(s) with a new subtype of influenza virus with no or very limited human-to-human transmission has occurred.

Pandemic Period – Increased and sustained transmission in the general population of a new subtype of influenza subtype somewhere in the world (included “Between Waves” which is a separate Period in the NJDOH Influenza Pandemic Plan).

Postpandemic Period – Return to the Interpandemic Period.

C Elements of the Pandemic Plan

The elements below must be addressed for each of the five (5) pandemic periods listed in Section D. Section D suggests activities to be considered with these eleven (11) elements.

- **Decision making and coordination**
 - Key to any plan is the establishment of a Pandemic Planning Committee and identification of a pandemic Influenza Coordinator
 - All staff/alert rosters should identify personnel 3-deep
- **Disease Surveillance and laboratory testing**
- **Communications**
 - External
 - State and local public health agencies – NJDOH, local health departments and New Jersey Local Information Network Communications System (NJLINCS) Agencies
 - Key stakeholders (e.g., New Jersey Primary Care Association (NJPCA), County/Local Office of Emergency Management, health care facilities – hospitals, other FQHCs)
 - Internal
 - FQHC management
 - FQHC staff
 - Patients

- **Patient Triage**
 - Develop criteria for identifying patients who need to be seen during an influenza pandemic versus those who do not
 - Develop methodology and system for phone triage of patients (home care versus outpatient visit versus referral to hospital emergency department)
 - Develop methodology and system for screening and segregation of patients presenting to the facility
 - Maintenance of care for patients with chronic illnesses

- **Clinical evaluation/treatment of patients**
 - Testing/diagnosis procedures
 - Treatment protocols (including home care)
 - Establish a system for rapid distribution of vaccine and antivirals (including NJDOH-required reports)
 - Development of agreements with acute care facilities and home care agencies

- **Human resources for patient care**
 - Identify categories and minimum number of personnel needed to provide care
 - Maintaining staffing in the face of anticipated workforce shortages
 - Use of staff not usually involved in patient care activities
 - Reassignment of staff
 - Use and credentialing of newly hired and volunteer health professionals
 - Use of community volunteers - All licensed or certified health care providers who volunteer in the health center must undergo a credentialing and privileging process in accordance with "Policy information Notice 02-22: Clarification of Bureau of Primary Health Care Credentialing and Privileging Policy Outlined in Policy information Notice 01-16."
 - Credentialing and privileging is required of all licensed or certified health care practitioners. Non-Licensed Independent Practitioners require primary source verification of only their license or certification, volunteers included.
 - Verification of education, training, and experience of provider.
 - Privileging: "The process of authorizing licensed or certified health care practitioners specific scope and content of patient care service" or assessment of the clinical competence of the provider to do the job expected.

Source: <http://bphc.hrsa.gov/ftca/healthcenters/ftcahcfags.html>
BUT they are not covered under FTCA malpractice coverage
(<http://bphc.hrsa.gov/policiesregulations/policies/pdfs/pin200716.pdf> - Section V). Source: <http://bphc.hrsa.gov/ftca/healthcenters/ftcahcfags.html>
 - Assignment of staff based on co-morbid illnesses
 - Time-off policies
 - Issues of childcare, eldercare, pet care and staff absenteeism
 - Development of policies for screening employees for symptoms of influenza-like illness prior to reporting for duty and when returning to work after illness
 - Prioritization and distribution of available antivirals and vaccines utilizing available protocols
 - Personal/Family Preparedness Plans for staff

- Identification of mental health resources to provide counseling to personnel (in collaboration with the New Jersey Department of Human Services (NJ DHS), Division of Mental Health Services Disaster and Terrorism Branch)
- **Physical resources for patient care**
 - Separation of individuals with influenza-like illness from those presenting with non-influenza symptoms/diagnoses
 - Development of surge capacity plans
 - Expansion of patient services into other areas of facility
 - Cohorting of patient services into other areas local facilities
 - Availability of equipment and supplies
 - Plans for dealing with supply shortages (primary and contingency)
 - Procedures for requesting supplies (otherwise unavailable) from County/Local Office of Emergency Management
 - Sharing/obtaining limited resources with other local and regional facilities/groups
 - Availability and use of antivirals and vaccine
 - Identifying contact(s) for requesting/receiving influenza vaccine and antiviral prophylaxis
 - Plans in place for rapid distribution of vaccine and antivirals to both patients and staff as appropriate (including NJDOH required reports)
 - Use of ancillary areas for patient care
- **Education and training**
 - Identification of language and reading-level appropriate pandemic influenza education materials utilizing government recommended sources
 - Education and training for patients utilizing materials in appropriate languages and reading-levels for the population served
 - Education and training of staff
 - Facility's Pandemic Preparedness Plan
 - Pandemic influenza
 - Cross-training to maintain essential services
 - Cross-training of staff
 - Exercising all areas of plan
 - Development and implementation of "just-in-time" training plan
- **Facility access**
 - Security personnel
 - Limit points of access/egress
 - Criteria and protocols
 - Limiting patient visits
 - Limiting access/egress to the facility
 - Screening staff/patients/visitors for ILI symptoms prior to building entry
 - Security the facility
 - Crowd control
- **Business continuity**
 - Refer to US DHHS HRSA/BPHC Document No. 2007-15, Document Title: Health Center Emergency Management Program Expectations, pgs. 6-7 (See Resources)

- **Infection Control (staff and patients)**
 - Use of surgical masks and N-95 particulate respirators
 - Respiratory hygiene/cough etiquette
 - Cleaning, disinfection and sterilization
 - Availability of alcohol-based gels, tissues and waste receptacles at the facility
 - Increased environmental cleaning

D Health Care Response during specific pandemic periods

Listed here are some of the issues to be considered when addressing each of the Elements in Section C.

1 Interpandemic Period

- Estimate the impact of an influenza pandemic on FQHC services using software such as “**FluWorkLoss 1.0**” available from the CDC at:
- <http://www.cdc.gov/flu/pandemic/preparednesstools.htm>
- Ensure pandemic influenza plan and protocols are in place
- Review internal emergency management and disaster mental health plans (i.e., in collaboration with NJDHS Division of Mental Health Services Disaster and Terrorism Branch and local/state Office of Emergency Management)
- Establish contact and plan with other FQHC and with state and local public health agencies (i.e., register for LINCS Health Alert Network)
- Update and/or inventory pharmaceutical supplies and sources of pharmaceutical resources and ensure that suppliers have adequate business continuity plans
- Update and/or inventory medical supplies and sources of medical supplies and ensure that suppliers have adequate business continuity plans
- Establish/maintain inventory of personal protective equipment (PPE) and update information in Hippocrates under Healthcare Facility Data/FQHC –Medical Facilities Capabilities
- Develop and maintain contact lists of FQHC personnel (including work and home communication information)
- Conduct education/training for staff on the Pandemic Plan, Personal Pandemic Plan, infection control, respiratory etiquette and hand hygiene
- Conduct surveillance for influenza

2 Pandemic Alert Period

- Continue activities of the Interpandemic Period
- Review and update FQHC Pandemic Influenza Plan
- Obtain from NJDOH and public health authorities case definitions, protocols and algorithms to assist with case finding, management, infection control and surveillance reporting
- Review, revise as needed, and activate guidelines for prevention, and control measures
- Maintain contact and continue planning with other FQHCs and with state and local public health agencies (i.e., NJ LINCS Health Alert Network)
- Conduct surveillance and testing for influenza per NJDOH guidance
- Provide “refresher” training to staff
- Cross-train staff as appropriate
- Begin education of patients (ensure uniformity of message with state education) to include:

- Seasonal influenza vs. pandemic influenza
- Prevention activities (i.e., hand washing, social distancing, etc.)
- Home care of those ill with influenza
- Exercise each of the key components of the plan and revise/adjust plan accordingly

3 Pandemic Period

- Continue activities of the Pandemic Alert Period
- Activate Pandemic Influenza Plan
- Keep up-to-date on the latest recommendations from governmental public health authorities
- Screen all incoming patients for influenza-like-illness
- Implement a plan for early detection, reporting and treatment of health care personnel (staff)
- Implement plan to vaccinate and provide antiviral agents to staff per NJDOH guidance, when vaccine is available
- Implement plan to vaccinate and provide antiviral agents to patients per NJDOH guidance
- Reinforce infection control procedures to prevent the spread of influenza and utilize appropriate PPE
- Maintain close contact with other FQHCs and with state and local public health agencies
- Post signs for respiratory hygiene/cough etiquette
- Maintain high index of suspicion that patients presenting with influenza-like-illness could be infected with pandemic strain
- Cohort and segregate patients
- Consider co-morbid conditions when developing staffing assignments
- Consider assigning staff recovering from influenza to care for influenza patients
- Follow guidelines for when sick staff are allowed to return to work
- Increase environmental cleaning efforts

4 Between Waves

- Scale back pandemic response activities as appropriate, returning to Pandemic Alert Period activities
- Initiate recovery operations including stress management and crisis counseling
- Summarize and analyze the pandemic response and lessons learned for next wave
- Review and revise the Pandemic Influenza Plan based on outcome measurements and performance results of current plan
- Rebuild/reinstate essential services
- Prepare for the next wave

5 Post-pandemic Period

- Scale back activities as appropriate returning to Interpandemic Period activities
- Initiate recovery operations including stress management and crisis counseling
- Summarize and analyze the pandemic response and lessons learned for future pandemic situations
- Review and revise the Pandemic Influenza Plan based on outcome measurements and performance results of current plan
- Rebuild/reinstate services

V Responsibilities

Identify/list Interpandemic roles/responsibilities for all staff members.

Identify/list Pandemic Alert Period roles/responsibilities for all staff members.

Identify/list Pandemic Period roles/responsibilities for all staff members.

Identify/list roles/responsibilities for all staff members between waves.

Identify/list Post-pandemic Period roles/responsibilities for all staff members.

VI Plan Maintenance

Any FQHC Pandemic Influenza Preparedness and Response Plan is a dynamic document and should be updated periodically to reflect new developments in understanding of the novel influenza virus with potential to cause a pandemic, its transmission, prevention and treatment.

The plan should be exercised to identify operating challenges and promote effective implementation. Plan updates should incorporate changes in response roles and improvement in response capability developed through ongoing planning efforts and exercises.

Attachments

1 Acronyms/Definitions

CDC	Centers for Disease Control and Prevention
CEMP	Comprehensive Emergency Management Plan
COG	Continuity of Government
COOP	Continuity of Operations Plan
DHHS	Department of Health and Human Services
FQHC	Federally Qualified Health Center
HAN	Health Alert Network
H5N1	Avian Flu virus
HRSA	Health Resources and Services Administration
ILI	Influenza-like Illness
IC	Incident Commander
ICS	Incident Command System
LAL	Look-a-Like (health center functioning like and FQHC but without Federal designation)
NJ LINCS Agency	New Jersey Local Information Network and Communications System
NJPCA	New Jersey Primary Care Association
MRC	Medical Reserve Corps
NIMS	National Incident Management System
NJDHS	New Jersey Department of Human Services
NJDOH	New Jersey Department of Health
PPE	Personal protective equipment
WHO	World Health Organization

2 WHO/HHS Pandemic Phases and US Government Response Stages

Resources

Centers for Disease Control and Prevention. Respiratory hygiene/cough etiquette in healthcare setting. February 27, 2012. Accessed at: <http://www.cdc.gov/flu/professionals/infectioncontrol/resphygiene.htm>

Centers for Disease Control and Prevention, Pandemic Planning Tools. Accessed at: <http://www.cdc.gov/flu/pandemic-resources/>

Centers for Disease Control and Prevention. Abbreviated Pandemic Influenza Plan Template for Primary Care Provider Offices: Guidance from Stakeholders August 2009. Accessed at: www.cdc.gov/h1n1flu/guidance/pdf/abb_pandemic_influenza_plan.pdf

U.S. Department of Health and Human Services, HRSA/BPHC, Policy Information Notice, Document No. 2007-15, Document Title: Health Center Emergency Management Program Expectations. Accessed at: <http://bphc.hrsa.gov/policiesregulations/policies/pin200715expectations.html>

New Jersey Department of Health. Pandemic Influenza Resources. July 12, 2012. Accessed at: <http://www.NJFlu.gov>

New Jersey Department of Health. Surveillance and Testing for Influenza A (H5N1) in Humans Pandemic Alert Period. July 12, 2012. Accessed at: <http://www.state.nj.us/health/flu/avianflu.shtml>

New Jersey Local Information Network and Communication System (LINCS). Accessed at: <http://www.njlincs.net>

New Jersey Local Health Department Directory. Accessed at: <http://www.nj.gov/health/lh/directory/lhdselectcounty.shtml>

Occupational Safety and Health Administration. Pandemic Influenza and Response Guidance for Healthcare Workers and Healthcare Employers. Accessed at: http://www.osha.gov/Publications/OSHA_pandemic_health.pdf

U.S. Department of Health and Human Services. One-stop access to U.S. Government avian and pandemic flu information. Accessed at: <http://www.pandemicflu.gov>

U.S. Department of Health and Human Services. HHS Pandemic Influenza Plan. November 2005. Accessed at: <http://dhhs.gov/nvpo/pandemicplan/>

World Health Organization. Global Influenza Programme.

Accessed at:

<http://www.who.int/influenza/en/>

Policy information Notice 02-22: Clarification of Bureau of Primary Health Care Credentialing and Privileging Policy Outlined in Policy information Notice 01-16."

Sources: <http://bphc.hrsa.gov/ftca/healthcenters/ftcahcfaqs.html>, and <http://bphc.hrsa.gov/policiesregulations/policies/pdfs/pin200716.pdf> - Section V).

Revised November 2013

Infection Control Guidelines in Healthcare Settings

The intention of this document is to assist healthcare settings in the planning for pandemic influenza by enhancing standard infection control practices.

The primary strategies for preventing pandemic influenza are the same as those for seasonal influenza: vaccination, early detection and treatment with antiviral medication, and the use of infection control measures to prevent transmission during patient care. However, when a pandemic begins, a vaccine may not yet be widely available, and the supply of antiviral drugs may be limited. In addition, antiviral drugs do not eliminate viral shedding or obviate the need for personal protective equipment. The ability to limit transmission in the healthcare settings will, therefore, rely heavily on the appropriate application of infection control measures.

Infection control guidance is based on knowledge of routes of influenza transmission, the pathogenesis of influenza, and the effects of influenza control measures used during past pandemics and inter-pandemic periods. However, the characteristics of a pandemic strain may be different. Planning must allow for flexibility and real-time decision-making that takes new information into account as the pandemic unfolds.

1. Background

Despite the prevalence of influenza every year, the amount of empirical data on influenza transmission is limited. Epidemiologic patterns suggest spread through large infectious respiratory droplets that are deposited on the oral, nasal or conjunctival mucosa of a susceptible host. Transmission via large droplets requires close contact between the infectious host and the susceptible individual. Special air handling and ventilation are not required to prevent transmission of disease transmitted primarily by droplets, as large particle droplets do not remain suspended in the air and generally travel only short distances (about three feet) through the air.

The significance of direct contact, indirect contact and airborne transmission has not been well established. In addition, certain host factors (i.e., diarrhea) or procedures (i.e., bronchoscopy) might alter the usual modes of transmission. The most appropriate form of respiratory protection during a pandemic remains controversial. The most recent recommendations can be found at <http://www.flu.gov/planning-preparedness/community/maskguidanceco.html>

The incubation period for routine seasonal influenza is 1 – 4 days, with an average of 2 days. The incubation period of a novel influenza strain would be unknown until the time it is circulating in the population. Therefore, the maximum interval between exposure and symptom onset for pandemic influenza will be considered 10 days for the purposes of this document. Influenza is contagious for approximately 24 – 48 hours prior to symptom onset and throughout most of the symptomatic period. Certain individuals, such as those with immunocompromising conditions and children, may shed the virus for longer periods.

Individuals involved in pandemic influenza planning for healthcare entities might want to familiarize themselves with the explanation of standard, droplet, airborne and contact precautions outlined by the

Centers for Disease Control and Prevention (CDC) found at http://www.cdc.gov/ncidod/dhqp/gl_isolation.html.

Commonly, novel viruses originate from the mutation of an influenza virus commonly found in animals and then obtain the ability to transmit the virus to humans. Influenza viruses from swine and avian origins have recently been of greatest concern. Avian Influenza A (H5N1) is highly contagious among birds and does not usually infect people. Although a few avian influenza viruses have crossed the species barrier to infect humans, it is still considered to be a very rare disease in people. The H5N1 virus does not infect humans easily, and if a person is infected, it is very difficult for the virus to spread to another person. Of the human cases associated with the ongoing H5N1 outbreaks in Asia, parts of Europe, the Near East and Africa, the infections have occurred mostly from people having direct or close contact with H5N1-infected poultry or H5N1-contaminated surfaces.

Because all influenza viruses have the ability to mutate, scientists are concerned that the H5N1 virus might one day be able to infect humans and spread easily from one person to another. If the H5N1 virus gains the capacity to spread easily from person to person, there will be little or no immune protection in the human population and an influenza pandemic could begin. At this point in time, infection control guidelines for those confirmed or suspected to be infected with the H5N1 strain differ in some respects from the guidance in this document. For more information about the avian influenza, go to the CDC website: <http://www.cdc.gov/flu/avian/gen-info/facts.htm> or the NJDOH website at <http://www.state.nj.us/health/flu/avianflu.shtml>.

2. Infection Control in Healthcare Settings

The recommendations for infection control are applicable throughout the different pandemic phases and represent sound infection control practices that are applicable for the control of communicable diseases. The key to successfully controlling transmission of influenza, and other communicable respiratory infections, is the early identification of potentially infectious individuals, and the immediate implementation of control measures for containment.

A. Basic infection control principles for preventing the spread of pandemic influenza for all pandemic periods

- Limit contact between potentially infected and non-infected individuals.
 - Ensure early identification of potentially infected individuals.
 - Physically isolate infected persons if possible/appropriate for setting.
 - Promote spatial separation in common areas (i.e., maintain at least three feet from potentially infectious persons).
- Protect healthcare workers from exposure while delivering care.
 - Wear a surgical or procedure mask for close contact with infectious patients (i.e., within three feet).
 - Use standard precautions including the use of personal protective equipment to prevent contact with respiratory secretions.

- Perform hand hygiene after contact with infectious patients or their immediate environment. Reinforce compliance with hand hygiene by:
 - Providing education on the importance of hand hygiene for the prevention of transmission of infectious agents;
 - Providing easy access to hand-washing facilities or alcohol-based hand sanitizers;
 - Placing signage about hand washing procedures throughout the facility. <http://www.cdc.gov/handhygiene/>
- Educate healthcare workers to avoid touching eyes, nose or mouth with contaminated hands (gloved or ungloved) while delivering care and until they perform hand hygiene.
- Enforce a ban on consuming food or beverages by healthcare workers in patient care areas.
- Consider the use of particulate respirators if performing or assisting with aerosol-generating procedures.
- Contain infectious respiratory secretions.
 - Implement the use of respiratory hygiene/etiquette.
 - Place signage regarding respiratory etiquette and universal respiratory precautions throughout the facility.
 - Promote the use of masks by symptomatic individuals in common areas or when being transported.
- Assure environmental controls.
 - Redouble efforts to clean potentially contaminated environmental surfaces by:
 - Daily cleaning of horizontal, frequently touched and lavatory surfaces.
 - Discharge cleaning of above surfaces and soiled vertical surfaces.
 - Assuring the products used for daily routine and discharge cleaning is an Environmental Protection Agency (EPA) registered low or intermediate-level disinfectant and is used per manufacturers' instructions.
 - Follow CDC Guideline for Environmental Control in Health-Care Facilities found at http://www.cdc.gov/ncidod/dhqp/gl_enviroinfection.html
 - Minimize the use of items shared by patients such as clipboards, pens and telephones.
 - Place tissues throughout patient care areas for use by symptomatic patients.
 - Place no-touch receptacles in patient care areas to facilitate disposal of used tissues.
 - Place alcohol-based hand sanitizers in patient care areas if hand-washing facilities are not available.
 - Develop policies and procedures to speed the processing of symptomatic individuals such as the use of standing orders for assessment or admission.
 - Use standard precautions, including gloves, when handling waste. Dispose of solid waste (medical and non-medical) that might be contaminated with influenza virus in accordance with facility-specific procedures and/or local or state regulations for handling and disposal of medical waste, including needles and other sharps, and non-medical waste.
 - Use standard precautions, including gloves, when handling and transporting laundry potentially contaminated with respiratory secretions. Place soiled laundry directly into a laundry bag in the patient's room for transport to linen holding areas. Wash and dry laundry according to routine standards and procedures. Use standard precautions, including gloves, when handling dishes and eating utensils used by a

patient with influenza. Disposable dishes and utensils should be discarded with other non-medical waste. Reusable dishes and utensils should be washed in a dishwasher with recommended water temperature.

- Use standard precautions, including gloves, when caring for the deceased. Follow facility-specific practices for care.

B. Management of Infectious/Potentially Infectious Individuals

- Respiratory Etiquette or Universal Respiratory Precautions should be utilized at all times in all healthcare settings and points of entry into the healthcare delivery system (e.g., emergency departments, admissions departments, outpatient clinics, physician offices). Please see <http://www.cdc.gov/flu/professionals/infectioncontrol/resphgiene.htm> and <http://nj.gov/health/flu/education.shtml> for the elements of Respiratory Etiquette or Universal Respiratory Precautions.
 - Institute policies and procedures to identify symptomatic patients at point of first contact including triage areas, reception areas or during the scheduling of appointments. This necessitates the education of healthcare workers not traditionally trained in patient assessment such as security or registration staff.
- Droplet precautions and patient placement. Patients with known or suspected influenza should be placed on droplet and standard precautions for the duration of illness, and a minimum of five days from the onset of symptoms. The duration of infectivity might vary depending on the characteristics of the pandemic virus or on the characteristics of the influenza infected patient. For instance, immunocompromised individuals and children could potentially shed virus for several weeks. Information on droplet precautions can be found at http://www.cdc.gov/ncidod/dhqp/gl_isolation_droplet.html. Precautions include:
 - Donning a surgical or procedural mask when within 3 feet of a symptomatic individual. If a healthcare worker is attending multiple patients in the same room (e.g., in a cohort situation), the same mask may be utilized until the healthcare worker leaves the room. If desired, a healthcare worker may choose to don a particulate respirator for patient care activities. Guidance on the choice of respiratory protection devices can be found at <http://www.flu.gov/planning-preparedness/community/maskguidancecommunity.html>
 - Performing hand hygiene after each patient encounter.
 - Placing patients in a private room, if possible. Patients may be cohorted, if necessary.
- Contact Precautions. There is insufficient data to determine the role of direct or indirect contact in the transmission of influenza. If the patient has diarrhea, contact precautions should be added.
- Aerosol-generating procedures for patients with suspected influenza. Aerosol-generating procedures (e.g., endotracheal intubation, suctioning, nebulizer treatments, and bronchoscopy) may increase the potential for dissemination of droplet nuclei in the immediate vicinity of the patient. Therefore, healthcare workers should use a NIOSH-approved N-95 or other particulate respirator when performing or assisting with

aerosol-generating procedures. Particulate respirators should be used within the context of a respiratory protection program that includes fit-testing, medical clearance, and training. The number of healthcare workers present during aerosol-generating procedures should be limited to reduce the number of workers potentially exposed. If available, aerosol-generating procedures should be performed in Airborne Infection Isolation Rooms.

- Postmortem care.
Follow standard facility practices for care of deceased. Practices should include standard precautions for contact with blood and body fluids.

C. Occupational health issues for all pandemic periods

- Surveillance activities are applicable throughout the pandemic periods. Once a pandemic has reached a community, healthcare facilities must increase active surveillance and monitoring of healthcare personnel (including non-direct patient care staff). Healthcare worker shortages due to the pandemic may also necessitate utilizing ill healthcare workers who are well enough to care for patients.
 - Designate those responsible for the monitoring of employee health concerns such as the employee/occupational health service.
 - Instruct all healthcare personnel to report influenza-like illness immediately.
 - If the onset of illness occurs while working, the healthcare worker should don a surgical mask and seek evaluation. If the onset occurs while at home, the employee should be instructed to remain at home until symptoms resolve.
 - Investigate clusters of illness within the facility and report to your local public health agency.
 - Develop policies and procedures for healthcare workers returning to work after an influenza-like illness.
 - Personnel at high risk for complications of influenza (e.g., pregnant women, immunocompromised individuals) should be informed of their medical risk and offered an alternate assignment away from influenza-patient care.
 - Closely monitor healthcare personnel with direct contact with influenza patients for early identification of secondary transmission. The following should be considered:
 - Limit patient contact to essential staff.
 - Eliminate or minimize floating.
 - Consider a daily sign in sheet for patient contact to facilitate epidemiological investigations.
 - Have staff complete a daily self-assessment to document symptoms.
 - Have policies and procedures in place to administer vaccine and antivirals to staff when available.
- Occupational health issues for a local influenza pandemic.
 - All personnel (direct patient care and non-direct patient care) should be actively monitored daily for fever and respiratory symptoms. All those with respiratory symptoms and/or fever ≥ 100 F should be furloughed and evaluated.

- Personnel who have recovered from pandemic influenza should develop antibodies against future infection with the same virus. Therefore, these personnel should be prioritized for the care of patients with active pandemic influenza infection. Regardless of immune status to the pandemic influenza virus, the healthcare worker should use appropriate personal protective equipment.
- If a severe staffing shortage occurs as a result of the pandemic, it might be necessary for infected healthcare workers, if they are physically capable, to care for patients. These workers should be given antiviral treatment, if available, instructed to wear a surgical mask, and assigned to the ill cohort.

3. Hospital-Specific Infection Control Guidance

A. Early detection and source control to prevent transmission of pandemic influenza during all pandemic periods

- Place signage in appropriate languages at all entrance and strategic locations throughout the facility detailing:
 - The signs and symptoms of influenza and any current epidemiological risk factors for a pandemic strain, if identified.
 - Visitors with influenza-like illness should not visit the facility.
 - Persons entering the hospital seeking care for respiratory symptoms should immediately inform the receptionist/triage personnel of their symptoms and use respiratory etiquette/universal respiratory precautions.
- Early detection of patients with respiratory symptoms can take place at triage areas, reception areas or during the scheduling of appointments.
 - Identify and train those personnel who are first points of contact to screen patients for respiratory symptoms.
 - Discourage unnecessary visits to medical facilities.
 - Instruct symptomatic patients on infection control measures to limit transmission in the home and when traveling to necessary medical appointments.
- Screen all patients presenting with respiratory illness for epidemiological links to areas affected by the pandemic:
 - Travel to affected area within 10 days of illness onset.
 - Recent contact with an ill person known to have had recent travel to an affected area.
 - Prioritize those meeting the above criteria to be placed in a private exam room on droplet precautions.
 - Notify the appropriate authorities of any person meeting the above criteria.
- Respiratory hygiene/Universal Respiratory Precautions should be utilized at all points of entry into the healthcare delivery system including the Emergency Departments, Admissions Departments, Outpatient Clinics, and Physicians' Offices.
- If the pandemic strain has not yet been identified locally, have systems in place to screen patients for epidemiological links to areas affected by the pandemic;
 - Travel to an affected area within 10 days of onset of illness;
 - Recent contact with an ill person known to have had recent travel to an affected area.
 - Prioritize those meeting the epidemiological criteria to be placed in a private exam room on droplet precautions.

- Communicate to triage and front-line personnel on a regular basis the status of the pandemic. The frequency of updates will depend on the epidemiology of the pandemic.
- Once the pandemic strain has been identified locally, mask all family members and visitors accompanying patients with influenza-like illness since they may be incubating the disease. More specific information on how to manage a surge in patients with influenza-like illness can be found in the document Influenza Surge Capacity Guidance for General Hospitals at http://www.state.nj.us/health/flu/documents/flu_scg.pdf.

B. Early detection and source control during a local pandemic

- Screen all patients and visitors for respiratory illness at points of entry into the healthcare system.
- Screening for epidemiological links is not indicated once the pandemic is underway locally.
- Mask all family members and visitors accompanying patients with influenza-like illness, as they may be incubating the disease.
- Follow guidance as outlined in Influenza Surge Capacity Guidance for General Hospitals as numbers of individuals seeking medical attention increases locally.

4. Long-term Care-specific Infection Control Guidance

Residents of long-term care facilities are a particularly vulnerable population for the acquisition and development of complications of influenza due to advanced age, co-morbid conditions, close contact with other vulnerable individuals, and decreased response to influenza vaccine. A pandemic influenza planning checklist for long-term care and other residential facilities can be found at

<http://www.cdc.gov/flu/professionals/infectioncontrol/>

During a pandemic, long-term care facilities should anticipate the need to manage the acute influenza and non-influenza related medical needs of residents, as hospitals may be unable to meet the demand for care. In addition, transfer of patients will only increase the likelihood of transmission between healthcare settings. Basic principles for infection control measures related to seasonal influenza transmission in long-term care facilities can be found at

<http://www.cdc.gov/flu/professionals/infectioncontrol/longtermcare.htm>. The principles outlined in this document can be applied during a pandemic influenza.

- **Prevention or delay of pandemic influenza virus entry into the facility during all influenza pandemic periods**
 - Place signage in appropriate languages at all entrance and strategic locations throughout the facility detailing:
 - The signs and symptoms of influenza and any current epidemiological risk factors for a pandemic strain, if identified.
 - Visitors with influenza-like illness should not visit the facility. Once a pandemic is identified but has not yet affected the local area, consider restriction of those visitors who have had recent travel (within 10 days) to areas affected by the illness, as they may be incubating the illness. Visitation policies should be developed and enforced.

- Designate an individual(s) to obtain current information from the NJDOH web site and LINC/CHAIN on the status and epidemiology of the pandemic. Ensure that this information is communicated to all clinical staff and direct patient-care providers.
- Implement respiratory etiquette/Universal Respiratory Protection at all points of entry into the facility and in common areas.
- Perform careful screening of all new admissions to the facility. Admit any new patients with symptoms or contacts of symptomatic individuals to private rooms with standard and droplet precautions.
- Follow occupational health guidelines as outlined above in section 2C.
- **Early detection, prevention or delay of pandemic influenza in facility during a local pandemic**

In addition to the measures delineated above, implement the following recommendations:

- Assign personnel to verbally and visually screen visitors for respiratory illness and actively enforce visitor restrictions.
- Limit visitors to persons who are needed to perform resident care, should a staffing shortage necessitate.
- Early in the progress of a pandemic in the region, increase resident surveillance for influenza-like symptoms. Notify state or local health officials if a case(s) is suspected.
- Carefully screen new admissions for symptoms of, and exposure to, pandemic influenza. Perform resident placement of new admissions with the following considerations:
 - Residents with respiratory symptoms who require admission to the facility should be admitted preferably to a private room on droplet precautions for the duration of illness, and for a minimum of 5 days beyond symptom onset. If a private room is not available, cohort patients.
 - Residents with exposure to pandemic influenza that require admission to the facility should be admitted to a private room on droplet precautions for the duration of the pandemic strain incubation period. If a private room is not available, cohort patients.
 - Asymptomatic residents and those with no known exposure should be admitted to the general resident population with caution. Perform careful screening for respiratory symptoms for the entire incubation period. Establish cohorts and place all new admissions on droplet precautions for the entire incubation period if widespread pandemic influenza is identified in the local community.
- If symptoms of influenza are apparent, implement droplet precautions for the resident and roommates, pending confirmation of pandemic influenza virus infection. Patients and roommates should not be separated or moved out of their rooms unless medically necessary. Once the diagnosis has been confirmed, roommates should be treated as exposed cohorts.
- Cohort residents and staff on units with known or suspected cases of pandemic influenza. Plans should be developed in advance on the best location and manner in which patients will be cohorted within the facility.
- Limit movement within the facility (e.g., close the dining room and serve meals on nursing unit, cancel social and recreational activities).
- Consider use of vaccine or antiviral agents, if available, for high risk contacts.
- Consider suspending all group activities during the local pandemic.

- Administer traditional group therapies individually to residents or within the cohorts.
- Curtail floating of direct care staff as feasible.

Consider developing guidelines for cohorting, visitors and nosocomial outbreak management.

5. Home Healthcare-Specific Infection Control Guidance

Home Healthcare personnel face considerable challenges when attempting to implement standard infection control practices in the home setting. Unlike hospitals and long-term care facilities, space is often limited and cleaning of the environment is not under the control of the healthcare provider. The home healthcare worker is subject to uncontrolled and unpredictable events and circumstances. In addition, the need for home healthcare services may increase during a pandemic and the acuity of patients being cared for at home may increase as acute care facilities are unable to meet the demand for care.

Home health agencies should ensure that there is a qualified individual(s) specifically assigned responsibility for infection control and occupational health.

- Assess infection control and occupational health policies to assure that they are consistent with current guidelines.
- Develop strategies to assess possible transmission risk to the healthcare worker in the home based on referral information:
 - Assure referrals from discharge planners or primary care physicians address the presence of communicable diseases.
 - Develop a communication plan to notify staff going into the home if precautions beyond standard precautions are indicated.
- Assure personal protective equipment is available for staff and that staff receive appropriate training.
- Assure hand hygiene materials are accessible. Alcohol-based rubs, soap and paper towels should be in easy access for the healthcare worker at the point of care.
- Ask symptomatic individuals in the home to don a surgical mask while the healthcare worker is present to decrease the risk of aerosolization of respiratory secretions.
- The agency should have staff trained and fit-tested to use particulate respirators in the event the patient meets criteria for the institution of airborne precautions.
- Designate an individual(s) to obtain current information on the status and epidemiology of the pandemic. Ensure that this information is communicated to all clinical staff and direct patient-care providers. Information can be found at www.state.nj.us/health or will be distributed via LINCS/CHAIN.
- Develop a plan to expeditiously administer vaccine and antiviral medication to staff, in the event they are available and recommended.
- Review policies regarding home laboratory testing, referral for evaluation and/or treatment, and accessing transportation of symptomatic individuals.
- Review Occupation Health Issues found in 2C.

6. Emergency Medical Services-Specific Infection Control Guidance

Patients with severe influenza or comorbid conditions are likely to require emergency transport to the hospital. EMS workers should:

- Screen patients requiring emergency transport for symptoms of influenza.
- Follow standard and droplet precautions when transporting symptomatic patients.
- If possible, ask family members of symptomatic patients accompanying the patient to don a surgical mask to prevent aerosolization of respiratory secretions.
- EMS should have staff trained and fit-tested to use particulate respirators in the event the patient meets criteria for the institution of airborne precautions.
- Optimize the vehicles ventilation to increase the volume of air exchange during transport. When possible, use vehicles that have separate driver and patient compartments that can provide separate ventilation to each.
- Notify the receiving facility that a patient with influenza-like-illness is being transported.
- Follow standard operating procedures for routine cleaning of the vehicle and reusable patient care equipment.
- Oxygen delivery with a non-rebreather face mask can be used to provide oxygen during transport. If needed, positive-pressure ventilation should be performed using a resuscitation bag-valve mask.
- Unless medically necessary, aerosol-generating procedures, such as intubation, should be avoided during pre-hospital care.
- Develop a plan to expeditiously offer and administer vaccine and antiviral medication to staff, in the event they are available and recommended.

7. Outpatient Medical Office-Specific Infection Control Guidance

Individuals with influenza-like illness seek care primarily in the outpatient setting. During a pandemic, outpatient medical service providers including private practitioners are expected to maintain office operations. In order to decrease the burden of patients presenting to hospitals, providers are expected to minimize referrals to hospitals emergency rooms for evaluation. Only those patients who need hospital-based services should be referred for admission. Providers must take steps to ensure a safer environment for patients and staff. These include:

- Institute Triage Policies
 - Ask patients with influenza-like illnesses to identify themselves upon arrival or when calling for an appointment.
 - Ensure that patients with influenza-like illnesses are evaluated expeditiously.
 - Consider scheduling patients with influenza-like illnesses at the end of the day or at a time separate from well visits.
 - Considering having patients with influenza-like illnesses arrive through a separate entrance or wait in a different area from others.
 - Ensure that a staff member calls ahead if referring a patient with an influenza-like illness to another medical provider or facility.
 - Encourage staff with influenza-like illnesses to remain at home.
- Follow Respiratory Etiquette/Universal Respiratory Precautions
 - Place signs in waiting area describing Universal Respiratory Precautions or Respiratory Etiquette.
 - Provide tissues in the waiting area to contain respiratory secretions when coughing or sneezing.
 - Provide no-touch receptacles for disposal of used tissues.
 - Provide alcohol-based hand sanitizers in waiting areas and encourage hand hygiene after contact with respiratory secretions.

- Provide symptomatic individuals with surgical masks to wear while interacting with others in the office.
- Encourage office staff to wear surgical masks when in close contact (i.e., within three feet) with symptomatic individuals and to practice good hand hygiene when interacting with these individuals.
- Reinforce Standard and Droplet Precautions
 - Ensure staff members are familiar with standard and droplet precautions.
 - Wash hands with soap and water or use alcohol-based hand sanitizers before direct patient contact, after contact with respiratory secretions, after removal of gloves, or after contact with contaminated environmental surfaces.
 - Wash hands before eating or drinking. Discourage eating or drinking in patient-care or reception areas.
 - Eliminate or decrease the use of items shared by patients such as pens, clipboards and telephones. Re-double efforts to decontaminate environmental surfaces in waiting and patient-care areas. Ensure that medical devices such as otoscopes, thermometers, and stethoscopes are appropriately cleaned between patients.
- Ensure System to Provide Vaccine or Antivirals
 - Develop a plan to provide vaccine and antivirals to staff, if available and recommended.
- Understand Surveillance and Reporting Policies
 - Designate an individual(s) to obtain current information on the status and epidemiology of the pandemic. Ensure that this information is communicated to all clinical staff and direct patient-care providers. Information can be located at www.state.nj.us/health or will be distributed via LINC/CHAIN.

Infection Control Guidelines in Non-Healthcare Settings

The intention of this document is to assist non-healthcare settings in the planning for pandemic influenza by enhancing standard infection control practices.

The primary strategies for preventing pandemic influenza are the same as those for seasonal influenza: vaccination, early detection and treatment with antiviral medication, and the use of infection control measures to prevent transmission during patient care. However, when a pandemic begins, a vaccine may not yet be widely available, and the supply of antiviral drugs may be limited. In addition, antiviral drugs do not eliminate viral shedding or obviate the need for personal protective equipment. The ability to limit transmission in the non-healthcare settings will, therefore, rely heavily on the appropriate application of infection control measures.

Infection control guidance is based on knowledge of routes of influenza transmission, the pathogenesis of influenza, and the effects of influenza control measures used during past pandemics and inter-pandemic periods. However, the characteristics of a pandemic strain may be different. Planning must allow for flexibility and real-time decision-making that takes new information into account as the pandemic unfolds.

1. Background

Despite the prevalence of influenza every year, the amount of empirical data on influenza transmission is limited. Epidemiologic patterns suggest spread through large infectious respiratory droplets that are deposited on the oral, nasal or conjunctival mucosa of a susceptible host. Transmission via large droplets requires close contact between the infectious host and the susceptible individual. Special air handling and ventilation are not required to prevent transmission of disease transmitted primarily by droplets, as large particle droplets do not remain suspended in the air and generally travel only short distances (about three feet) through the air.

The significance of direct contact, indirect contact and airborne transmission has not been well established. The most appropriate form of respiratory protection during a pandemic remains controversial. The most recent recommendations can be found at <http://www.flu.gov/planning-preparedness/community/maskguidanceco.html>

The incubation period for routine seasonal influenza is 1 – 4 days, with an average of 2 days. The incubation period of a novel influenza strain would be unknown until the time it is circulating in the population. Therefore, the maximum interval between exposure and symptom onset for pandemic influenza will be considered 10 days for the purposes of this document.

Influenza is contagious for approximately 24 – 48 hours prior to symptom onset and throughout most of the symptomatic period. Certain individuals, such as those with immunocompromising conditions and children, may shed the virus for longer periods.

Individuals involved in pandemic influenza planning for non-healthcare settings, might want to familiarize themselves with the explanation of standard, droplet, airborne and contact precautions outlined by the Centers for Disease Control and Prevention (CDC) found at http://www.cdc.gov/ncidod/dhqp/gl_isolation.html.

Commonly, novel viruses originate from the mutation of an influenza virus commonly found in animals and then obtain the ability to transmit the virus to humans. Influenza viruses from swine and avian origins have recently been of greatest concern. Avian Influenza A (H5N1) is highly contagious among birds and does not usually infect people. Although a few avian influenza viruses have crossed the species barrier to infect humans, it is still considered to be a very rare disease in people. The H5N1 virus does not infect humans easily, and if a person is infected, it is very difficult for the virus to spread to another person. Of the human cases associated with the ongoing H5N1 outbreaks in Asia, parts of Europe, the Near East and Africa, the infections have occurred mostly from people having direct or close contact with H5N1-infected poultry or H5N1-contaminated surfaces.

Because all influenza viruses have the ability to change, scientists are concerned that the H5N1 virus might one day be able to infect humans and spread easily from one person to another. If the H5N1 virus gains the capacity to spread easily from person to person, there will be little or no immune protection in the human population and an influenza pandemic could begin. At this point in time, infection control guidelines for those confirmed or suspected to be infected with the H5N1 strain differ in some respects from the guidance in this document. For more information about the avian influenza, go to the CDC website: <http://www.cdc.gov/flu/avian/gen-info/facts.htm> or the NJDOH website at <http://www.state.nj.us/health/flu/avianflu.shtml>.

2. Home Healthcare-Specific Infection Control Guidance

Home Healthcare personnel face considerable challenges when attempting to implement standard infection control practices in the home setting. Unlike hospitals and long-term care facilities, space is often limited and cleaning of the environment is not under the control of the healthcare provider. The home healthcare worker is subject to uncontrolled and unpredictable events and circumstances. In addition, the need for home healthcare services may increase during a pandemic and the acuity of patients being cared for at home may increase as acute care facilities are unable to meet the demand for care.

Home health agencies should ensure that there is a qualified individual(s) specifically assigned responsibility for infection control and occupational health.

- Assess infection control and occupational health policies to assure that they are consistent with current guidelines.
- Develop strategies to assess possible transmission risk to the healthcare worker in the home based on referral information:
 - Assure referrals from discharge planners or primary care physicians address the presence of communicable diseases.
 - Develop a communication plan to notify staff going into the home if precautions beyond standard precautions are indicated.
- Assure personal protective equipment is available for staff and that staff receive appropriate training.
- Assure hand hygiene materials are accessible. Alcohol-based rubs, soap and paper towels should be in easy access for the healthcare worker at the point of care.
- Ask symptomatic individuals in the home to don a surgical mask while the healthcare worker is present to decrease the risk of aerosolization of respiratory secretions.

- The agency should have staff trained and fit-tested to use particulate respirators in the event the patient meets criteria for the institution of airborne precautions.
- Designate an individual(s) to obtain current information on the status and epidemiology of the pandemic. Ensure that this information is communicated to all clinical staff and direct patient-care providers. Information can be found at www.state.nj.us/health or will be distributed via LINC/CHAIN.
- Develop a plan to expeditiously administer vaccine and antiviral medication to staff, in the event they are available and recommended.
- Review policies regarding home laboratory testing, referral for evaluation and/or treatment, and accessing transportation of symptomatic individuals.
- Review Occupation Health Issues found in 2C.

3. Emergency Medical Services-Specific Infection Control Guidance

Patients with severe influenza or comorbid conditions are likely to require emergency transport to the hospital. EMS workers should:

- Screen patients requiring emergency transport for symptoms of influenza.
- Follow standard and droplet precautions when transporting symptomatic patients.
- If possible, ask family members of symptomatic patients accompanying the patient to don a surgical mask to prevent aerosolization of respiratory secretions.
- EMS should have staff trained and fit-tested to use particulate respirators in the event the patient meets criteria for the institution of airborne precautions.
- Optimize the vehicles ventilation to increase the volume of air exchange during transport. When possible, use vehicles that have separate driver and patient compartments that can provide separate ventilation to each.
- Notify the receiving facility that a patient with influenza-like-illness is being transported.
- Follow standard operating procedures for routine cleaning of the vehicle and reusable patient care equipment.
- Oxygen delivery with a non-rebreather face mask can be used to provide oxygen during transport. If needed, positive-pressure ventilation should be performed using a resuscitation bag-valve mask.
- Unless medically necessary, aerosol-generating procedures, such as intubation, should be avoided during pre-hospital care.
- Develop a plan to expeditiously offer and administer vaccine and antiviral medication to staff, in the event they are available and recommended.

4. Care of Pandemic Influenza Patients in the Home

Most patients with pandemic influenza will be able to remain at home during the course of their illness and be cared for by other family members, or others who live in the household, provided the home is a suitable location for them during their illness. Voluntary home confinement by symptomatic persons will limit their contact with uninfected persons and help slow the spread of the disease. Anyone residing in a household with an influenza patient during the incubation period and illness is at risk for developing influenza. A key objective in this setting is to limit transmission of influenza within and outside the home.

All persons in the household should follow recommendations for hand hygiene. When care is provided by the household member, basic infection control precautions should be in place. These include:

- Physically separating the symptomatic individual from non-ill persons living in the home.
- Keeping the symptomatic individual at home at all times during the period when they are most infectious to others. When movement outside the home is necessary, the symptomatic individual should follow respiratory etiquette/universal respiratory precautions and wear a surgical mask, if available.
- Using surgical mask by the symptomatic patient or by the caregiver during interactions, if one is available.
- Disposing of tissues immediately.

5. Care of Pandemic Influenza Patients at Alternative Sites

If an influenza pandemic overwhelms the healthcare system, it may become necessary to provide patient care at alternative sites (e.g., auditoriums, conference centers, hotels). The infection control guidelines will vary depending on the location and should specifically address the following infection control and patient care needs:

- Bed capacity and spatial separation that prevents the flow of patients with respiratory illness from contact with non-infectious patients
- Facilities and supplies for hand hygiene at the point of care and in waiting areas including tissues and no-touch receptacles
- Lavatory and shower capacity for large numbers of patients
- Food services (refrigeration, food handling and preparation)
- Medical Services
- Staffing for patient care and support services (e.g., housekeeping)
- Ensure adequate supplies of PPE at the point of care
- Cleaning/disinfection supplies and adequate disposal of infectious wastes
- Environmental services (linen, laundry, waste)
- Safety and security
- Appropriate signage and educational materials

The same principles of infection control should apply in these settings as in other healthcare settings. Planning is necessary to ensure that resources are available and procedures are in place to adhere to the key principles of infection control.

6. Infection Control in the Workplace

- Encourage symptomatic workers to stay away from the workplace while they are infectious.
- Promote respiratory hygiene/cough etiquette and hand hygiene as for any respiratory infection. The benefit of asymptomatic individuals wearing masks in these settings has not been established. Surgical masks or procedure masks should be considered for those individuals who develop symptoms consistent with influenza.
- Ensure that materials for respiratory hygiene/cough etiquette (i.e., tissues and no-touch receptacles) and hand hygiene are readily available.
- Place appropriate signage and provide appropriate educational materials to staff.

See <http://www.osha.gov/Publications/OSHA3327pandemic.pdf> for guidance on preparing workplaces for an influenza pandemic.

7. Infection Control in Schools

- Keep symptomatic students and staff home from school while they are infectious.
- Promote respiratory hygiene/cough etiquette and hand hygiene as for any respiratory infection. The benefit of asymptomatic individuals wearing masks in these settings has not been established. Surgical masks or procedure masks should be considered for those individuals who develop symptoms consistent with influenza.
- Ensure that materials for respiratory hygiene/cough etiquette (i.e., tissues and no-touch receptacles) and hand hygiene are readily available.
- Place appropriate signage and provide appropriate educational materials to students, staff and parents.

8. Infection Control in Community Settings

- Keep symptomatic individuals out of community areas.
- Promote respiratory hygiene/cough etiquette and hand hygiene as for any respiratory infection. The benefit of asymptomatic individuals wearing masks in these settings has not been established. Surgical masks or procedure masks should be considered for those individuals who develop symptoms consistent with influenza. Further information on use of facemasks in the community can be found at <http://www.flu.gov/planning-preparedness/community/maskguidanceco.html>
- Ensure that materials for respiratory hygiene/cough etiquette (i.e., tissues and no-touch receptacles) and hand hygiene are readily available.
- Place appropriate signage and provide appropriate educational materials in community settings.

Clinical Guidelines Appendix List

- 1 MMWR Influenza ACIP Vaccine Recommendations
<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>
- 1a ACIP Recommendations regarding Influenza Antiviral Medications
<http://www.cdc.gov/flu/professionals/antivirals/>
- 2 MMWR Prevention of Pneumococcal Disease
<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>
- 3 MMWR Preventing Pneumococcal Disease Among Infants and Young Children
<http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/index.html>
- 4 WHO Rapid Advice Guidelines on Pharmacological Management of Humans Infected with Avian Influenza A (H5N1) Virus
http://whqlibdoc.who.int/hq/2006/WHO_PSM_PAR_2006.6_eng.pdf
- 5 Influenza Symptoms and the Role of Laboratory Diagnostics
<http://www.cdc.gov/flu/professionals/diagnosis/labrolesprocedures.htm>
- 6 Clinical Presentation and Complications of Illnesses Associated with Avian Influenza (H5N1) and Previous Pandemic Influenza Viruses (from HHS Plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinflenzaplan.pdf> (HHS Plan Appendix 2)
- 7 Special Situations and Exceptions to Clinical Criteria (from HHS Plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinflenzaplan.pdf> (HHS Plan Box 3)
- 8 Enhanced Passive Surveillance for Novel Strains of Influenza
(See Surveillance Appendix 9)
- 9 Clinical Evaluation of Patients with Influenza-like Illness during the Interpandemic and Pandemic Alert Periods (from HHS Plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinflenzaplan.pdf> (HHS Plan Box 2)
- 10 Case Detection and Clinical Management during the Interpandemic and Pandemic Alert Periods (from HHS Plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinflenzaplan.pdf> (HHS Plan Figure 1)
- 11 Infectious Diseases Society of America (IDSA) Guidelines for the Management of Community-acquired Pneumonia
<http://www.journals.uchicago.edu/doi/pdf/10.1086/511159>
- 12 The Management of Community-Acquired Pneumonia in Infants and Children Older Than 3 Months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America
<http://cid.oxfordjournals.org/content/early/2011/08/30/cid.cir531.full>
- 13 Pneumonia PORT Severity Index (PSI) Calculation (from HHS plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinflenzaplan.pdf> (HHS Plan Table 1)

- 14 Pneumonia Severity Index Risk Classification (from HHS plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Table 2)
- 15 CURB-65 Scoring System (from HHS plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Table 3)
- 16 Recommended site of care based on CURB-65 system (from HHS plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Table 4)
- 17 Home Care Infection Control Guidance for Pandemic Influenza Patients and Household Members (from HHS plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (HHS Plan Box 4)
- 18 Case Detection and Clinical Management during the Pandemic Period (from HHS Plan)
<http://www.flu.gov/planning-preparedness/federal/hhspandemicinfluenzaplan.pdf> (Figure 2)

New Jersey Pandemic Influenza Vaccine Distribution and Administration Plan

Introduction

States are responsible for the management and administration of pandemic influenza vaccines they will receive from the Centers for Disease Control and Prevention (CDC). Each state is responsible for vaccine storage, vaccine allotment, distribution to priority groups, and delivery to the organizations responsible for local distribution and administration.

The New Jersey Department of Health (NJDOH) will coordinate the movement of incoming and outgoing Strategic National Stockpile (SNS) supplies including pandemic influenza vaccine. This infrastructure has been established in the New Jersey SNS plan. New Jersey's 21 Local Information Network and Communications System (LINCS) Agencies have established regional distribution operations (Receipt Stage and Store [RSS] sites) which will be used to receive, store and distribute vaccine to established priority groups.

Vaccination will take place over many months and may occur in several phases:

CDC Vaccination Phases:

- Phase 1: Vaccination with stockpiled pre-pandemic vaccine (assuming vaccine of the same subtype as the pandemic strain is available), conducted by public health potentially in collaboration with agencies and institutions
- Phase 2: Vaccination with pandemic vaccine, conducted by public health
- Phase 3: Vaccination with pandemic vaccine, conducted by the private sector

During Phases 1 and 2, demand is expected to exceed supply. Determination of prioritization for vaccination is dependent on the ability to minimize morbidity and mortality, state critical infrastructure needs, viral etiology and pharmaceutical availability. NJDOH is responsible for developing recommendations for the prioritization for vaccination, based on CDC/Health & Human Services (HHS) determined guidelines. The Office of the Governor is the authority for final determination of prioritization.

Vaccine Distribution and Allocation

Based upon the most recent United States census data and guidance from the CDC, NJDOH will create population-based allocations of vaccine doses to each county.

LINCS Agencies are responsible for accepting and distributing the allocated vaccine for their jurisdictions. The list of vaccination/storage sites is available in the New Jersey SNS plan ("LINCS Agency RSS Sites," Attachment 24). NJDOH has evaluated these sites to ensure that they can maintain cold chain custody, provide appropriate security, provide adequate storage space (including refrigeration), have adequate staffing levels and provide vehicle transportation with law enforcement escorts. All vaccines will be shipped directly to these sites under the direction of the CDC. The initial allotments of vaccine will be made based on population by jurisdiction. Allocations will be continually evaluated based on vaccine availability, CDC/HHS guidelines, epidemiologic and surveillance data, critical infrastructure need, and Governor's final prioritization.

The Health Officer of each LINCS Agency is designated as the individual responsible for accepting the vaccine. Upon receipt, the Health Officer will ensure and oversee all logistical requirements. Vials of vaccine will be tracked, inventoried and stored immediately at the manufacturer's recommended temperature (usually between 35 and 46 degrees Fahrenheit, a NIST certified calibrated thermometer should be used to monitor temperatures). If temperature-recording devices are used during transport, they shall be removed from the shipping containers and instructions shall be followed. These instructions will be provided in each shipping container. Any vaccines that are lost, stolen, or have been out of temperature shall be reported to the NJDOH for inventory purposes. LINCS Agencies will follow their SNS plans for securing and transporting vaccines to vaccination sites, including ensuring the chain of custody.

When required and available, in addition to LINCS Agencies' shipments, NJDOH will expand vaccine distribution and incorporate vaccine drop shipments directly to New Jersey's hospitals. This information is available in the New Jersey SNS Plan ("Hospital Staff Directory," Attachment 46). Hospitals are responsible for developing internal plans for vaccinating essential high priority staff and patients and providing vaccine for physicians who have hospital privileges.

Priority Groups

NJDOH is responsible for developing a recommended health based vaccine administration plan for the Governor. New Jersey's priority groups will be based on the CDC/HHS "Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC) Vaccine Priority Group Recommendations," vaccine availability and epidemiologic and surveillance data. The priority groups will be re-evaluated during the pandemic based on vaccine availability and epidemiological and surveillance data. There may be a need to further restrict priority groups if vaccine allotment falls below 25% of New Jersey's allocation, which will follow ACIP guidance when demand exceeds supplies.

Once health based priority groups have been established, NJDOH will deliberate with other state agencies and determine how to factor critical infrastructure needs into the priority list. New Jersey has identified Critical Infrastructure (CI) sectors and assigned their oversight to individual state departments. As part of the planning process, New Jersey's Office of Homeland Security and Preparedness (OHSP) has required all CI sectors to identify and prioritize the basic functions necessary to provide minimum services in support of operations continuity and to submit these priorities. Each CI sector must plan to provide at a minimum, basic services with maximum available staffing levels of 50 percent of routine operations. As part of this planning process and in support of maintaining the State's critical infrastructure, CI sectors are being asked to develop prioritized lists of positions supporting essential functions as a basis for determination of antivirals and vaccines distribution. Each agency is to work through their occupational health clinic or contracted provider to identify these positions, identify a point of contact for their institution, and provide vaccines to their employees based on that agency's priorities. These lists are to be held by the originator as part of their Continuity of Operations Plan (COOP), however, the originator is to submit total numbers from these lists to OHSP upon request. OHSP will forward these numbers to NJDOH for planning purposes.

Verification of Priority Group Membership

Occupational Groups

In the event that occupational groups will receive vaccination at public health sponsored clinics, those employers shall provide the public health department staff with a list of vaccine-eligible employees to be vaccinated. In addition, the individuals receiving vaccination will be required to present identification (e.g. driver's license, company ID) prior to vaccination. LINCS Agencies will require employers to provide a list of eligible employees to be vaccinated before releasing any vaccine that will be used in an on-site occupational clinic. This will ensure that vaccine is only used for individuals of the identified priority groups. Family members not included in any of the identified priority groups are not eligible to receive vaccine during Phases I and II.

Other Risk-Based Groups

Those individuals who meet the priority group criteria for age may be required to provide appropriate documentation (e.g. birth certificate, driver's license, tax return, etc.). All other individuals who meet priority group criteria may be required to provide a signed physician's note documenting that they meet the risk criteria.

Vaccination Clinic Operations

Each LINCS Agency has developed a comprehensive plan under their SNS Program for mass prophylaxis/vaccination clinics. These plans include the location of Point of Dispensing (POD) sites for vaccine administration. Other components of the plans include staffing, the use of volunteers from both the Medical Reserve Corps (MRC) and local volunteer groups, and security, which will be coordinated with their local law enforcement agencies. Just-in-time public health information will be available at the clinic to include information on influenza, containment, prevention measures and instructions for follow up for a second dose of vaccine.

Pandemic influenza vaccination clinics within each LINCS jurisdiction will operate using the existing plans and standard operating procedures they currently use for seasonal influenza vaccination. In addition, the following should be considered by each agency: expansion of clinic hours and days, increasing staffing levels to increase throughput, additional security and supplies, and staffing accommodations such as feeding plans.

All staff (e.g., vaccinators, security, food service, mental health workers, etc.) working in any vaccination clinic shall follow the personal protection guidelines outlined in NJDOH's Infection Control Plan.

All vaccination sites shall be given access with user name and password to The New Jersey Immunization Information System (NJIS) Registry to capture the following information for each person receiving the vaccine: name, address including zip code, date of birth, phone number, date of vaccine administration, lot number, vaccine name and manufacturer and clinic location. Please note, based on the event, CDC or NJDOH may require additional data sets. On a weekly basis, NJDOH will collate the CDC required data from all vaccination sites and transmit that data to CDC.

The New Jersey Immunization Information System (NJIS) will be utilized to track vaccine administrations, receipt and records of vaccinations. The New Jersey Emergency Preparedness Inventory System (NJEPIS) will be used to track vaccine inventory, manufacturer, lot number, expiration date and quantity delivered to each LINCS Agency. An online just-in-time training will be developed by OITS for NJPVS and NJEPIS.

NJDOH will designate a Vaccine Safety Officer for the Pandemic Influenza Vaccination Plan. Responsibilities of this individual include working with the Office of Communications to develop press releases and HAN messages encouraging physicians to report any and all adverse reactions related to pandemic influenza vaccine through the Vaccine Adverse Event Reporting System (VAERS). There is a link to the VAERS System on the NJIIS to CDC.

Special Needs Populations

The NJDOH Office of Communications is responsible for ensuring that all public health information is culturally-appropriate and language-appropriate. New Jersey's LINCS Agencies employ Health Educators/Risk Communicators (HERCs) who have been trained in low-literacy writing. NJDOH is working with community leaders to communicate with traditionally hard to reach at-risk populations such as the hearing and vision impaired, the developmentally disabled, those who speak foreign languages, and individuals who are economically disadvantaged. Through PHILEP's Office for Preparedness for Special Health Needs, NJDOH is working with the New Jersey Special Needs Advisory Panel (an advisory body to NJOEM and NJOHSP) to:

- enlist their support to explore and address influenza pandemic preparedness planning issues specific to at-risk populations; and
- advocate for strong mechanisms to support at-risk populations during an influenza pandemic.

Roles and Responsibilities

NJDOH Communicable Disease Service (CDS) Branch

- Track demographics for vaccine usage through the NJIIS
- Maintain NJIIS throughout the pandemic, and provide technical support for local users
- Ensure the reporting of adverse reactions through the federal VAERS
- Provide guidance for and coordinate epidemiological investigations with LINCS Agencies
- Provide guidance for contact tracing
- Develop health education and communication (e.g., talking points) materials in conjunction with the Office of Communications
- Activate the Emergency Communication Center (ECC) for inquiries from the public and health/health care communities
- Identify a Vaccine Safety Officer
- Develop NJIIS just-in-time training

NJDOH Division of Public Health Infrastructure, Laboratories and Emergency Preparedness (PHILEP)

- Assist in security issues
- Ensure cold chain is not broken for vaccine
- Determine the minimum storage space needed at local RSS sites
- Activate the Health Command Center
- Evaluate the need for stockpiling additional supplies, materials (e.g. syringes, masks)
- Incorporate state response into Emergency Operations Plan
- Coordinate special needs population concerns

NJDOH Joint Responsibilities

- Provide vaccination priority group recommendations to the Office of the Governor
- Track vaccine inventory
- Develop Chain of Command form

Local Responsibilities

- Assure that each municipality within their jurisdiction has developed plans to identify and vaccinate their priority groups
- Receive, stage, store and distribute vaccine received from CDC
- Ensure cold chain custody and security for vaccine
- Determine the number and location of clinics and staff appropriately
- Train vaccinators
- Ensure mental health professionals are available at vaccination clinics
- Use NJIIS to track vaccinated individuals
- Maintain point of contacts for all vaccination sites
- Track vaccine usage
- Assure appropriate disposal of medical waste
- Identify local adverse event coordinator

Antiviral Distribution Plan

Introduction

States are responsible for the management of the antiviral drugs they receive from the Strategic National Stockpile (SNS). Each state is responsible for antiviral storage, the division of the allotment into distribution units, and the arrangement for delivery of these units to the organizations responsible for local distribution of the drugs. In addition to federal SNS supplies, New Jersey, within the Strategic State Stockpile (SSS) Program, is currently in the process of stockpiling antiviral drugs. At the time of an event, distribution of antivirals depends on the amounts of antivirals available, the priority groups, and the epidemiology of the disease. For detail, see “Antiviral Treatment/Prophylaxis Distribution Template” (Attachment A).

The New Jersey Department of Health (NJDOH) coordinates the movement of incoming and outgoing SNS and SSS supplies. The infrastructure established in New Jersey’s SNS Plan is utilized when antivirals are received, staged and distributed. In certain situations, NJDOH may elect to push out antivirals to LINCS Agencies’ RSS sites, LINCS Agencies’ dispensing sites, treatment centers as well as other delivery or dispensing locations. Materials may be shipped out daily, in other prescribed frequencies or as needed. LINCS Agencies are responsible for distribution to Federally Qualified Health Centers (FQHCs) and LINCS sponsored dispensing sites.

Section 1

Conditions/Environment

The NJDOH Office of State Stockpile and Health Logistics is responsible for the SSS program. The NJDOH SNS Coordinator works in this office. The SSS storage location meets the guidelines for the Federal Food and Drug Administration’s (FDA) Federal Shelf Life Extension Program (SLEP). The following details measures in place to support the proper maintenance and sustainment of antivirals:

- The Storage location is a confidential and secure warehouse that has constant security personnel on-site and is surrounded by a barbed wire fence. All access to the facility is key-controlled and all personnel entering or exiting the facility are visually recorded. In addition, any individuals entering the facility must have a NJDOH approved photo I.D. and sign in and out on the entry log.
 - An alarm system is in place to alert security and NJDOH personnel of possible intrusion into the storage area. In addition, the area is monitored 24/7 by closed circuit television at the New Jersey State Police Headquarters.
 - Antivirals are required to be stored in a climate-controlled environment between 59 to 86 degrees Fahrenheit with humidity levels below 60%. Therefore, the facility has a state-of-the-art climate control system installed specifically to meet these standards.
 - The facility has dedicated sensors that continuously monitor the ambient temperature within the facility and the presence of any water incursion (flooding/pipe leak).

- The facility has a fire detection/alarm device and adequate fire suppression in accordance with state fire codes.
- The facility has an independent office fully equipped with power, internet, analog and digital communications able to sustain operations and rapidly deploy the stockpiled antivirals. Supportive equipment such as forklifts and pallet jacks are also on site.
- The facility is covered by a pest control contract.
- In the event of any power disruption, the warehouse has the built-in redundancy of generators to ensure environmental, security and operational conditions/resources are not compromised.

Section 2

Receipt/Inventory Control

The Emergency Preparedness Inventory System (EPIS) is the NJDOH internet-based inventory control system. The SNS Coordinator or his/her designee accounts for and enters into the state's EPIS all quantities of SSS and SNS antivirals. EPIS provides the ability for staff to accurately log and track SNS and SSS items and provides "pick sheets" for tracking items to the receiving authority. In addition, EPIS can log users and can track amount, frequency and trends in orders to better gauge future needs and assist in making apportionment decisions. In the event of product loss due to expiration, damage etc., EPIS can administratively remove the items from the system and provide official documentation.

Stockpiled supplies and antivirals have monthly quality control checks to ensure the product has not been environmentally compromised (pests, water, etc.) and to ensure the integrity of the stored pallets. At six month intervals, the NJDOH Stockpile Coordinator conducts a full inventory of items and checks this inventory against the EPIS database. This inventory includes the amount of antivirals and their expiration/lot numbers.

Section 3

Activation/Operations

The NJDOH SNS Coordinator is responsible for the overall management of the SSS and SNS assets including the receipt, storage and distribution of the inventory.

In the event of a pandemic flu outbreak, the NJDOH may activate the SNS Plan as a means to distribute antivirals to the State's RSS sites as well as to the LINCS Agencies and acute care hospitals.

NJDOH notifies other state agencies that support SNS operations.

For complete/detailed activation and staffing information, please refer to the NJ SNS Plan, a comprehensive plan provided to the CDC's Division of SNS on April 26, 2013.

Section 4

Distribution

All requests for transportation of SNS or SSS supplies go through the State EOC. State resources provide transport of the SNS materiel from the RSS/SSS Warehouses. The Department of Corrections (DOC) and the Department of Treasury (DOT) have responsibility for transportation activities. DOC will provide vehicles with two armed officers per vehicle. DOT will facilitate the acquisition of other vehicles as needed.

The DOC, in coordination with state, county and local law enforcement, will provide security for SNS/SSS materiel when en route from the state sites to the LINCS Agencies and hospitals. When medication is being transported from a LINCS Agency, local law enforcement shall escort these vehicles.

There are several possible scenarios for distribution of SNS materiel to the LINCS Agencies' RSS sites and other requestors, depending on the scope of the emergency, number of counties/locations involved, and the number of individuals requiring medications: RSS Warehouse to the LINCS Agencies' RSS location, RSS Warehouse to hospital sites, RSS Warehouse to specific sites within LINCS Agencies' jurisdictions. The LINCS Agency is responsible for receipt and delivery to the FQHCs. (See "LINCS Planning Guide for RSS Warehouse," Attachment B.)

The primary method of transporting SNS materiel to the various sites will be vans, small trucks and tractor-trailer trucks. When necessary, NJDOH may request LINCS Agencies and hospitals to pick up materials directly from the State designated RSS site or SSS warehouse. LINCS Agencies and hospitals are responsible for developing these contingency plans.

The DOC and the State Treasury Department are the primary transportation providers; however, additional resources can be requested through the State EOC.

At the time of an event, the distribution of antivirals depends on the amounts of antivirals available, the priority groups, and the epidemiology of the disease. For detail, see "Antiviral Treatment/Prophylaxis Distribution Template" (Attachment A).

In the event that there is no epidemiological data and quantities of antivirals are insufficient to address all of the interim pre-determined groups, the appropriations will be as follows:

- 60% of antiviral regimens will be directed to hospitals. Each hospital facility will receive an allotment of antivirals based upon the number of staffed or occupied beds.
- 40% will be allocated to the LINCS Agencies for direct distribution to FQHCs and other health care facilities or alternate dispensing/distribution sites identified by the LINCS Agency. The county and city LINCS Agencies will receive population-based allotments. (See allocation table Antiviral Allotments for LINCS Agencies and Hospitals," in the New Jersey State SNS Plan.)

The SNS plans in place at the state, regional and local levels are designed to be flexible in order to respond to a changing environment. Epidemiological data would be used to determine the best strategy to limit morbidity and mortality related to pandemic influenza within New Jersey. In the event that New Jersey is the first state to identify a confirmed or suspect case of a novel influenza strain, antivirals may be used to contain the disease. If used, the NJDOH will recommend case contacts receive antivirals as

part of a focused and targeted prophylaxis effort. NJDOH and the SSS Program would work closely with the local health officials to ensure that affected individuals receive appropriate information and timely antiviral prophylaxis. However, if this strategy proves ineffective at containing the disease or if New Jersey is one of the many affected states, the widespread use of prophylactic antivirals would be inappropriate. In that situation, available antiviral agents would best be used for treatment of symptomatic individuals and prophylaxis of close contacts in the home.

Section 5

Antiviral Treatment/Prophylaxis Distribution Template

The “Antiviral Treatment/Prophylaxis Distribution Template” (Attachment A) is a tool which provides LINCS Agencies and Local Public Health Agencies with guidance and checklists for the selection, setup and operation of appropriate sites for distributing antiviral medications for treatment and/or prophylaxis to the public during an influenza pandemic.

Antiviral Treatment/Prophylaxis Distribution Template

The Antiviral Treatment/Prophylaxis Distribution Template is a tool that provides LINCS Agencies and Local Public Health Agencies with guidance and checklists for the selection, setup and operation of appropriate sites for distributing antiviral medications for treatment and/or prophylaxis to the public during an influenza pandemic.

Introduction

The distribution of medications is a core function of influenza pandemic preparedness. The key to survival for many people may be NJDOH's ability to provide antiviral medications as soon as possible and/or before an individual begins to show clinical symptoms. This distribution is made possible through venues such as LINCS Agency Antiviral Distribution Sites and hospitals.

Advance planning for a coordinated public health response to an influenza pandemic is essential. Supplies of prophylactic/treatment medications may be limited.

Purpose

The purpose of this antiviral treatment/distribution plan is to provide operational and logistical capacity to set up and manage temporary sites for targeted distribution of antiviral medications for influenza pandemic treatment and prophylaxis.

LINCS Agency Antiviral Distribution Sites (LADS) are designed to be activated when circumstances require that a large number of the population may need oseltamivir (Tamiflu) for treatment and/or prophylaxis during an influenza pandemic. The extent and sequence in which sites are opened is the purview of the LINCS Agency Health Officer, resources permitting.

Eligible Individuals – Oseltamivir (Tamiflu)

Individuals who have been seen by a health care provider and diagnosed with influenza, but are not so seriously ill as to require hospitalization, are eligible to receive a five-day treatment course of oseltamivir (Tamiflu) from their appropriate LINCS Agency, provided that they have a valid prescription from that health care provider. This is the only medication that will be provided through the LINCS Agency Antiviral Distribution Sites.

Note: If zanamivir (Relenza) is available to NJDOH through either future procurement or as a part of CDC's Vendor Managed Inventory (VMI)

Program, this medication will only be distributed to hospitals for patient care. zanamivir (Relenza) will not be distributed to LINCS Agencies for treatment for exposed individuals or confirmed cases.

Healthy household members of an individual diagnosed with influenza may be eligible to receive a ten-day prophylactic course of oseltamivir (Tamiflu), pending the overall supply quantity. During an influenza pandemic, eligible individuals will be asked to send a healthy family member, friend or

neighbor to the LADS with their valid prescription. **Anyone with symptoms of influenza shall NOT attend a LINCS Agency Antiviral Distribution Site.**

In the event that there is a limited supply of oseltamivir (Tamiflu) or if supplies on hand fall below 25% of the State level, the medications may be restricted to priority groups of individuals.

Determination of prioritization for antiviral agent or vaccine distribution is dependent on ability to minimize morbidity and mortality, state critical infrastructure needs, viral etiology and pharmaceutical availability.

NJDOH, with input from the Influenza Advisory Committee, or equivalent, is responsible for developing and submitting a recommended health-based antiviral administration plan to the Governor. New Jersey's priority groups will be based on the CDC/HHS priority list, antiviral availability and epidemiologic and surveillance data. The priority groups will be re-evaluated during the pandemic based on antiviral availability and epidemiological, and surveillance data.

Once health-based priority groups have been established, NJDOH will consult with other state agencies and determine the need to factor critical infrastructure into the priority list. NJ has identified Critical Infrastructure (CI) sectors and assigned their oversight to individual state departments. As part of the planning process, NJ's Office of Homeland Security and Preparedness (OHSP) has required all CI sectors to identify and prioritize the basic functions necessary to provide minimum services in support of operations continuity and to submit those priorities to OHSP. Each CI sector must plan to provide at a minimum, basic services with maximum available staffing levels of 50 percent of routine operations. As part of this planning process and in support of maintaining the State's critical infrastructure, CI sectors are being asked to develop prioritized lists of positions supporting essential functions as a basis for determination of antiviral and vaccine distribution. Each agency is to work through their occupational health clinic or contracted provider to identify these positions, to identify a point of contact for their institution, and to provide antivirals to their employees based on that agency's priorities. These lists are to be held by the originator agency as part of their COOP, however, the originator is to submit total numbers from these lists to OHSP upon request. OHSP will forward these numbers to NJDOH for planning purposes.

When a priority list is finalized, NJDOH will notify all LINCS Agencies and local health departments through the Health Alert Network and conduct a conference call with them to discuss antiviral distribution and administration strategies. NJDOH will work with the Governor's Office, the Office of Emergency Management and other appropriate agencies to advise those identified priority groups where and how to be prophylaxed.

Sites & Supplies

Each LINCS Agency must pre-identify an appropriate number of Antiviral Distribution Site facilities and plan for the set-up of each site and incorporate, as necessary, Federally Qualified Health Centers (FQHC) as LAD sites. See "Site Selection Considerations" (Attachment 1). The "Antiviral Distribution Site Information Form" (Attachment 2) should then be completed for each proposed location and kept on

file along with a site/setup plan. “Minimum Antiviral Distribution Site Equipment/Supplies” (Attachment 3) details the requirements.

Procedure

LINCS Agencies are to plan for a minimum daily operation of all Antiviral Distribution Sites between the hours of 9:00 am and 9:00 pm. Staff assigned to Antiviral Distribution Sites are provided antiviral prophylaxis, as needed. Staff shall be assigned to work at the Antiviral Distribution Site(s) for multiple days within the prophylaxis coverage period.

The standard template of patient care (i.e., a one-on-one dialog that includes history-taking, assessment, education and feedback) is modified for the Antiviral Treatment/Prophylaxis Distribution Template. Health care professionals will have already assessed and diagnosed those patients with symptoms of influenza and provided them with the appropriate education and prescription for Oseltamivir (Tamiflu).

LINCS Agencies shall refer to their existing Point of Dispensing (POD) plans when addressing the needs of special populations.

The antiviral distribution system recommended by NJDOH has four separate but interdependent parts. Each is vital to the overall success of the antiviral distribution template. The four parts of the antiviral distribution template are as follows.

- Screening area
- Distribution area
- Public information campaign
- Support functions (LINCS Agency RSS site, etc.)

See “LADS Flow Chart” (Attachment 4) for POD flow.

See “Job Summaries” (Attachment 5) for POD job descriptions and staffing requirements.

1. Screening Area

- As individuals arrive at the LINCS Agency Antiviral Distribution Site, two screeners will supply the appropriate personal protective equipment (PPE) and check that each has a valid prescription and the appropriate household member information if needed. Anyone arriving without the proper prescription/household member information will be referred to a health care provider/clinic if appropriate.
- A screener will advise anyone entering that they must wear a surgical mask and assist with education regarding the proper application and removal of the mask.
- A screener will verify that each individual has a valid prescription for Oseltamivir (Tamiflu).
- Additionally, Oseltamivir (Tamiflu) may be provided as prophylaxis for each household member of that person who is ill. To facilitate this process, screeners will need to check for proof of residency (i.e. mail, driver’s license, physician records, school records, income tax returns)
- Individuals coming to the LADS to pick up medications for an individual diagnosed with influenza, plus their household members will need to complete an “Antiviral Distribution Household Intake

Form” (Attachment 6), listing the name, address and contact information of any individuals ill with influenza as well as all household members.

- Individuals will then be directed to a Distribution Area.

2. Distribution Area

- Staff will provide appropriate educational materials (such as question and answer sheets, fact sheets and general preventive measures) on influenza, antiviral agents, and other relevant topics in various languages.
- Staff will reference the intake form and provide a 5-day course of antiviral medication for any individual with influenza; plus a 10-day course of antiviral medication for any healthy household members if directed by NJDOH. “Pediatric Instructions” (Attachment 7) will be available as needed.
- **NOTE:** A pharmacist is preferred for staffing this position; in the absence of a registered pharmacist, a nurse could be considered. At a minimum, an individual assigned to distribute antiviral medications shall have a 4-year college degree with 2 years public health experience.
- Translation services shall be available (on site or via telephone) as needed.

3. Public Information Campaign

The purpose of the public information campaign is to educate the public about influenza, its treatment and its prevention. Through the campaign, public health professionals will provide specific instructions. The campaign should begin as soon as an influenza pandemic is suspected and be updated frequently. In conjunction with the campaign, an emergency call center that can be reached through a toll-free number should be opened. This campaign will be coordinated with the Public Health Communications section of the NJDOH Influenza Pandemic Plan to deliver messages that are consistent with the overall operations of the pandemic influenza response.

A comprehensive, properly run public information campaign can do much to prevent panic, control the spread of the disease and make the LINC Agencies’ Antiviral Distribution Sites run more smoothly. First, it will minimize crowds by encouraging non-eligible persons to stay at home. Additionally, the campaign will provide eligible persons/households with all of the information needed to ensure that they can arrive at the distribution site with all of the information and documentation necessary to expedite the process and service the community as quickly as possible.

The public information campaign will provide the following information:

- Public messages instructing those ill with symptoms of influenza to stay home and send a family member, neighbor or friend to the LADS with their prescription and household member information
- Instructions for donning and doffing surgical masks
- Information regarding ways to prevent the spread of influenza
- Oseltamivir (Tamiflu) treatment information
- Oseltamivir (Tamiflu) prophylaxis information (including a statement of the fact that prophylaxis provides protection only for that period of time while an individual is actually taking the medication)
- Compounding/pediatric dosing instructions

4. Support Functions

Each LINCS Agency must be able to assure the appropriate handling and distribution of all antiviral materials and supplies provided by NJDOH. To facilitate this process, the following considerations must be addressed:

- Availability of LINCS Agency RSS site and all personnel and materials needed for its operation
- Availability of personnel, vehicles and equipment needed to deliver medications and supplies to distribution sites (as needed)
- Development of an apportionment plan (as needed)
- Staffing of Antiviral Distribution Site with relief personnel, as needed
- Personalization of public information campaign materials to reflect LINCS jurisdiction

Standing Orders

Oseltamivir (Tamiflu) is a prescription medication. Unlike over-the-counter medications, such as aspirin and cough syrup, it is not available to the general public without a specific recommendation for its use by a licensed health care provider with prescriptive privileges. In a mass treatment/prophylaxis clinic, the need to process large numbers of people quickly and efficiently makes such individualized prescribing impractical. Instead, the means to provide prescription antiviral medication to both ill and healthy populations is through standing orders. See “Standing Orders for Influenza Treatment & Post Exposure Prophylaxis During an Influenza Pandemic” (Attachment 8).

Standing orders provide authorization to medicate a specific population based on predetermined criteria. Before they can be carried out, two functions must be fulfilled. First, the individual must be educated about the medication, and screened to confirm medical eligibility. Second, the individual must give his or her informed consent to be medicated. In the New Jersey Antiviral Distribution Template, declaration of self-education and self-screening are acceptable.

In an actual influenza pandemic, decisions about types of antiviral medication regimens and populations to be treated will be made at the federal and/or state level.

Recordkeeping

LINCS Agencies shall plan for the retention of all Intake Forms. The following information should be reported to NJDOH Emergency Communications Center (ECC) using the “Antiviral Distribution Daily Report” (Attachment 9):

- Number of Antiviral Distribution Sites open for that day
- Total number of Oseltamivir (Tamiflu) regimes distributed by site (number should equal total of two categories listed below):
 - Number of antiviral regimens distributed for those ill (with prescriptions)
 - Number of antiviral regimens distributed as prophylaxis (healthy household members)

Site Selection Considerations

Potential sites should be assessed by both public health and law enforcement personnel. See the attached “Physical Requirements and Logistical Considerations” to facilitate appropriate site identification. Because each jurisdiction has unique considerations, this tool is provided as a supportive tool. However, keep in mind that having comparable sites will facilitate mutual aid staffing and provide a basis for standard operating procedure development.

- ✓ Selection of Antiviral Distribution Sites should be based on a worst-case scenario. Facilities should be assessed with consideration to providing prophylaxis to large numbers of individuals in the county/municipalities involved.
- ✓ A greater number of sites enable easier public access, reduced length of line and waiting time and increased efficiency in distribution. The trade-off is more security, core staff members and supplies are needed. Therefore it may be more advantageous to have fewer, larger sites.
- ✓ Triage should be located a relatively short distance from the distribution area. Triage design should include:
 - Climate controlled waiting area
 - Special needs accommodations
 - Clean, well-maintained facilities
- ✓ Operating hours at each site should be planned for 12 hours a day.
- ✓ In addition to size and location accessibility to major roads and transportation should be considered.
- ✓ The facility should have the capacity to handle large numbers of people under cover and out of the weather.
- ✓ Each site should have, at a minimum, the following characteristics:
 - Heat and air conditioning to maintain controlled room temperature
 - Adequate bathrooms, water and electricity
 - Adequate parking for staff and public
 - Handicap accessibility
- ✓ Possible facilities to consider for Antiviral Distribution Sites locations:
 - Public schools
 - Community centers
 - Government buildings
 - Polling places
 - Private business sites
- ✓ Security Considerations
 - Resources available in the community
 - Local police
 - Other security resources (private security companies, volunteers)

- Site security
 - External
 - Traffic control
 - Internal
- ✓ Location
 - Consider size and layout of the facility based on the estimated number of people to receive treatment/prophylaxis
 - Ensure that the facility has not already been designated of any other function during an emergency, such as shelter, alternate medical facility, quarantine, etc.
 - Ensure that the site is familiar to the population and located within close proximity to it
 - Ensure that facility is not located in a flood prone area
 - Ensure the facility is structurally sound
 - Ensure the facility and surrounding environment are free of biological hazards, hazardous materials and mechanical hazards
 - Ensure facility can be secured (access controlled)
- ✓ Accessibility
 - Ensure that traffic flow patterns avoid potential problematic areas
 - Ensure that there is a large parking area
 - Ensure that there is access to public transportation
 - Ensure that there is a separate entrance and exit that can be secured
 - Ensure that the facility is handicap accessible
- ✓ Space
 - Ensure there is a single room for distribution process
 - Ensure that there is a waiting/assembly area
 - Ensure that there is adequate floor space
 - Ensure that there is adequate area for staff breaks
- ✓ Develop an Antiviral Distribution Site flow chart for each site
- ✓ Evaluate internal/external site communications capabilities including:
 - Telephone land-lines
 - Use capability of cellular phones
 - Internet access
 - Public use phones
- ✓ Building Safety Checks for:
 - Fire extinguishers (inspected)
 - Fire alarms
 - Marked exits
 - Emergency lighting
- ✓ Facilities Checks for:
 - Adequate toilet facilities
 - Staff break area

- Kitchen area for meal preparation and/or area for catered food
- Climate controlled (68-77°)

- ✓ Equipment needed may include:
 - Locked room/the ability to secure medication
 - PPE (N95 masks for staff; surgical masks for all others)
 - Fax machine with dedicated phone line
 - Telephones (both land line and cellular)
 - Computers and printers
 - Office supplies
 - Clipboards
 - Tables and chairs
 - Back-up generator
 - First aid kits
 - Alternate light source
 - Two-way radios
 - Flashlights
 - Appropriate signage

- ✓ Memorandum of Agreement
 - Agencies/facilities that will be providing space, equipment and/or supplies should have agreements developed, signed and reviewed annually

Attachment 2**Antiviral Distribution Site Information Form****Physical Requirements and Logistical Considerations****BASICS**

Name of site: _____

Location: _____

Contact person who can activate site on a 24-hour basis

Name: _____

Phone Number: _____

ACCESSIBILITY

Is the site accessible to at least one major access road? YES NO

Is the site accessible to mass transportation? YES NO

Is the site handicap-accessible? YES NO

Number of parking spaces: _____

SIZE

Approximate number of total square feet available and in what configuration? Ideally, each site should have one large room with separate access and egress, plus a staff break area, storage area and rest rooms. (attach site/setup plan)

INFRASTRUCTURE

Does the facility have:

Heat YES NO

Phone lines YES NO Number _____

Fax machine YES NO Number _____

Copy machine YES NO

Internet connection YES NO

Tables and chairs YES NO

TV/VCR/Radio YES NO

Backup generator YES NO

Toilet facilities (how many) _____

SECURITY

Is there controlled access to the site? YES NO

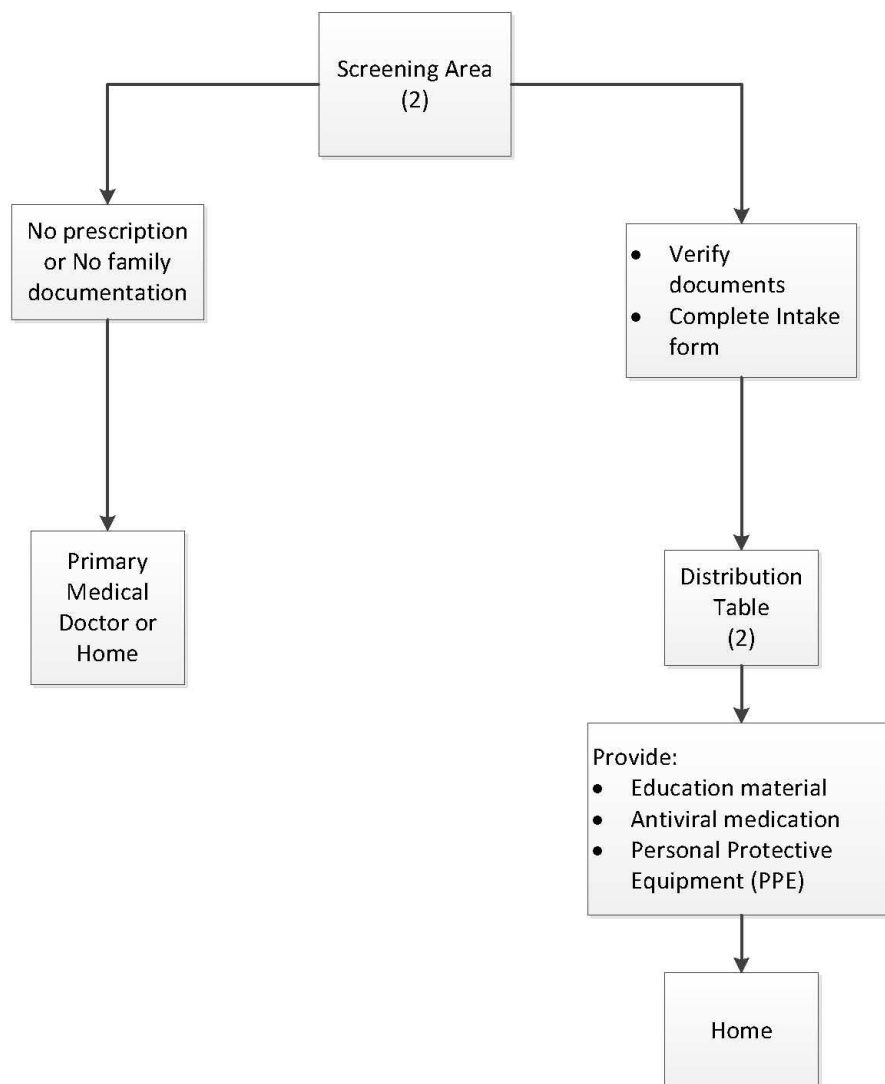
Is there a separate entrance and exit? YES NO

Attachment 3**Minimum Antiviral Distribution Site Equipment/Supplies**

Each LINCS Agency Antiviral Distribution Site is set up with assistance from the facility owner/operator and the LINCS Agency staff. The following list summarizes logistics requirements (supplies and equipment) for one Antiviral Distribution Site.

LOGISTICS REQUIREMENTS FOR ONE ANTIVIRAL DISTRIBUTION SITE

ITEM	Quantity
Chairs	8
Clipboards	4
Crowd control systems (ropes, cones, etc)	As needed per site
Documentation collection bin	2
Fax machine with dedicated phone line	optional
Tables	2
Office Supplies (pens, staplers, staples, staple remover, paper clips, tape)	Quantities to be determined from setup
PPE (N95 masks for staff, surgical masks for all others)	Quantities to be determined from setup
Telephone (both land line & cellular)	2
Forms	Quantities to be determined from site
Water, bottled	Quantities to be determined from site
Food for Antiviral Distribution Site staff	Quantities to be determined from site
Signage	As appropriate for site
Antiviral medication	Quantities to be determined from site
First Aid kits	2
Two-way radios (communication at site)	10
Flashlights (with spare batteries)	1/staff member

LINCS Agency Antiviral Distribution Flow Chart

Attachment 5

Job Summaries

Position	Overview of Job Description	# per site/ shift	Comments
Screeners	<ul style="list-style-type: none"> ✓ Greets clients in line at site ✓ Distribute PPE to all clients ✓ Identify symptomatic persons; refer them to health care provider/clinic ✓ Distribute Intake Form ✓ Answer questions ✓ Provide early alert of situations that may require additional security attention 	4 (includes relief)	Assist with physical setup of site
Distributors	<ul style="list-style-type: none"> ✓ Distribute education materials ✓ Distribute medications and appropriate dosing instructions 	4 (includes relief)	Assist with physical setup of site
Administrative Functions/Logistics	<ul style="list-style-type: none"> ✓ Direct physical set-up of site ✓ Ensure briefing of distribution mission to staff ✓ Communications ✓ Staffing Rosters ✓ Relief (breaks/meals) ✓ Change of shift ✓ Set up and maintain telephone, fax and/or computer communications ✓ Ensure that all necessary supplies/medications are on-site and available in sufficient quantity ✓ Maintain inventory of supplies ✓ Record-keeping ✓ Forms collection ✓ Assist with greeting/distribution as needed ✓ Ensure that distribution site staff receive prophylaxis 	2	

Translators	<ul style="list-style-type: none"> ✓ Assist when language translation is needed ✓ Assist in preparing educational materials 	Depends on population	May work offsite and be available via telephone
Security (includes traffic control)	<ul style="list-style-type: none"> ✓ Oversee personnel assigned to security activities ✓ Maintain communication with local law enforcement ✓ Enforce orderly flow of traffic and parking ✓ Ensure orderly movement of clients through the distribution process ✓ Provide necessary control of persons if they become unruly ✓ Ensure security of supplies, especially medications 	Determined by law enforcement	Works with facility liaison
Facility Liaison	<ul style="list-style-type: none"> ✓ Open the individual facility ✓ Coordinate access to onsite resources and supplies ✓ Coordinate with distribution site staff and law enforcement for security and traffic flow needs ✓ Assist with communication 	1	

Attachment 6

Antiviral Distribution Household Intake Form

Antiviral Distribution Site: _____ Date: _____
 Name: _____ Phone: _____

Address: _____ City: _____ State: _____ Zip: _____

1. For each question, circle “yes” or “no” for each person in your household who will get medicines.
2. If you do not know the answer to a question, leave it blank.
3. If you need another form, ask one of the clinic staff.

	Person #1		Person #2		Person #3		Person #4		Person #5	
First name										
Last name										
Prescription presented?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Is this person sick with flu?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
Kidney disease/impairment?	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No

Any individuals with kidney disease/impaired kidney function should consult their physician before taking Oseltamivir (Tamiflu) as the dosage may need to be adjusted.

Do Not Write Below This Box Do Not Write Below This Box

Screening staff:	Oseltamivir (Tamiflu)	Oseltamivir (Tamiflu)	Oseltamivir (Tamiflu)	Oseltamivir (Tamiflu)	Oseltamivir (Tamiflu)
For each person, please circle the appropriate antiviral dosing.	Treatment: 75 mg BID x 5 days	Treatment: 75 mg BID x 5 days	Treatment: 75 mg BID x 5 days	Treatment: 75 mg BID x 5 days	Treatment: 75 mg BID x 5 days
For children, circle the appropriate regimen and mark the number of teaspoons (tsp) needed from the pediatric table.	prophylaxis 75 mg QD x 10 days	prophylaxis 75 mg QD x 10 days	prophylaxis 75 mg QD x 10 days	prophylaxis 75 mg QD x 10 days	prophylaxis 75 mg QD x 10 days

QD = once per day BID=twice per day

 Signature of person picking up medications

 DATE

 Print name of person picking up medication

Attachment 7

Pediatric Instructions¹**TAMIFLU® (oseltamivir phosphate) Capsule 75 mg**

How to prepare oral suspension for children

To prepare an oral suspension of Tamiflu for administration to children, follow the directions as outlined below. Use a bottle of flavored syrup-like liquid for mixing such as Humco Co Cherry syrup, or Ora-Sweet® syrup, or FlavoRx, all are readily available at local pharmacies typically in 1 pint bottles.

1. Begin by using 10 capsules of Tamiflu. Carefully separate each capsule body and cap and pour the contents of the capsules into a clean bowl. Discard empty capsules.
2. With the back of a clean dry spoon, crush the contents of the bowl into a fine powder.
3. Add 6 teaspoons of syrup to the bowl of finely ground powder and mix thoroughly until a uniform suspension is achieved.
4. Transfer the mixture from the bowl into a small bottle using a funnel, if necessary to eliminate any spillage.
5. Add 4 additional teaspoons of syrup to the same bowl and mix thoroughly again assuring that all residue from previous mixture is thoroughly mixed into the new suspension.
6. Add this mixture to the same small bottle using a funnel if necessary to eliminate any spillage.
7. Close the bottle with the cap
8. Shake well to assure the suspension is thoroughly mixed.
9. Place a label on the bottle indicating its contents (Tamiflu Suspension) and the instructions "Shake before use".
10. Store the suspension in a refrigerator.
11. Discard all unused suspension after 30 days of preparation.

Dosing Chart

Body Weight in pounds	Treatment Dose twice a day for 5 Days	Prophylactic Dosing Once a day for 10 Days
< 33 lbs	2 ml	2 ml
> 33lbs to 51 lbs	3 ml	3 ml
> 51 lbs to 88 lbs	4 ml	4 ml
> 88 lbs	5ml	5 ml

To assure accuracy of doses it is recommended that you use a graduated oral spoon, dropper or syringe. These are readily available through pharmacies and grocery stores.

Public information instructions for suspension will be developed for use by NJDOH.

¹ U.S. Food and Drug Administration. (2013, August 19). *Emergency Compounding of an Oral Suspension from Tamiflu 75 mg Capsules (Final Concentration 15 mg/ml)*. Retrieved from <http://www.fda.gov/Drugs/DrugSafety/PostmarketDrugSafety/InformationforPatientsandProviders/ucm183878.htm>

Standing Orders for Influenza Treatment & Post Exposure Prophylaxis During an Influenza Pandemic

Purpose:

Reduce morbidity and mortality from influenza, during an influenza pandemic, by providing antiviral medication as treatment and/or prophylaxis.

Policy:

Under these standing orders, issued by NJDOH and local health departments, registered pharmacists, nurses or other individuals with a 4-year college degree and 2 years public health experience may distribute Oseltamivir (Tamiflu) antiviral regimens to persons who have been found to meet criteria established by the New Jersey Department of Health (NJDOH) and the Centers for Disease Control and Prevention (CDC).

Procedure:

1. Confirm that participant is eligible to receive treatment (present with prescription) and/or post-exposure antiviral prophylaxis (household members of those ill with influenza) and has been educated about its risks and benefits. Declaration of self-education is acceptable.
2. Screen all participants for contraindications and precautions to antiviral therapy with Oseltamivir (Tamiflu). Declaration of self-screening is acceptable.
3. Dispense an antiviral post-exposure prophylaxis regimen as follows:
 - Adults and children weighing at least 88 pounds **with no** contraindications/precautions to Oseltamivir (Tamiflu):
Oseltamivir (Tamiflu), 75 mg PO once daily for 10 days
 - Children <88 pounds **with no** contraindications/precautions to Oseltamivir (Tamiflu):
Oseltamivir (Tamiflu), xx mg/kg PO once daily for 10 days (maximum daily dose, 75 mg)
4. Provide all participants with a patient information sheet that includes: name and dose of drug, instructions on how to take the drug, drug/food interactions, warnings, side effects, and 24-hour telephone number for questions or problems.
5. Document each participant's medication information in the following places:
Household Intake Form: Record the Antiviral Distribution Site location, date of distribution, the manufacturer and lot number, and the name and title of the person distributing the medication.

This policy and associated procedures shall remain in effect until rescinded or until (date) .

Medical Director's signature: _____

Effective Date: _____

Attachment 9

Antiviral Distribution Daily Report

LINCS Agency _____ Date _____

Identify each distribution location	Site #1	Site #2	Site #3	Site #4	LINCS AGENCY TOTAL
Number of antiviral regimens distributed/site					
<input type="radio"/> For ill					
<input type="radio"/> For prophylaxis					

Individual completing form _____
(print name)

NOTE: Fax completed form to NJDOH/Emergency Communications Center (ECC) or Health Command Center by noon of the following day.

Attachment B

LINCS Planning Guide for RSS Warehouse

Managed Inventory (all numbers are approximations)

(Please use as a guide to determine warehouse requirements.)

ANTIBIOTICS:

1 Pallet contains 100 cases.

1 Case contains 100 units (10 day supply).

1 Pallet contains medication to treat 10,000 people.

These pallets **cannot** be stacked during transport.

Trailer can hold 20 pallets = 2,000 cases which treats 200,000 people.

To treat 1 million people = 5 trailers.

To treat 9,000,000 people = 45 trailers.

The pallets cannot be stacked.

ANTIVIRALS:

1 Pallet contains 90 cases.

1 Case contains 48 units (10 day supply).

1 Pallet contains medication to treat 4,320 people.

Trailer can hold 20 pallets = 960 cases which treats 86,400 people.

To treat 1 million people = 12 trailers.

NOTE: These pallets **can be** stacked during transport.

Trailer can hold 40 pallets = 1920 cases which treats 172,800 people.

To treat 1 million people = 6 trailers.

Anticipate the trailer to be 53' long.

EMI-Virtual Table Top Exercise (VTTX) - PANDEMIC INFLUENZA

Situation Manual

May 21, 2014

This Situation Manual (SitMan) provides exercise participants with all the necessary tools for their roles in the exercise. Some exercise material is intended for the exclusive use of exercise planners, facilitators, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan.

Exercise Overview

Exercise Name	Virtual Table Top Exercise (VTTX) Pandemic Influenza
Exercise Dates	May 21, 2014
Scope	This is a discussion based exercise, planned for four hours hosted by the Centers for Disease Control (CDC) & the Emergency Management Institute (EMI) and conducted with multiple remote VTC sites.
Mission Area(s)	Response & Recovery
Core Capabilities	Planning, Public Information and Warning, Operational Coordination, Infrastructure Systems, Mass Care Services, Situational Assessment, Economic Recovery, and Health and Social Services
Objectives	<ol style="list-style-type: none"> 1. Test participants knowledge, skills, and abilities to effectively conduct all-hazards emergency response and recovery. 2. Enable participants to better coordinate response operations with counterparts from Federal agencies, State governments, local governments, private sector organizations, and nongovernmental agencies. 3. Allow participating locations to share real-time pandemic influenza related preparation, response and recovery solutions with all participants.
Threat or Hazard	Pandemic Influenza
Scenario	This Pandemic Influenza VTTX was designed around a realistic scenario.
Sponsor	FEMA – Emergency Management Institute (EMI)
Participating Organizations	Federal, State, Tribal or local levels of government agencies while utilizing the whole community approach of including applicable representative organizations (such as private sector partners, voluntary agencies, school districts, etc.) within each jurisdiction.
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PREFACE

The Pandemic Influenza Virtual Tabletop Exercise (VTTX) is sponsored by the Federal Emergency Management Agency's (FEMA), Emergency Management Institute (EMI) as one of a series of virtual exercises designed to bring numerous communities together in a collaborative environment. This Situation Manual (SitMan) follows guidance set forth by the U.S. Department of Homeland Security (DHS) Homeland Security Exercise and Evaluation Program (HSEEP).

The Pandemic Influenza VTTX SitMan provides exercise participants with all the necessary tools for their roles in the exercise. It is tangible evidence of FEMA's commitment to ensure public safety through collaborative partnerships that will prepare it to respond to any emergency.

The Pandemic Influenza VTTX is an unclassified exercise. Based on public sensitivity and the nature of the exercise, the exercise information is controlled as For Official Use Only (FOUO). Some exercise material is intended for the exclusive use of exercise planners, facilitators, and evaluators, but players may view other materials that are necessary to their performance. All exercise participants may view the SitMan.

All exercise participants should use appropriate guidelines to ensure proper control of information within their areas of expertise and protect this material in accordance with current jurisdictional directives. Public release of exercise materials to third parties is at the discretion of EMI.

HANDLING INSTRUCTIONS

1. The title of this document is *EMI VTTX Situation Manual – Pandemic Influenza*.
2. Information gathered in this Situation Manual is designated as For Official Use Only (FOUO) and should be handled as sensitive information that is not to be disclosed. This document should be safeguarded, handled, transmitted, and stored in accordance with appropriate security directives. Reproduction of this document, in whole or in part, without prior approval from FEMA/EMI is prohibited.
3. At a minimum, the attached materials will be disseminated strictly on a need-to-know basis and, when unattended, will be stored in a locked container or area that offers sufficient protection against theft, compromise, inadvertent access, and unauthorized disclosure.
4. For more information about the exercise, please consult the following points of contact (POCs):

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CONTENTS

MODULE 1: PREPAREDNESS	111
Scenario: Possible Novel Influenza A Virus in the United States	11
Key Issues	
Questions	
Outbrief	
MODULE 2: RESPONSE	15
Scenario: Widespread Cases of the H5N1 Virus in the United States	
Key Issues	
Questions	
Outbrief	
MODULE 3: EXTENDED RESPONSE/RECOVERY	1818
Scenario: Declining Spread of the H5N1 Virus in the United States	
Key Issues	
Questions	
Outbrief	19
Appendix A: ACRONYMS	A-1
Appendix B: PANDEMIC INFLUENZA	B-1
APPENDIX C: PARTICIPANT FEEDBACK FORM	C-3

INTRODUCTION

Background

The Centers for Disease Control and Prevention (CDC) is sponsoring, in conjunction with EMI, a series of Virtual Tabletop Exercises (VTTX) that are designed to help prepare organizations for potential catastrophic events. Each VTTX presents a different scenario based on anticipated seasonal events and/or potential threats. One of the goals of this series is to increase preparedness for these threats through the collaborative exercises among participating agencies. Successful exercises lead to an ongoing preparedness process for improvements.

CDC serves as the national leader for developing and applying disease prevention and control, environmental health, and health promotion and health education activities designed to improve the health of the people of the United States.

In collaboration with state and local partners, CDC works to strengthen and support the nation's health security by saving lives and protecting against public health threats. Public health preparedness involves a cycle of outreach, planning, capability development, training, exercising, evaluation, and improvement. CDC collaborates with partners at the national, state, local, tribal, and territorial levels to prevent, protect, respond to, mitigate, prepare for, and recover from public health emergencies.

This Pandemic Influenza VTTX uses a severe influenza pandemic scenario to establish a learning environment for participants to exercise their emergency response plans, policies, and procedures for an influenza pandemic.

Purpose

The purpose of this exercise is to provide participants with an opportunity to assess their preparedness, response and recovery protocols, plans, and capabilities for an influenza pandemic.

Scope

Participants will play locally and participate virtually during the VTTX. Players will participate in facilitated discussions within their organizations to address the challenges presented by the scenario, and share those outcomes with the virtual community of participants. Discussions will focus on response coordination, critical decision-making, and the integration of resources necessary to prepare for, respond to, and recover from a pandemic.

Core Capabilities

The National Preparedness Goal (September 2011) has directed the focus of homeland security planning toward a capabilities-based approach. Because the timing and specificity of the next disaster is uncertain, this type of planning uses an all-hazards approach to build capabilities that can be applied to a wide variety of incidents. States and urban areas use capabilities-based planning to identify a baseline assessment of their homeland security efforts by comparing their current capabilities against the Core Capabilities. This approach identifies gaps in current capabilities.

The Core Capabilities are essential for the execution of each of the five mission areas: Prevention, Protection, Mitigation, Response, and Recovery. These capabilities provide the foundation for development of the exercise design objectives and scenario. The purpose of this exercise is to measure and validate performance of these Core Capabilities. The selected Core Capabilities are:

Common to All Mission Areas

Planning - Conduct a systematic process engaging the whole community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.

Public Information and Warning - Deliver coordinated, prompt, reliable, and actionable information to the whole community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard and, as appropriate, the actions being taken and the assistance being made available.

Operational Coordination - Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Response Mission Area: Response includes those capabilities necessary to save lives, protect property and the environment, and meet basic human needs after an incident has occurred.

Infrastructure Systems - Stabilize critical infrastructure functions, minimize health and safety threats, and efficiently restore and revitalize systems and services to support a viable, resilient community.

Mass Care Services - Provide life-sustaining services to the affected population with a focus on hydration, feeding, and sheltering to those who have the most need, as well as support for reunifying families.

Situational Assessment - Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Recovery Mission Area: Recovery includes those capabilities necessary to assist communities affected by an incident in recovering effectively. It is focused on a timely restoration, strengthening, and revitalization of the infrastructure; housing; a sustainable economy; and the health, social, cultural, historic, and environmental fabric of communities affected by a catastrophic incident.

Economic Recovery - Return economic and business activities (including food and agriculture) to a healthy state and develop new business and employment opportunities that result in a sustainable and economically viable community.

Health and Social Services - Restore and improve health and social services networks to promote the resilience, independence, health (including behavioral health), and well-being of the whole community.

Exercise Objectives

The following exercise objectives were created so the exercise players can develop an effective response based on the scenario and identify opportunities for future improvements related to the scenario.

1. Discuss the ability to conduct a systematic planning process which has engaged the whole community.
2. Discuss the capability to deliver coordinated, prompt, reliable, and actionable information to the whole community.
3. Discuss the capability to establish and maintain a unified and coordinated operational structure and process that integrates all critical stakeholders.
4. Discuss the capability to provide life-sustaining services to the affected population.
5. Discuss the capability to provide decision-makers with decision-relevant information regarding the nature and extent of hazards.
6. Discuss the capability to restore and improve health and social services networks.

Pandemic Influenza Specific Exercise Objectives for the Exercise Participants

- Review current policies and plans for an influenza pandemic response.
- Strengthen the existing emergency response structure within the participating organization and discuss the challenges with responding to an influenza pandemic.
- Assess and determine how the participating organization will coordinate response activities with its internal and external partners.
- Identify gaps and issues to be addressed in the participating organization's plan for responding to an influenza pandemic.

Participants

- **Players.** Players respond to the situation presented, based on expert knowledge of response procedures, current plans and procedures, and insights derived from training.
- **Observers (Optional).** Observers may support the group in developing responses to the situation during the discussion.
- **Facilitators.** Facilitators provide situation updates and moderate discussions. They also provide additional information or resolve questions or conflict as required.
 - **Lead Facilitator.** EMI and CDC will co-lead and facilitate the exercise and interface with the Local Facilitator.
 - **Local Facilitator.** The Local Facilitator will moderate the exercise discussion, operate the local Video Teleconference (VTC) system, and interface with EMI and CDC. It is expected the Local Facilitator will recruit necessary Players and exercise staff as required. The Local Facilitator will lead the virtual conduct of the exercise.

- **Subject Matter Experts.** A few CDC subject matter experts may be available to provide technical and scientific information, as needed.
- **Evaluators (Optional).** Evaluators are personnel who observe, record, and evaluate exercise activities. Evaluators will use Exercise Evaluation Guides (EEGs) to evaluate the capabilities identified in the exercise objectives and to provide input into the After Action Report (AAR).

Exercise Structure

During this facilitated exercise, players will participate in the following:

- Overview briefing describing the current situation
- Scenario modules that will include:
 - Guided discussions moderated by an on-site facilitator
 - Brief-outs from each participating location after each module
- Hot Wash conducted at each location after the VTC has ended

Each module begins with an update that summarizes key events occurring within a time period. After the updates, participants review the situation and engage in a group discussion of appropriate issues. Each Local Facilitator will lead these discussions. Once the allotted discussion time has been used, each Local Facilitator (or chosen representative) will brief-out to EMI and the other virtual participants.

Once the VTTX has concluded, Local Facilitators will lead a Hot Wash with their respective participants to address any ideas or issues that emerged from the exercise discussions. After the Local Hot Wash has concluded, Local Facilitators will then participate in a Facilitator’s brief-out led by the Lead Facilitator from EMI/CDC.

The VTTX will run for approximately four (4) hours. The exercise schedule is as defined in the table below:

20 Minutes	Introductions
10 Minutes	Scenario and Situational Awareness Briefing
65 Minutes	Module 1 - Preparedness
65 Minutes	Module 2 - Response
65 Minutes	Module 3 - Recovery
15 Minutes	Debrief and Evaluation

Exercise Guidelines

- This VTTX is designed to engage participants in a no-fault, hazard-specific environment. Varying viewpoints are expected and differences of opinion may occur.
- Participants are expected to respond based on their knowledge of current plans and capabilities, as well as insights derived from their training.
- Decisions are not precedent setting and may not reflect your organization's final position on a given issue. This exercise is an opportunity to discuss and present multiple options and possible solutions.
- Issue identification is not as valuable as suggestions and recommended actions that could improve response and preparedness efforts. Problem-solving efforts should be the focus.
- During exercise discussions, if a player states they are going to ask for or provide mutual aid, they need to state specifically under which plan, and to which agency, they will do so.

Assumptions and Artificialities

In any exercise, assumptions and artificialities may be necessary to complete play in the time allotted. During this exercise, the following apply:

- The scenario is plausible, and events occur as they are presented.
- There is no hidden agenda, and there are no trick questions.
- All players receive information at the same time.

MODULE 1: PREPAREDNESS

Scenario: Possible Novel Influenza A Virus in the United States

Pandemic Influenza Threat

Influenza viruses, especially highly pathogenic avian influenza like H5N1, are among the most urgent global infectious disease threats. For more than 60 years, the U.S. Centers for Disease Control and Prevention (CDC) has used its scientific expertise and resources to address a variety of public health challenges, including the continuing threat and burden of seasonal influenza and unpredictable pandemics. The occurrence of pandemics in 1918, 1957, 1968, and 2009 show that pandemics are inevitable, yet unpredictable events. The 2009 H1N1 pandemic occurred against a backdrop of ongoing pandemic planning efforts by governments and organizations throughout the world, which included a substantial amount of capacity building and pandemic response plan development. In fact, many of these activities were initiated because of the recognized potential for a highly pathogenic avian influenza virus (H5N1) to eventually develop the capability for sustained human-to-human transmission that could cause a severe pandemic.

As of March 2014, the World Health Organization (WHO) has reported 664 confirmed cases of H5N1 infection, and since 2003, nearly 60% of those infections have been fatal. Although the imminent threat of the 2009 H1N1 influenza virus has subsided, influenza viruses with pandemic potential, including H5N1, H7N9, and H3N2v, continue to circulate across the globe. As a result, the threat of a pandemic caused by more pathogenic strains of influenza remains very significant. In fact, the threat of a more severe pandemic caused by H5N1 or another highly pathogenic strain of influenza is no less than before the 2009 pandemic. CDC continues to maintain situational awareness of influenza so that the United States and other countries can be prepared to respond and intervene when a novel influenza virus is detected.

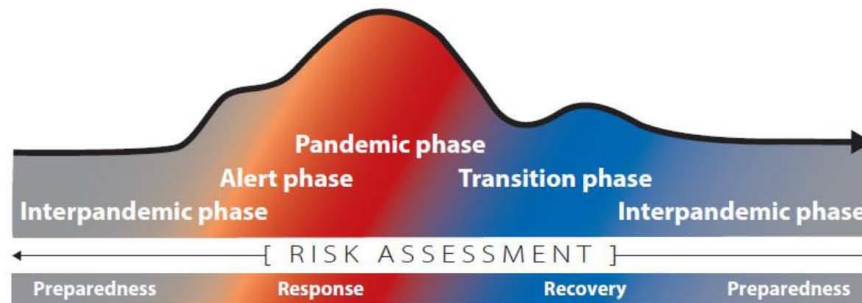
World Health Organization (WHO) Phases

In response to lessons learned from the 2009 H1N1 pandemic, WHO revised its pandemic phases. The phases, which are based on virological, epidemiological, and clinical data, are to be used for describing the spread of a new influenza subtype, taking into account the disease it causes around the world.

As shown in Figure 1, the global phases — Interpandemic, Alert, Pandemic and Transition — are represented as a continuum, which also shows the phases in the context of preparedness, response, and recovery, as part of an all-hazards approach to emergency risk management.

Situation Manual
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Virtual Tabletop Exercise
Pandemic Influenza



Scenario Introduction

Alert phase: This is the phase when influenza caused by a new virus has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the Interpandemic Phase (the period between influenza pandemics) may occur.

March 28-30

On March 28-30, an International Infectious Disease Conference is held at an overseas hotel. It is attended by approximately 20 doctors and scientists from all over the globe. One or two days following the conference, the conference attendees flew back to their respective countries. Several of the conference attendees are showing signs of influenza-like illness (ILI), such as coughing, sneezing, fever, and lack of energy a few days after returning home.

April 3

Patient 1: A scientist, who participated in the conference, is feeling tired and has low energy;
Patient 2: A middle school student from the exercise participant's jurisdiction (on the same flight as Patient 1) feels bad and leaves school early.

April 6

The scientist, who attended the International Conference, goes to an emergency room at a nearby hospital in the early morning complaining of shortness of breath and difficulty breathing. Two family members now show mild influenza-like illness symptoms. The patient's 72 year-old mother has started running a fever and has an occasional cough. The patient is intubated for respiratory distress and hypoxia and admitted to the intensive care unit.

Testing results at the county virology laboratory in the late afternoon are positive for influenza A, negative for H1 and H3. Antiviral Oseltamivir treatment is started. The State Department of Health and the Influenza Division at CDC are notified about influenza A of this critically ill adult. A decision is made to ship the specimen overnight to CDC. They overnight a shipment containing original clinical material and extracted RNA to CDC Atlanta.

The Middle School student goes to see his doctor, with fever and cough, is given acetaminophen and told to rest at home.

April 7

The scientist's specimen sent to CDC Atlanta is received at 3:00PM and identified in the evening as H5N1 by real-time rRT-PCR at the Influenza Division. This is repeated twice.

The Middle School reports several cases of ILI from students who depart school early on Thursday. One of them is the sister of the first ill student who was reported sick on April 3rd.

CDC confirms evidence of human to human transmission of Avian Influenza A(H5N1) virus. On April 8, CDC drafts an International Health Regulation (IHR) Event Notification Form regarding the first U.S. H5N1 confirmed case and notifies international partners of a Public Health Event of International Concern (PHEIC.)

CDC EOC is activated based on the confirmed H5N1 case located in the U.S.

Key Issues

- The patients have recently returned from an overseas trip
- Several of the conference attendees are showing signs of influenza-like illness (ILI), such as coughing, sneezing, fever, and lack of energy
- One patient is showing rapid progression of illness with **severe** symptoms. Two family members now show mild ILI symptoms
- The middle school reports several cases of ILI from students
- H5N1 case confirmed in the U.S.
- CDC EOC is activated

Questions

The following questions are provided as suggested general subjects that you may wish to address as the discussion progresses. Please feel free to identify any additional requirements, critical issues, decisions, or questions that should be addressed at this time.

1. What preparedness actions has your community/jurisdiction taken to prepare for a pandemic influenza response?
2. What information would you need to provide to your partners or stakeholders on the steps they can take to quickly prepare for a severe pandemic?
3. What entities will you be coordinating with at this point and who may be reaching out to you for questions and assistance?
4. What types of guidance will you need and where do you expect that to come from? How will you share the information with your community/jurisdiction? How/what are you doing to ensure that specific at-risk and vulnerable populations are reached?

**Situation Manual
(SitMan)**

**Virtual Tabletop Exercise
Pandemic Influenza**

5. How will you prevent illness in your staff and the people you are responsible for? Operationally, do you have the staff and resources available to respond for a severe pandemic influenza? If not, how would you obtain these resources?

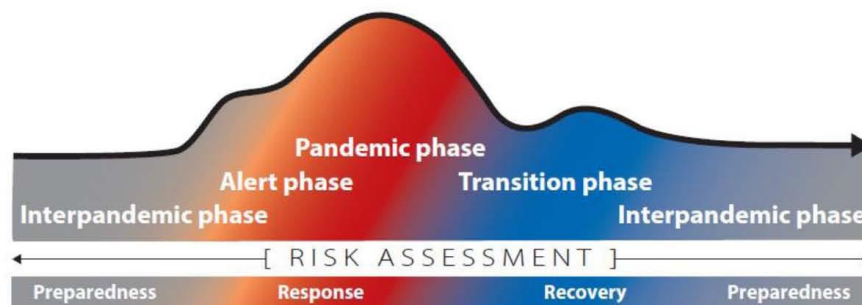
Outbrief

MODULE 2: RESPONSE

Scenario: Widespread cases of the H5N1 virus in the United States and Overseas

World Health Organization (WHO) declares a Pandemic phase

Pandemic phase: This is the period of global spread of human influenza caused by a new virus. Movement between the Interpandemic, Alert and Pandemic Phases may occur quickly or gradually as indicated by the global risk assessment, principally based on virological, epidemiological and clinical data.



April 8

Discovering that human-to-human H5N1 virus transmission is suspected, CDC activated its EOC on April 7 to coordinate the response to this emerging public health threat.

In your community, two middle school students and the principal are hospitalized with severe pneumonia. Upper respiratory samples will be collected from all students and faculty at the Middle School for H5N1 testing on April 9. Any sick student with acute febrile respiratory illness is encouraged to seek medical care urgently for evaluation and antiviral treatment.

A local television news station reports a cluster of respiratory illness in the local middle school, and interviews a local school official. The school official says they are considering closing that specific school to prevent the spread of illness.

April 9

Several people associated with the middle school are ill with fever and cough, some with diarrhea. Five samples taken from 12 symptomatic middle school students by the local Health Department on April 8 are positive for H5N1.

The scientist, Patient 1, dies; his 72 year old mother is hospitalized with high fever, cough, and headache.

A custodial worker at the Community Hospital becomes ill with fever, coughs, and diarrhea. Test results from that patient are positive for H5N1.

CDC holds a press briefing to inform the public and guide the public health and health care response to the current situation.

Based on severity and existing data, the U.S. Government (USG) decides to initiate a nationwide mass vaccination campaign. The government estimates that 8 weeks will be needed to fill and finish the H5N1 vaccine currently in the USG stockpile. Organizations are encouraged to begin the planning activities for a national mass vaccination campaign.

April 25

By mid-April, CDC reports that the pandemic has spread from the two initially impacted local communities to multiple metropolitan areas.

On April 25, the USG declared a public health emergency, and CDC's Strategic National Stockpile (SNS) began releasing 25 percent of the supplies in the stockpile that could be used to protect and treat influenza patients. The supplies provided to states included 11 million regimens of antiviral drugs, over 39 million respiratory protection devices (masks and respirators), gowns, gloves, and face shields. Allocations of materiel were based on each state's population.

May 15

Affected communities are reporting challenges handling first-, second-, and third-order effects from the pandemic. Most hospitals in your community have been overwhelmed and lack the space, resources (e.g., ventilators), and personnel to handle the number of patients.

According to CDC projections, the impact of the pandemic will grow considerably more severe in the coming months. The expected attack rate of 20-25% is anticipated, that rate is the percentage of people who are infected with the virus of those who are exposed to it. Those who catch the virus and recover will typically spend three to five weeks between being ill and recovering depending on the severity of their illness and their general pre-infection health.

In addition to the direct public health impact, communities are reporting high rates of absenteeism, especially among individuals that interface directly with the public and healthcare workers. Many affected communities have shut down school systems and/or are experiencing a number of impacts such as high absenteeism, food distribution, and sanitation issues.

The news media is reporting on the extent of the local and national effects of the illness, to include not only the number of those infected, but also how public services like water and power are becoming degraded. Food and other items on store shelves are becoming scarce. Public transportation services have also been significantly curtailed.

May 20

CDC reports that a supply of the stockpiled H5N1 vaccine is available. Vaccine supplies will be allocated to states proportional to their total populations (2 doses with adjuvant per person) and will be shipped to public and private provider vaccination sites based on orders placed by the

states. Participating providers will be asked to sign a Provider Agreement assuring they intend to meet state requirements for administering vaccine.

Key Issues

- Public Health Emergency is declared in US
- Community mitigation measures are considered
- Worker Safety (e.g., hospital workers, teachers) is threatened
- Possible high rate of employee absenteeism and disruption of resources/services (e.g., healthcare, power, food services)
- Potential for maximum capacity in hospitals
- Potential immediate shortage of vaccines. Plan for mass vaccination.

Questions

The following questions are provided to stimulate local discussions. Please feel free to identify any additional requirements, critical issues, decisions, or questions that should be addressed at this time.

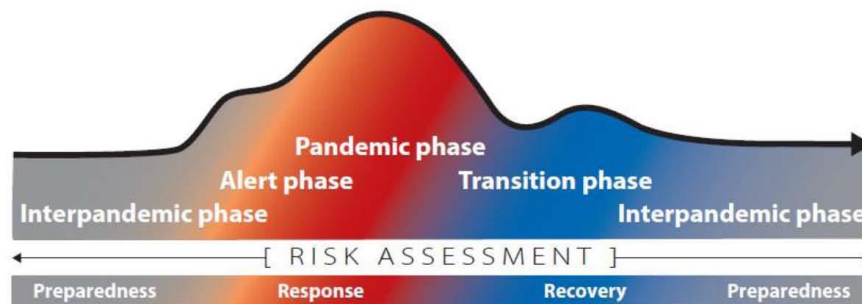
1. What actions are critical during an initial response level, and then at the peak of response level in your community response plan?
2. What information about self-protection from pandemic influenza needs to be communicated to your organization? What's your policy on the closure of public services/schools or businesses? (Consider authority and responsibilities, trigger points, duration of closure, plans to re-open, and social consequences of implementing school/business closures.)
3. Community mitigation measures (e.g., school closures, social distancing) will increase rates of absenteeism in workplaces. What measures would you take to ensure the continuity of your operations/services? Do you have leave policies (e.g., telework) to cope with business closings and at home childcare during a pandemic?
4. It is likely that medical needs of people will overwhelm existing healthcare capacities. What measures will you implement in the community to mitigate surge on the hospital systems (e.g., alternate care systems, health professional call centers, delivery of only essential healthcare services)?
5. Discuss capacity to deliver pandemic vaccine in your community. What are methods to rapidly administer the pandemic vaccination program that can be initiated and fully implemented once a decision has been made to distribute pandemic influenza vaccine?
6. What assistance/policy guidance would you need at this stage of response?

Outbrief

MODULE 3: EXTENDED RESPONSE/RECOVERY

Scenario: Declining spread of the H5N1 virus in the United States

Transition phase: As the assessed global risk reduces, de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessments.



Typically an influenza pandemic in the United States will come in “waves,” each wave lasting between six to eight weeks, with several months in between each. Limited recovery operations should be conducted after each pandemic wave; full recovery operations should be conducted after the end of the pandemic. While a pandemic wave may be severe, it will resolve with each phase, and planning should also include how quickly and effectively community and business operations can return to normal.

October

By late October just about every community has seen 30% of its population contract the virus, and as many as 2% of cases have been fatal. CDC reports that influenza activity levels in the United States are steady across key flu indicators at this time. Vaccines and anti-viral medications are available to everyone who needs and wants them. As the pandemic subsides, absenteeism has diminished but it could take months for the work force to stabilize as well as for public and private sector services to return to pre-pandemic levels.

Key Issues

- This is a pandemic transition phase
- About 30% of your community population contracted the virus, and about 2% cases have been fatal
- Vaccines and anti-viral medications are generally available, with spot shortages

Questions

The following questions are provided as suggested general subjects that you may wish to address as the discussion progresses. Please feel free to identify any additional requirements, critical issues, decisions, or questions that should be addressed at this time.

1. When should the response shift into recovery operations? What actions are critical at this response level in your community/jurisdiction response plan? How would you prioritize the actions?
2. What assistance or guidance would you need during the recovery stage?
3. What steps need to take place in order to rebuild your community/jurisdiction, at least a level of normalcy comparable to pre-incident level, and improved levels? Would you have adequate supplies/equipment/personnel to rebuild your community/jurisdiction back to normalcy?
4. Does your emergency operations plan provide for feedback procedures in order to record experiences from this response and integrate lessons learned? Who will lead the after action process and how do you track the progress?

Outbrief**Best Practice and Information Sharing**

Considering the preparedness, initial response, and recovery phases discussed during this VTC; What does your organization do that is unique, or could be considered a best practice so that others participating in the VTC may benefit?

Appendix A: Acronyms

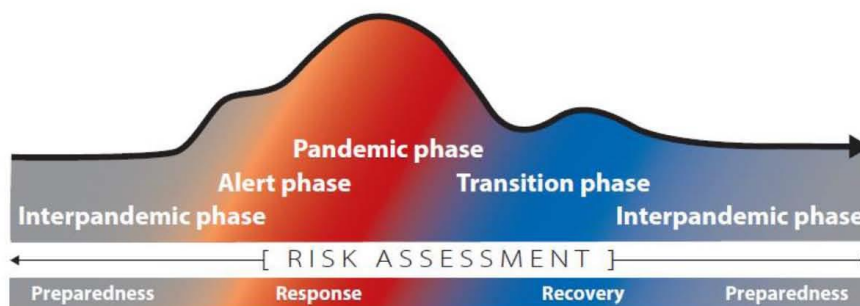
Acronym	Term
AAR	After Action Report
CDC	Centers for Disease Control and Prevention
DHS	U.S. Department of Homeland Security
EEG	Exercise Evaluation Guide
EOC	Emergency Operations Center
FEMA	Federal Emergency Management Agency
FOUO	For Official Use Only
HSEEP	Homeland Security Exercise and Evaluation Program
ICS	Incident Command System
ILI	Influenza-like Illness
PHEIC	Public Health Event of International Concern
POC	Point of Contact
SITMAN	Situation Manual
SA	Situational Awareness
SME	Subject Matter Expert
SNS	Strategic National Stockpile
USG	U.S. Government
VTC	Video Teleconference
VTTX	Virtual Tabletop Exercise
WHO	World Health Organization

Appendix B: Pandemic Influenza Phases

World Health Organization (WHO) Phases

The WHO Interim Guidance on Pandemic Influenza Risk Management is to be used to inform and complement national and international pandemic preparedness and response. In response to lessons learned from the 2009 H1N1 pandemic, WHO revised the pandemic phases. The phases, which are based on virological, epidemiological, and clinical data, are to be used for describing the spread of a new influenza subtype, taking into account the disease it causes around the world. As shown in Figure 1, the global phases — Interpandemic, Alert, Pandemic and Transition — are represented as a continuum, which also shows the phases in the context of preparedness, response, and recovery, as part of an all-hazards approach to emergency risk management.

Figure 1. The continuum of pandemic phases



This continuum is according to a "global average" of cases, over time, based on continued risk assessment and consistent with the broader emergency risk management continuum.

Interpandemic phase: This is the period between influenza pandemics.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the Interpandemic Phase may occur.

Pandemic phase: This is the period of global spread of human influenza caused by a new subtype. Movement between the Interpandemic, Alert and Pandemic phases may occur quickly

**Situation Manual
(SitMan)**

**Virtual Tabletop Exercise
Pandemic Influenza**

or gradually as indicated by the global risk assessment, principally based on virological, epidemiological and clinical data.

Transition phase: As the assessed global risk reduces, de-escalation of global actions may occur, and reduction in response activities or movement towards recovery actions by countries may be appropriate, according to their own risk assessments.

APPENDIX C: PARTICIPANT FEEDBACK FORM

Please enter your responses in the form field or check box after the appropriate selection.

Name: _____ **Title:** _____

Agency: _____

Role: Player Facilitator Observer Evaluator

Part I: Recommendations and Corrective Actions

1. Based on the discussions today and the tasks identified, list the top three strengths and/or areas that need improvement.

1. _____
2. _____
3. _____

2. Identify the action steps that should be taken to address the issues identified above. For each action step, indicate if it is a high, medium, or low priority.

Corrective Action	Priority

3. Describe the corrective actions that relate to your area of responsibility. Who should be assigned responsibility for each corrective action?

Corrective Action	Recommended Assignment

**Situation Manual
(SitMan)**

**Virtual Tabletop Exercise
Pandemic Influenza**

4. List the policies, plans, and procedures that should be reviewed, revised, or developed. Indicate the priority level for each.

Item for Review	Priority

Part II: Assessment of Exercise Design and Conduct

Please rate, on a scale of 1 to 5, your overall assessment of the exercise relative to the statements provided below, with 1 indicating strong disagreement with the statement and 5 indicating strong agreement.

Assessment Factor	Strongly Disagree					Strongly Agree				
The exercise was well structured and organized.	1	2	3	4	5	1	2	3	4	5
The exercise scenario was plausible and realistic.	1	2	3	4	5	1	2	3	4	5
The multimedia presentation helped the participants understand and become engaged in the scenario.	1	2	3	4	5	1	2	3	4	5
The facilitator(s) was knowledgeable about the material, kept the exercise on target, and was sensitive to group dynamics.	1	2	3	4	5	1	2	3	4	5
The Situation Manual used during the exercise was a valuable tool throughout the exercise.	1	2	3	4	5	1	2	3	4	5
Participation in the exercise was appropriate for someone in my position.	1	2	3	4	5	1	2	3	4	5
The participants included the right people in terms of level and mix of disciplines.	1	2	3	4	5	1	2	3	4	5

Part III: Participant Feedback

What changes would you make to this exercise? Please provide any recommendations on how this exercise or future exercises could be improved or enhanced.

Psychosocial Considerations - Appendix 5**INFORMATIONAL MATERIALS**

- **FEMA Continuity of Operations Pandemic Influenza Guidance and Template Instructions**
- **Phase-Specific one page flyers on managing stress during an influenza pandemic**

One Page Flyers**Pandemic Alert Phase****Coping with the News of a New Health Risk**

Fear of the unknown is common for people of all ages and cultures. Fear and anxiety can become very powerful emotions when health risks are unknown. Many people are beginning to hear about birds and other animals becoming sick in other parts of the world. Even though this may be happening in far away places, the risks can feel close to home. It is important to understand the risks, our emotional reactions, and ways of coping in order to effectively deal with the stress that such situations can cause.

Changes in Our World

Change is constant in our world and can bring different physical and emotional challenges for many people. The current changes in bird and animal health may affect everyone's health or may continue as a bird and animal problem only. But simply knowing of this risk, it is natural and normal for people to experience emotional changes.

Emotional Reactions

We each have different ways of reacting to trying events in our lives. It is quite normal and natural for people to experience stress reactions in ways you may not think of as "physical", for example, you may find that you are:

- Preoccupied with thoughts or interest in health-related news stories
- Unable to concentrate at work or school
- Becoming irritable or tense with people
- Having difficulty sleeping
- Feeling hopeless or depressed
- Feeling more distrustful
- Worrying about your and your family's safety

Psychosocial Considerations – Appendix 5

Ideas for Coping

Public health officials are closely watching how birds and animals are affected by this new health risk. It is important that you get your news about any health risks from trusted sources of information. Occasional checks for updates in the news can be helpful, but know when to put down the newspaper or turn off the television. Right now there are things that can help you cope with the physical and emotional stresses you may feel due to the changing health news.

- Stay informed, but not preoccupied with the news
- Stay physically and mentally busy
- Keep to your normal daily routines
- Communicate openly with friends and family
- Rely on your normal sources of support
- Follow expert advice for personal and family preparedness
- Reach out for emotional support or professional help if necessary

Changes in our world are inevitable, and as with other changes and challenges, we will work together to meet and overcome them. Understanding and managing your emotions during stressful times is part of any change. If you or someone you know is having difficulty coping with the stress associated with the changing health news, please reach out for help.

A toll-free phone number is available for emotional support at (877) 294-HELP (4357) and for TTY Assistance at (877) 294-4356. You can also find more ideas for coping online at <http://www.disastermentalhealthnj.com>.

Heightened Pandemic Period

Managing the Emotional Challenges of the Influenza Pandemic

The current influenza pandemic has caused serious physical as well as emotional challenges for many individuals and families across the U.S. and around the world. Dealing with the stress of caring for sick loved ones, as well as taking care of oneself can be overwhelming. For those who have lost loved ones during this crisis, the emotional impact of the situation can be even greater.

In order to best help yourself and others around you, it is important that you pay attention to your own feelings and take care of your own emotional needs. (recognize some of the emotional challenges brought on by the pandemic, as well as some ideas about how to cope with those challenges.)

Emotional and Behavioral Reactions

Each individual and family has its own way of reacting, and coping with (the strong emotions triggered by) a serious illness or death in the family. (Some of the more common reactions experienced during an outbreak like the current pandemic include) these are normal reactions:

- Physical aches and pain unrelated to the illness
- (Extreme) fear, panic and dread
- Inability to focus on work or school (trouble concentrating)

Psychosocial Considerations – Appendix 5

- Helplessness and/or hopelessness
- Depression (Inability to engage in productive activity)
- (Acute) grief and sadness
- Disorientation (feeling dazed, memory loss,
- inability to recall events of the past 24 hours or understand what is happening) and confusion
- Overwhelmed with self-doubt and uncertainty (Feeling overwhelmed)

Coping

During the peak of a disease outbreak, life can change in many ways. Remaining flexible is important. It may also be helpful to:

- Find alternative ways to do normal activities if isolation is necessary
- Explore alternative means of communicating Stay connected (e.g. phone, e-mail) with loved ones if separated
- Learn and use relaxation techniques that can help calm your mind and body
- Talk and share your feelings with others
- Find comfort in your spiritual and personal beliefs

Helping Children

There are a number of useful ideas that can help parents and caregivers in dealing with their children's emotional response to this phase of the pandemic. These include:

- Provide only age-appropriate information to children (Respond to questions in terms they can comprehend.)
- Be honest, but don't vent your frustrations or overwhelm the child
- Provide children with opportunities to talk about what they are seeing or hearing in the news and the community
- Provide play experiences to help relieve tension. Younger children in particular may find it easier to share their ideas and feelings about the event through non-verbal activities such as drawing.
- Don't be afraid to admit that you can't answer all of their questions
- Allow children to discuss other fears and concerns about unrelated issues
- Monitor children's television viewing. Limit your child's exposure to graphic or troubling scenes. Watch news reports with your child so that you are available to answer their questions and to monitor their reactions
- Keep regular schedules for activities such as eating, playing and going to bed to help restore a sense of security and normalcy.

Psychosocial Considerations – Appendix 5

You're Not Alone

Contagious diseases often prevent people from having close contact with friends and neighbors. During this difficult time, it is important to remember that you are not alone. Assistance in coping with the emotional challenges of the pandemic is available from many sources.

A toll-free phone number is available for emotional support at (877) 294-HELP (4357) and for TTY Assistance at (877) 294-4356. You can also find more ideas for coping online at <http://www.disastermentalhealthnj.com>.

Pandemic Period

The Emotional Impact of the Influenza Pandemic

The current influenza pandemic has resulted in serious illness and many flu-related deaths. Many families are experiencing the loss of one or more loved ones. Many of these losses feel very unfair, since young people, as well as the old or sick die from the flu. Stress and grief reactions are *normal* aspects of the emotional process in such situations. These reactions often include:

Physical reactions, such as:

- Fatigue
- General malaise and tiredness
- Susceptibility to illness (all which may easily be confused with early symptoms of influenza)

Emotional disruption –

- Sadness
- Anxiety
- Loneliness
- Guilt and shame
- Feeling isolated and alien from others

Changes in thinking –

- Impaired concentration
- Problems with short-term memory
- Disrupted problem-solving abilities

In general, many individuals and families will experience a sense of physical and emotional exhaustion.

Psychosocial Considerations – Appendix 5

When a loved one dies

A pandemic disease does not discriminate. It can take the life of the young and the old, the healthy and the sick, the rich and the poor. When a loved one dies, common reactions include:

- Feeling confused, numb, disbelief, bewildered, or lost
- Feeling angry at the person who died or at the people considered responsible for the death
- Strong physical reactions, such as nausea, fatigue, shakiness, and muscle weakness
- Intense emotions, such as extreme sadness, anger or fear
- Increased risk for physical injury or illness

Coping with grief and loss: What helps

There are several useful approaches to managing the powerful emotional reactions that can follow the serious illness or death of a loved one. These include:

- Talking to another person for support or spending time with others
- Engaging in positive distracting activities (hobbies, reading, etc.)
- Getting adequate rest and eating healthy meals
- Exercising in moderation
- Trying to maintain a normal schedule
- Focusing on something practical that you can do right now to manage the situation better
- Using relaxation methods (breathing exercises, meditation, calming self-talk, soothing music, etc.)
- Keeping a journal
- Seeking counseling

You're Not Alone

These powerful emotional reactions can further isolate us from others. During this difficult time, it is important to remember that you are not alone. Assistance in coping with the emotional challenges of the pandemic is available from many sources.

A toll-free phone number is available for emotional support at (877) 294-HELP (4357) and for TTY Assistance at (877) 294-4356. You can also find more ideas for coping online at <http://www.disastermentalhealthnj.com>.

Psychosocial Considerations – Appendix 5*Handout for Community Mental Health Agencies and Counselors***Coping with Fears about Avian Influenza**

Local residents struggle to deal with emotions triggered by new health risk

For Additional Information Contact:

New Jersey Department of Human Services

Division of Mental Health and Addiction Services

Disaster and Terrorism Branch

Trenton, New Jersey

609-777-0728

www.disastermentalhealthnj.com

Trenton, NJ - Across the entire country and all around New Jersey, people are beginning to hear about birds and other animals becoming sick with avian influenza. Even though this disease occurs primarily in migratory birds and poultry; it has raised fears of a possible flu outbreak in humans. Public health officials are closely watching how birds and animals are affected by this illness. Many New Jersey residents are expressing fears about contracting the disease and have been reaching out to medical professionals and others to learn more about the risk. Health care and mental health experts say that during times of uncertainty about a new disease, it is important to understand the risks, emotional reactions, and ways of dealing with the stress that such situations can cause.

The current changes in bird and animal health may affect everyone's health or may continue as a bird and animal problem only. When faced with the frightening news about a health risk, it is natural and normal for people to experience emotional changes. The New Jersey Department of Health and Senior Services and Department of Human Services-Division of Mental Health and Addiction Services have partnered to help New Jersey residents manage the emotional challenges related to avian influenza.

Health care and mental health experts agree that everyone has different ways of reacting to trying events such as health risks. It is quite normal and natural for people to experience stress reactions in both physical and emotional ways. Experts explain that these reactions can include:

- Preoccupation with thoughts or interest in health-related news stories
- Inability to concentrate at work or school
- Irritability with others
- Sleeping difficulties
- Depression or feelings of hopelessness
- Feelings of distrust
- Worry about personal and family safety

There are many ways to deal with fear and anxiety about avian influenza. One way is by keeping up with the news. It is important that news about any health risks comes from credible sources of health care information. Occasional checks for updates in the news can be helpful, but it is also important to know when to put down

the newspaper or turn off the television. Right now there are things that can help people cope with the physical and emotional stresses related to the changing news about avian influenza. These include:

Psychosocial Considerations – Appendix 5

- Staying informed, but not overly preoccupied with the news
- Staying physically and mentally busy
- Keeping to your normal daily routines
- Communicating openly with friends and family
- Relying on your normal sources of support
- Following expert advice for personal and family preparedness
- Reaching out for emotional support or professional help if necessary

Health care experts explain that understanding and managing fear and anxiety when a new illness emerges is an important part of fighting the disease. For people experiencing difficulty coping with the stress associated with the changing health news, a toll-free phone number is available for emotional support. Trained crisis counselors are available at (877) 294-HELP (4357) or for TTY assistance at (877) 294-4356. The Division of Mental Health and Addiction Services-Disaster and Terrorism Branch has more information and ideas for coping online at <http://www.disastermentalhealthnj.com>.

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Psychosocial Considerations – Appendix 5*Press Template***Coping with Fears about Avian Influenza****How to deal with emotions triggered by new health risk****For Additional Information Contact:**

New Jersey Department of Human Services
Division of Mental Health and Addiction Services
Disaster and Terrorism Branch
Trenton, New Jersey
609-777-0728
www.disastermentalhealthnj.com

Trenton, NJ - As we enter “flu season,” people across the country and around New Jersey are beginning to hear about birds and other animals becoming sick with avian influenza. Even though this disease occurs primarily in migratory birds and poultry, it has raised fears of a possible flu outbreak in humans. Public health officials are closely watching how birds and animals are affected by this illness.

Because many New Jersey residents fear that they might contract the disease and want to learn more about the risk, both health care and mental health care experts stress that “knowledge is power.” They say that during times of uncertainty about a new disease, it is important not only to follow healthcare directives and activities, but also to understand the risks, emotional reactions, and ways of dealing with the stress caused by such situations.

The current changes in bird and animal health may affect everyone’s health...or may merely continue as a bird and animal problem only.

If avian flu does become a frightening health risk, it will be natural and normal for people to experience emotional changes. To help New Jersey residents manage the emotional challenges related to avian influenza, the New Jersey Department of Health and Senior Services and Department of Human Services-Division of Mental Health and Addiction Services have partnered to develop some simple suggestions for coping with this potential health hazard.

Health care and mental health experts agree that while everyone has different ways of reacting to events such as health risks, there are a number of quite normal and natural reactions that people can experience in both physical and emotional ways, such as:

- Preoccupation with thoughts or interest in health-related news stories
- Inability to concentrate at work or school
- Irritability with others
- Sleeping difficulties
- Overeating or turning to other substances for comfort
- Depression or feelings of hopelessness

Psychosocial Considerations – Appendix 5

- Feelings of distrust
- Worry about personal and family safety

There are many ways to deal with fear and anxiety about avian influenza. One way is to keep up with the news; but make sure to get news about any health risks from credible sources of health care information.

Occasional checks for updates in the news can be helpful; but it is also important to know when to put down the newspaper or turn off the television. Here are some immediate ways to help people cope with the physical and emotional stresses related to the changing news about avian influenza. You should:

- Stay informed, but do not become overly preoccupied with the news
- Stay physically and mentally busy
- Keep to your normal daily routines
- Maintain healthy practices of a good diet, cleanliness, and exercise
- Get plenty of sleep and set aside times for relaxation
- Communicate openly with friends and family
- Rely on your normal sources of support
- Follow expert advice for personal and family preparedness
- Reach out for emotional support or professional help if necessary

Remember... an important part of fighting the disease is learning how to understand and manage anxiety when a new illness emerges. Movies may show throngs of people panicking in the streets or storming into places of safety... but in real life, that is not the healthy approach to handling any public health situation.

For people experiencing difficulty coping with the stress associated with the changing health news, a toll-free phone number is available for emotional support. Trained crisis counselors are available at (877) 294-HELP (4357) or for TTY assistance at (877) 294-4356. The Division of Mental Health and Addiction Services-Disaster and Terrorism Branch has more information and ideas for coping online at <http://www.disastermentalhealthnj.com>.

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Psychosocial Considerations - Appendix 6

DESCRIPTION OF WEB BASED AND TELE CRISIS OPTIONS AND HOW TO ACCESS THEM

Web-based Resources for Managing the Psychosocial Impact of an Influenza Pandemic

Overview

The Department of Human Services-Division of Mental Health and Addiction Services-Disaster and Terrorism Branch, in cooperation with the Department of Health, will develop web-based resources to address undesirable psychological, emotional, and behavioral responses to an influenza pandemic. The target audiences for such resources are the general public and providers of health care, mental health care and related human services; and first responders. These phase-specific resources are psycho-educational in nature, addressing the impact (i.e., typical emotional and behavioral reactions, etc.) and intervention (i.e., strategies and techniques for coping), as well as introducing appropriate resources (i.e., downloadable printed materials, links to helpful websites, organizations, etc.).

The objectives of web-based resources developed for the public include:

- Provide accurate information and education regarding the emotional and behavioral response to the various phases of a pandemic;
- Increase health protective behaviors and response behaviors (i.e., individuals under extreme stress will need reminders to take care of their own health and limit potentially harmful behaviors);
- Reduce a potential surge in demand for health care services by mitigating stress-related responses to the outbreak;
- Reduce social isolation;
- Reduce stigma and discrimination that may further complicate response and recovery;
- Maximize the individual's ability to care for self and family;
- Facilitate connectedness to family and other social supports via virtual or electronic means;
- Maintain a sense of community;
- Foster hope and optimism while appropriately addressing risk.

The format of such web-based programs includes, but is not limited to:

- Asynchronous distance learning programs (PowerPoint slides with voice-over narration and/or video of narrator converted to Flash to compress file size and increase ease of use on all types of computers);
- Creation/ facilitation of synchronous and/or asynchronous virtual support communities to foster a sense of community cohesion (i.e., web-based forums using text, voice and/or web-cams; telephone, etc.);
- Development of other web-based resources such as downloadable publications addressing the psychosocial aspects of the outbreak.

Such web-content may be hosted on multiple servers, including those of the Department of Human Services, the Division of Mental Health and Addiction Services, and potentially by partner agencies, such as the NJ Learns learning management system hosted by the Office of Homeland Security and Preparedness and the Department of Health to extend their reach.

Psychosocial Considerations - Appendix 7

NEW JERSEY ASSOCIATION OF COUNTY MENTAL HEALTH ADMINISTRATORS
2013

County (Region)	Name	Address	Phone/Fax/E-mail
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Burlington (South)	Barbara Biglin Rachel Morgan	Mental Health Administrator 795 Woodlane Road P. O. Box 6000 Mt. Holly, NJ 08060	(609) 265-5545 (609) 265-5382 (Fax) E-mail: bbiglin@co.burlington.nj.us rmorgan@co.burlington.nj.us
Camden (South)	Marilyn Corradetti	Mental Health Coordinator 2500 McClellan Avenue Suite 110 Pennsauken, NJ 08109-4212	(856) 663-3998 x224 (856) 663-7182 (Fax) E-mail: mhadmin@cpachvi.org
Cape May (South)	Patricia Devaney	Cape May Courthouse DN 907 County Admin. Building 4 Moore Rd. Cape May Court House, NJ 08210	(609)465-1055 E-mail: devaneyp@co.cape-may.nj.us
Cumberland (South)	Juanita Nazario	Department of Human Services 99 W. Broad St. Bridgeton, NJ 08302	(856) 451-3727 856-455-5756 (Fax) E-mail: juanita@co.cumberland.nj.us
Essex (North)	Joseph Scarpelli, D.C.	County of Essex Office of Mental Health Administrator 204 Grove Ave. Cedar Grove, NJ 07009	(973) 571-2821/ 2822 (973) 571-2820 (Fax) E-mail: jscarpelli@health.essexcountynj.us
Gloucester	Kathy Spinosi	Gloucester Cty. Institute of	(856) 681-6128 x2036

County (Region)	Name	Address	Phone/Fax/E-mail
(South)		Technology 1340 Tanyard Rd. Sewell, NJ 08080	(856) 681-6133 (Fax) E-mail: kspinosi@co.gloucester.nj.us
Hudson (North)	Robin James	HC Dept of Health & Human Svc 595 County Ave, Bldng # 2 Secaucus, NJ 07094	Tel: 201-369-5280 ext. 4250 Fax: 201-395-5662 E-mail: rjames@hcnj.us
Hunterdon (Central)	Cathy Zahn	Dept. of Human Services 8 Gaunt Place P. O. Box 2900 Flemington, NJ 08822-2900	(908) 788-1372 (908) 806-4204 (Fax) E-mail: czahn@co.hunterdon.nj.us
Mercer (Central)	Michele Madiou	Mercer Co. Div. of Mental Health 640 South Broad Street P. O. Box 8068 Trenton, NJ 08650	(609) 989-6574/6529 (609) 989-6032 (Fax) E-mail: mmadiou@verizon.net
Middlesex (Central)	Penny Grande	Mental Health Administrator Middlesex County Office of Human Services JFK Square, 5th Floor New Brunswick, NJ 08901	(732) 745-4313 (732) 296-7971 (Fax) E-mail: penny.grande@co.middlesex.nj.us
Monmouth (Central)	Barry W. Johnson	Mental Health Board 3000 Kozloski Road P. O. Box 3000 Freehold, NJ 07728-3000	732-431-6451 (732) 866-3595 (Fax) E-mail: Barry.Johnson@co.monmouth.nj.us
Morris (North)	Laurie Becker	Department of Human Services 30 Schuyler Place P. O. BOX 900 Morristown, NJ 07963-0900	(973) 285-6852 (973) 285-6713 (Fax) E-mail: lbecker@co.morris.nj.us
Ocean (Central)	Jill Perez Contact: Tracy Maksel, Asst. M.H. Admin.	Department of Human Services 1027 Hooper Ave, Building 2 P. O. Box 2191 Toms River, NJ 08754-2191	(732) 506-5374 (732) 341-4539 (Fax) E-mail: jperez@co.ocean.nj.us tmaksel@co.ocean.nj.us

County (Region)	Name	Address	Phone/Fax/E-mail
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Sussex (North)	Christine Florio Melissa Latronica	County of Sussex One Spring Street Newton, NJ 07860	(973) 948-6000 ext 1381 (973) 948-6664 (Fax) E-mail: cflorio@sussex.nj.us mlatronica@sussex.nj.us
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Warren (Central)	Shannon Brennan	Warren County DHS 202 Mansfield Street Belvidere, NJ 07823	908-475-6092 or 6080 Fax - 908-475-6085 email - sbrennan@co.warren.nj.us

SECTION IV. GLOSSARY

ACIP	Advisory Committee on Immunization Practices: an advisory committee of the Centers for Disease Control and Prevention.
Antiviral	An agent used to kill or suppress growth of viruses, including influenza. Antivirals are not vaccines. Other therapies for influenza may include fever-reducing medicine, oral or intravenous hydration, and mechanical ventilation.
APHL	Association of Public Health Laboratories
CAP	Community-Acquired Pneumonia
CDC	Centers for Disease Control and Prevention (U.S.)
CDRSS	Communicable Disease Reporting and Surveillance System (NJDOH): a web-enabled, CDC-specification compliant application that is used to enter, update and track New Jersey's reportable communicable disease information.
CDS	Communicable Disease Service: the program within NJDOH responsible for prevention and control of communicable diseases.
CDS-HES	Communicable Disease Service Health Educators
CI	Critical Infrastructure
CSTE	Council of State and Territorial Epidemiologists
DGMQ	Division of Global Migration and Quarantine (CDC)
DOC	Department of Corrections (NJ)
DTB	Disaster and Terrorism Branch of the Division of Mental Health and Addiction Services (within the New Jersey Department of Human Services)
ECC	Emergency Communications Center (phone bank within NJDOH CDS)
EHPA	Emergency Health Powers Act, N.J.S.A. 26:13-1 et seq.
EMS	Emergency Medical Services
ESAR-VHP	Emergency System for Advance Registration of Volunteer Health Professionals
FQHC	Federally Qualified Health Center: a facility located in a medically underserved area that has been approved by the federal government to

	provide low cost, preventive primary medical care to Medicare beneficiaries. FQHCs include community health centers, tribal health clinics, migrant health services, and health centers for the homeless.
FSIS	Food Safety and Inspection Service (U.S. Department of Agriculture)
H5N1	A specific strain of influenza A virus
HAN	Health Alert Network: Electronic communication between CDC and NJDOH. Also called LINCS (Local Information Network and Communications System) when NJDOH communicates to LINCS agencies and when LINCS agencies communicate with community partners.
HCC	Health Command Center (emergency operations center at NJDOH)
HCP	Health Care Provider: A physician, advanced practice nurse, physician's assistant or a person having control or supervision over a hospital or other health care institution, correctional facility, school, summer camp, child care center, preschool, or institution of higher education.
HCWs	Healthcare Workers
Healthcare Entities	Hospitals, long-term care facilities, home care agencies, emergency medical services, primary care centers (including Federally Qualified Health Centers [FQHCs]), and private health professionals.
HERC	Health Educator/Risk Communicator, on staff in LINCS agencies
HHS	U.S. Department of Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act (U.S.)
Home Health Agency	A facility licensed by NJDOH to provide preventive, rehabilitative and therapeutic services to patients in the patient's home or residence. This includes nursing, homemaker-home health aides, and physical therapy services. See Home Health Agency Licensing Standards, N.J.A.C. 8:42-1.2.
Hospice Agency	A program licensed by NJDOH to provide palliative services to terminally ill patients in the patient's home or place of residence, including medical, nursing, social work, volunteer and counseling services. See Hospice Licensing Standards, N.J.A.C. 8:42C-1.2.
ICS	Incident Command System
ILI	Influenza-Like Illness (fever > 100°F AND cough and/or sore throat, in the absence of a known cause)

ISP	Influenza Surveillance Program (within NJDOH CDS)
JIC	Joint Information Center
LAD	Local Antiviral Distribution sites
LEPC	Local Emergency Planning Council
LHD	Local Health Department: Responsible for the provision of local public health services.
LINCS	Local Information Network and Communications System comprised of 21 strategically located public health agencies in NJ responsible for planning, coordination, and delivery of specialized services related to public health emergencies
LOP	Laboratory Outreach Program
LRN	Laboratory Response Network
LTCFs	Long Term Care Facilities: Assisted living residences and nursing homes. These are facilities licensed by NJDOH under N.J.A.C. 8:36 and N.J.A.C. 8:39.
MCC	Medical Coordination Center (NJDOH)
MHA	Mental Health Administrators (county)
MHANJ	Mental Health Association in New Jersey
MMWR	Morbidity and Mortality Weekly Report
MRC	Medical Reserve Corps: Professional and lay volunteers who have registered to provide assistance during a public health emergency.
NJDA	New Jersey Department of Agriculture
NJDEP	New Jersey Department of Environmental Protection
NJDHS	New Jersey Department of Human Services, the state's social service agency
NJDOH	New Jersey Department of Health
NJEPI	New Jersey Emergency Preparedness Inventory System: Used for tracking vaccine inventory.
NJIIS	New Jersey Immunization Information System: A web enabled interactive registry that is used by both the private and public sectors for tracking

	individuals' immunization information. It is internet accessible and password protected.
NJNG	New Jersey National Guard
NJOEM	New Jersey Office of Emergency Management
NJOHSP	New Jersey Office of Homeland Security and Preparedness
NJPVS	New Jersey Preparedness Vaccination System: A module of NJIIS used for tracking vaccine administration.
N.J.S.A.	New Jersey Statutes Annotated
NJSP	New Jersey State Police
Non-Healthcare Entities	Non-healthcare entities: Local and state agencies including public health agencies, private corporations and businesses, schools and universities, and congregate living facilities not considered healthcare entities (e.g., prisons, dormitories, group homes).
NPI	Non-Pharmaceutical Intervention: Community strategies that do not involve vaccines or medications. It includes social distancing strategies to reduce contact between people.
OAG	Office of Attorney General (NJ)
OCOM	Office of Communications (NJDOH)
OEM	Office of Emergency Management: Office within the NJ State Police that plans, directs and coordinates emergency operations. Each county also has an OEM.
OIE	Office International des Epizooties (World Organization for Animal Health)
OSHA	Occupational Safety and Health Administration (U.S.)
PCC	Public Call Center (PHILEP)
PEOSH	Public Employees Occupational Safety and Health (NJDOH)
PHEL	Public Health and Environmental Laboratories (NJDOH)
PHILEP	Division of Public Health Infrastructure, Laboratories and Emergency Preparedness (NJDOH)
PIO	Public Information Officer

POD	Point of Dispensing: Term used for a mass prophylaxis clinic
PPE	Personal protective equipment
PSA	Public Service Announcement
RODS	Real-time Outbreak and Disease Surveillance: A national effort to monitor sales of over-the-counter healthcare products and analyze them for aberrations suggestive of a disease outbreak.
ROIC	Regional Operations and Intelligence Center, a division of NJ State Police
RSS Site/Facility	Receipt, Storage, Staging Site/Facility: Facility designated for receiving, storing and staging of pharmaceuticals, equipment and supplies required for an emergency operation, especially those items associated with the Strategic National Stockpile.
SEOC	State Emergency Operations Center (NJ)
SNS	Strategic National Stockpile: Assets (medicine, medical supplies, equipment and vaccines) supplied to state agencies by the federal government to supplement and replace stocks normally held by healthcare facilities and to support expanded dispensing capabilities in case of a large-scale public health emergency.
SSS	Strategic State Stockpile
USDA	United States Department of Agriculture
VDP	Vaccine Distribution Plan
VMI	Vendor Managed Inventory
VPDP	Vaccine Preventable Disease Program (within NJDOH CDS)
WHO	World Health Organization