

**Cuyahoga County Pandemic Influenza
Response Plan
Version 0.9 (May 2, 2006)**

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Influenza Pandemic Response Plan Cuyahoga County

I. Purpose

The purpose of this Influenza Pandemic Response Plan is to provide a framework for identifying, responding to, and controlling an influenza pandemic in Cuyahoga County. The plan details local response activities to be taken by local public health before, during, and after an influenza pandemic. Public health activities at the local level will be coordinated through The Cuyahoga County Public Health Collaborative (CCPHC). The CCPHC consists of four local health departments, Cuyahoga County Board of Health, Cleveland Department of Public Health, Shaker Heights Department of Health, and Lakewood Department of Health. This plan follows guidance by the U.S. Department of Health and Human Services (DHHS) and the Ohio Department of Health (ODH). It is also compliant with the National Incident Management System (NIMS) developed by the Federal Emergency Management Agency. It is meant to be a dynamic document and will be regularly reviewed and updated as new information on the novel virus, its spread, treatment, and prevention becomes available. Although this plan focuses on influenza, it may be adapted to address other large-scale outbreaks of highly infectious respiratory diseases.

II. Assumptions

1. The novel virus will have the ability to spread rapidly throughout the world
2. People may be asymptomatic while infectious
3. Simultaneous or near-simultaneous outbreaks will occur in communities throughout the U.S. limiting the ability of one jurisdiction to provide support and assistance to other areas.
4. There will be overwhelming demands on the healthcare system and shortages of essential resources will occur
5. Delays and shortages in vaccine and antiviral drug availability can be expected
6. There is a potential for disruption of local and national critical infrastructures (transportation, commerce, utilities, public safety, etc.) due to worker absenteeism

III. Federal and State Roles

The following is excerpted from *The National Strategy for Pandemic Influenza* available at <http://www.whitehouse.gov/homeland/pandemic-influenza.html>.

A. Federal Roles

Federal responsibilities include the following:

- Advancing international preparedness, surveillance, response and containment activities.
- Supporting the establishment of countermeasure stockpiles and production capacity by:
 - Facilitating the development of sufficient domestic production capacity for vaccines, antivirals, diagnostics and personal protective equipment to support domestic needs, and encouraging the development of production capacity around the world;
 - Advancing the science necessary to produce effective vaccines, therapeutics and diagnostics; and
 - Stockpiling and coordinating the distribution of necessary countermeasures, in concert with states and other entities.
- Ensuring that federal departments and agencies, including federal health care systems, have developed and exercised preparedness and response plans that take into account the potential impact of a pandemic on the federal workforce, and are configured to support state, local and private sector efforts as appropriate.
- Facilitating state and local planning through funding and guidance.
- Providing guidance to the private sector and public on preparedness and response planning, in conjunction with states and communities.

Lead departments have been identified for the medical response (Department of Health and Human Services), veterinary response (Department of Agriculture), international activities (Department of State) and the overall domestic incident management and Federal coordination (Department of Homeland Security). Each department is responsible for coordination of all efforts within its authorized mission, and departments are responsible for developing plans to implement this *Strategy*.

B. States and Locality Roles

State and local responsibilities include the following:

- Ensuring that all reasonable measures are taken to limit the spread of an outbreak within and beyond the community's borders.
- Establishing comprehensive and credible preparedness and response plans that are exercised on a regular basis.
- Integrating non-health entities in the planning for a pandemic, including law enforcement, utilities, city services and political leadership.
- Establishing state and community-based stockpiles and distribution systems to support a comprehensive pandemic response.

- Identifying key spokespersons for the community, ensuring that they are educated in risk communication, and have coordinated crisis communications plans.
- Providing public education campaigns on pandemic influenza and public and private interventions.

IV. Pandemic Phases

This plan will organize response activities by the World Health Organization's (WHO) Influenza Pandemic phases which are detailed below. (The following is excerpted from <http://www.cdc.gov/flu/pandemic/phases.htm>.)

A. Interpandemic period:

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

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

B. Pandemic Alert Period:

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

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

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

C. Pandemic Period:

Phase 6: Pandemic: increased and sustained transmission in general population. This phase includes periods when virus activity has subsided and a second wave.

Notes: The distinction between **phases 1** and **2** is based on the risk of human infection or disease resulting from circulating strains in animals. The distinction is based on various factors and their relative importance according to current scientific knowledge. Factors may include pathogenicity in animals and humans, occurrence in domesticated animals and livestock or only in wildlife, whether the

virus is enzootic or epizootic, geographically localized or widespread, and other scientific parameters.

The distinction among **phases 3, 4, and 5** is based on an assessment of the risk of a pandemic. Various factors and their relative importance according to current scientific knowledge may be considered. Factors may include rate of transmission, geographical location and spread, severity of illness, presence of genes from human strains (if derived from an animal strain), and other scientific parameters.

V. Command and Control

In the event of an influenza pandemic, local agencies will operate under an Incident Command Structure/Unified Command Structure (ICS/UCS) which will be compliant with the National Incident Management System (NIMS). The Northeast Ohio (NEO) Homeland Security Planning Region has developed a Regional Command and Control Plan that addresses decision making and communications during events that cross jurisdictional lines. Coordination of interagency activities will be done through the Emergency Operations Center (EOC). Public Health will have a representative in the EOC and hospitals will be represented by Center for Health Affairs.

VI. Communications

A. Interoperable

Interpandemic Period:

1. Utilize the Ohio Public Health Communication System (OPHCS) as appropriate. The NEO Epidemiologic Response Team has developed Standard Operating Procedures (SOP) for regional notifications. This SOP is part of the NEO Regional Epidemiologic Response Plan and is numbered NEOERT-SOP01
2. Utilize the Multi-Agency Radio Communication System (MARCS) during drills and exercises and participate in the monthly radio checks. The Northeast Ohio Public Health Planning Region has developed a MARCS Radio Protocol that includes routine tests.
3. Become familiar with and utilize other available technology [i.e. Video Conferencing via ISDN (Integrated Services Digital Network), VoIP Phones (Voice over Internet Protocol), and national coverage area walkie talkie phones].
4. Provide training on equipment to appropriate staff.
5. Participate in local drills and exercises that test interoperable communication.

Pandemic Alert:

1. Ensure that equipment is working properly and available for use.
2. Ensure that proper protocols are in place for use of equipment.
3. Ensure that appropriate staff are trained on protocols and proper use of equipment.

Pandemic:

1. Uses established communication modes to share information with local partners on a regular basis.
2. Assign MARCS radios and walkie talkie phones to staff as appropriate.

B. Risk Communication

Each public health jurisdiction has Risk Communication plan that will be followed in the event of a pandemic influenza. The current plans will include an annex specific to pandemic influenza. **Please refer to Appendix A for the Pandemic Influenza Communication Plan Annex.**

Interpandemic Period:

1. Develop and maintain a database of local providers.
2. Assess information needs of local providers and the general public.
3. Identify logistical constraints to effective communications, such as, communications staffing and equipment needs and public information call center staffing capacity
4. Develop and maintain PIO information of large businesses in the area.
5. Update existing Crisis Communication plans as appropriate
6. Educate general public about influenza pandemics, avian influenza, and steps to reduce transmission. Information may be disseminated via website, newspaper editorials, flyers and billboards and television and radio broadcasts.
7. Coordinate with CDC, ODH, and local health departments adjacent to jurisdiction to develop common health messages and education materials.

Pandemic Alert:

1. Communicate regularly with local providers through established system
2. Provide public education utilizing the internet, media, and other identified sources.
3. Public Health would set up a phone bank to answer public inquires as needed

Pandemic:

1. Establish a Joint Information Center (JIC) with local and/or regional partners as necessary.
2. Establish a public information call center as necessary.

3. Conduct regular briefings with key response partners (EOC staff, business leaders, community based organizations, first response agencies, and critical agencies)
4. Conduct regular media briefings

Return to Interpandemic:

1. Make recommendations for change and modify plans as needed.
2. Provide an after action report for pertinent agencies.
3. Continue risk communication activities as the situation dictates.

VII. Surveillance

A. Federal Level Activities

National influenza surveillance is coordinated through the CDC. The Influenza Branch at CDC collects and reports information on influenza activity in the United States each week from October through May. There are 4 main components to of influenza surveillance in the United States (information obtained from “Supplement 1: Pandemic Influenza Surveillance” of the Health and Human Services Pandemic Influenza Plan available at <http://www.hhs.gov/pandemicflu/plan/pdf/HHSPandemicInfluenzaPlan.pdf>):

- 1.) **Virologic surveillance:** There are about 75 World Health Organization (WHO) and 50 National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories located throughout the United States that report the total number of respiratory specimens tested and the number positive for influenza types A and B each week. Some of these laboratories report the influenza A subtype of the viruses they have isolated and the ages of the persons from whom the specimens were collected. Certain influenza viruses collected by laboratories are sent to CDC for more testing.
- 2.) **Outpatient ILI surveillance:** Each week, approximately 2,300 primary care providers around the country report the total number of patients seen and the number of those patients with influenza-like illness (ILI) by age group. For this system, ILI is defined as fever (temperature of >100°F) plus either a cough or a sore throat in the absence of a known cause other than influenza.
- 3.) **Hospitalization surveillance:** Hospitalizations associated with laboratory-confirmed influenza in children are monitored in 12 metropolitan areas through the Emerging Infections Program (EIP) influenza project and the New Vaccine Surveillance Network (NVSN). Patient-level data is sent to CDC every 2 weeks.
- 3.) **Mortality surveillance:** Each week, the vital statistics offices of 122 cities report the total number of death certificates filed and the number of those for which pneumonia or influenza was listed as the underlying or as a contributing cause of death.
- 4.) **State-level influenza activity assessments:** State health departments report the estimated level of influenza activity in their states each week. States

report influenza activity as no activity, sporadic, local, regional, or widespread. (See <http://www.cdc.gov/flu/weekly/fluactivity.htm> for activity level definitions.)

B. State Level Activities

Influenza Surveillance at the state level is coordinated by the Ohio Department of Health (ODH) and consists of the following:

- 1) The Ohio Department of Health Laboratory (ODHL) reports number and type of influenza viruses each week and sends representative and unusual viral specimens to the CDC for comparative antigenic and genetic analysis.
- 2) ODH reports weekly level of activity (widespread, regional, local, sporadic, or no activity) to the CDC.
- 3) ODH maintains a voluntary, statewide network of approx. 60 sentinel physicians who report the number of patients presenting to their office w/ ILI and the total number of patient visits by age group each week.
- 4) Vital Statistics offices in Akron, Canton, Cincinnati, Cleveland, Columbus, Dayton, Toledo, and Youngstown report weekly to ODH the percentage of total deaths caused by pneumonia and influenza.

For more information on the ODH plan for surveillance during a pandemic, please refer to their Influenza Pandemic Response Plan: Version 2.0.

C. Animal Surveillance

Highly pathogenic avian influenza is reportable to the Ohio Department of Agriculture (ODA). If an avian influenza outbreak occurs among birds in Ohio, ODA would be the lead agency. There is an Animal Disease Incident Annex of the Ohio Emergency Operations Plan that addresses this type of situation. Local public health would assist with collection, disposal, and transportation of animals as requested. Currently, the local health department is involved in collecting animals for rabies surveillance and have collected dead birds in the past for West Nile virus surveillance. Current collection procedures could be adapted in the event of an avian influenza outbreak. As part of Cuyahoga County Board of Health's (CCBH) all Hazard Plan, an annex is being developed for NIMS Target Capability No. 2: Animal Health Emergency Support. This plan will be shared with local partners when complete.

ODH is working to establish a syndromic surveillance system for zoonotic diseases. RODS will be adapted to animal data sources. This system will obtain data from emergency veterinary clinics and possible fields include date and time of visit, complaint/initial clinical impression, zip code of animal, species of animal, breed of animal, gender of animal, and age of animal. Local public health will work with ODH to implement the new system into local facilities.

D. Local Activity Level

Activities at the local level will be coordinated through the CCPHC. Specific phase-based activities are as follows:

Interpandemic Period:

1. Continue and enhance/expand current surveillance program
 - a. Per Ohio Administrative Code 3701-3-02, 3701-3-13, and 3701-3-12 hospitals and laboratories are required to report influenza by number by the end of each work week. In Cuyahoga County, reports are received by central reporting (Cuyahoga County Board of Health) and culture confirmed and positive rapid test results are entered into the Ohio Disease Reporting System (ODRS).
 - b. Currently over 40 sites (including big business, child care, special care sites, Urgent Care, and schools) across Cuyahoga County participate in local sentinel surveillance. Information is updated weekly and posted on www.ccbh.net.
2. Continue to collaborate with ODH to implement Real-Time Outbreak and Disease System (RODS) in local hospitals.
3. Report and investigate influenza related deaths as required by ODH
4. Educate local providers and reporters on importance of influenza testing and reporting.

Pandemic Alert, Phases 3 & 4:

If the novel virus appears first elsewhere:

1. Continue all activities conducted in pre-pandemic period. Enhance and modify surveillance activities as needed based on CDC and ODH guidance. Collaborate with partners to ensure accurate and timely reporting.
2. Participate in CDC and ODH surveillance activities.
3. Monitor Health Alert Network (HAN), OPHCS, and CDC's Epi-X and other appropriate sources for updates regarding international, federal and state surveillance activities as well as for current recommendations.
4. Viral culture and testing should be performed on patients presenting with ILI who have had a recent travel history to a region where the pandemic influenza strain is circulating or who have unusually severe symptoms. Consult with ODH for guidance on testing and disseminate to local providers, infection control practitioners (ICPs), emergency departments, laboratory directors, and urgent care centers. Provide instruction for safe handling and shipment of specimens to ODHL. **See Appendix E for current guidance.**
5. Initiate passive surveillance measures to include individuals who have been hospitalized with unexplained pneumonia, acute respiratory distress syndrome (ARDS), or severe respiratory illness AND who have traveled to countries where exposure to novel virus might occur.

If the novel virus appears first in Cuyahoga County:

1. Continue all activities conducted in pre-pandemic period regardless of time of year and conduct thorough epidemiological investigations of early cases. Collaborate with partners to ensure accurate and timely reporting.
2. Continue to facilitate collection and testing of appropriate specimens.
3. Update local laboratory directors, providers, ICPs, emergency departments, and urgent care centers regularly and request testing. Provide information and guidance on submitting specimens to ODHL. (NOTE: ODH is currently working to enroll hospitals in the Ohio Public Health Communication System (OPHCS) and developing the Ohio Laboratory Response Network System to communicate with these groups.)
4. The following will immediately be reported to ODH by telephone who will, in turn, report to the CDC: test positive for a novel influenza subtype OR a case that meets the enhanced surveillance case definition in effect at that time *and* cannot be subtyped in the state public health laboratory because appropriate reagents or biocontainment equipment is not available.
5. Following an initial telephone report of a case that meets the above criteria, a CDC case screening and report form will be completed. The report form will be obtained from the CDC Hotline or Epi-X.
6. If the local jurisdiction's resources are overwhelmed, the Northeast Ohio Region Epidemiology Response Plan would be activated.
7. Request aid and additional resources from ODH and CDC as needed for epidemiological investigations and case tracking activities.

Pandemic Alert, Phase 5:

1. Continue with surveillance activities as before. Enhance and modify activities based on CDC and ODH guidance. Collaborate with partners to ensure accurate and timely reporting.
2. Continue to participate in CDC and ODH surveillance activities
3. Continue to monitor HAN, OPHCS, and Epi-X for current recommendations on surveillance.
4. Communicate and provide updates on surveillance activities to local providers, hospitals, laboratories, and urgent care centers through established systems.
5. Consider broadening enhanced passive surveillance to include day care centers, long-term care facilities, and occupational sites. Unexplained deaths may also be investigated, including possible influenza testing by the coroner's office.
6. Consider starting active surveillance.
7. Continue to encourage and facilitate collection and testing of appropriate specimens.
8. The following will immediately be reported to ODH by telephone who will, in turn, report to the CDC: test positive for a novel influenza subtype OR a case that meets the enhanced surveillance case definition in effect at that

- time *and* cannot be subtyped in the state public health laboratory because appropriate reagents or biocontainment equipment is not available.
9. Following an initial telephone report of a case that meets the above criteria, a CDC case screening and report form will be completed. The report form will be obtained from the CDC Hotline or Epi-X.

Pandemic:

1. Continue with surveillance activities as before. Enhance and modify activities based on CDC and ODH guidance. Collaborate with partners to ensure accurate and timely reporting.
2. Increase sentinel surveillance to include demographics, date of birth, symptoms, specimen collection date, vaccine history, severity of illness.
3. Continue to participate in CDC and ODH surveillance activities.
4. Continue to monitor HAN, OPHCS, and Epi-X to stay up to date on national and international surveillance.
5. Follow the Northeast Ohio Region Epidemiology Response Plan for epidemiological duties and activities.
6. Collaborate with partners to monitor health impacts, including deaths and hospitalizations.
7. Collaborate with partners to monitor community impacts, including absenteeism in schools and essential services.
8. As the pandemic continues, the pandemic strain is likely to become a routinely circulating influenza virus. At this time, surveillance activities will be scaled down to pre-pandemic frequency and intensity. The decision on when it is appropriate to do so will come from the federal level and be communicated to local partners.

Second Wave:

1. Continue surveillance.
2. Continue surveillance activities for pandemic phase as needed.

Return to Interpandemic (Post-pandemic):

1. Summarize and analyze data to characterize pandemic and evaluate effectiveness of local response activities.
2. Make recommendations for change and modify plan as needed.
3. Provide a report for pertinent agencies.
4. Continue surveillance as needed.
5. Assist CDC and ODH in post-pandemic activities.

VIII. Strategies to Limit Transmission

Two main strategies exist to prevent transmission: 1) decrease contact between infected and uninfected persons and 2) decrease the probability that contact will result in infection if contact occurs. Both of these strategies are addressed below. **A Quarantine/Isolation SOP has been developed and can be found in**

Appendix C. Appendix D contains guidance for Acute Care Settings on isolation and infection control.

Interpandemic Period:

1. No use of community or individual containment measures outside of the health care setting is recommended at this phase and level.
2. Encourage the use and application of current recommended strategies to prevent health-care associated influenza

Pandemic Alert, Phases 3 & 4:

If cases of the novel virus are first detected in the United States:

1. Notify laboratory directors, infection control practitioners, physicians, hospital emergency departments and other health care providers and request collection of respiratory specimens on patients presenting with ILI who have had a recent travel history to a region where the pandemic influenza strain is circulating or who have unusually severe symptoms. Specimens will be sent to ODHL for viral culture and testing. **See Appendix E for current laboratory guidance.**
2. Persons who are positive for influenza A should be isolated until subtyping of their isolate can be accomplished. Isolation may take place either in the hospital or at home. Isolation should be continued for at least 7 days or until viral shedding is no longer detected, whichever is longer, or until the isolate is laboratory-confirmed not to be a novel influenza A virus.
3. If an animal source is identified with ongoing transmission within the animal population:
 - Advise persons who may be in contact with potentially infected animals to wear personal protective equipment (PPE), receive influenza vaccine and use antiviral chemoprophylaxis.
 - Ensure that persons exposed to infected animals or the animals' contaminated environment are monitored for febrile, respiratory and conjunctival illness.
 - If persons exposed to the animal source of influenza become ill, ensure that these individuals are isolated at home or in a hospital, conduct rapid testing for influenza and arrange for viral culture or collection of respiratory specimens.
 - Work with ODH officials to ensure provision of antiviral medication for treatment.
4. If no animal source is identified:
 - Work with federal and state partners to determine epidemiologic links between infected persons.
 - Work with ODH to ensure that persons with known or suspected influenza are isolated at home or in a hospital as detailed above.
 - Quarantine contacts of infected persons at home for 7 days or until influenza is ruled out in their contact. (Contacts are defined as persons residing in the same home and persons working within 6 feet of a suspected person.)

If cases of the novel virus are first detected outside of the U.S:

1. Consider isolation of recent (within 7 days) travelers to the implicated region if they have ILI and recommend testing for influenza A. If influenza is suspected or confirmed, the individual would be isolated at home or in a hospital as detailed above.
2. The Cleveland Hopkins International Airport has a protocol in place to respond to any reported or suspected communicable disease incident.

Pandemic Alert, Phase 5:

Containment measures will be dictated by available resources, effectiveness of measures and epidemiology of the disease. If cases are detected in the United States, containment measures may include the following:

1. Isolation of persons with confirmed or suspected influenza as detailed above.
2. Quarantine contacts of cases at home for 7 days or until influenza is ruled out in their contact.
3. Work with local communities to discourage or cancel large gatherings in depending on the level of person-to-person transmission.
4. Consider school closures in the affected region.
5. Consider closures of specific office buildings, colleges/universities or other groups based on the epidemiology of known infected case patients.

Possible containment measures if cases are occurring outside of the United States:

1. Support a travel advisory if federal health officials issue such an advisory.
2. Quarantine persons arriving in the U.S. from the affected region(s) in their home or other lodging.

Pandemic:

Containment measures are less likely to be effective at this stage as the efficiency of person-to-person transmission is likely to be greater. Use of containment measures should take into context the availability of vaccine and antiviral medication, public cooperation available resources, and illness severity. Changes in containment measures should be made based on effectiveness and the emerging epidemiologic information. Possible containment measures if spread is occurring within the U.S. include the following:

1. Discourage or ban large indoor gatherings
2. Consider school closures, including universities, or limiting class sizes and holding meetings outside when possible.
3. Ensure that persons with confirmed or suspected influenza A are isolated as in the Pandemic Alert Phase and persons exposed to suspected or confirmed cases are quarantined unless these individuals are taking antiviral medication known to be effective against the circulating pandemic influenza strain.

IX. Vaccine and Antiviral Use

A. Influenza Vaccine Distribution and Administration

Availability of an effective vaccine for the novel influenza virus will vary throughout the pandemic. Currently it is estimated that it will take 3 to 6 months after a novel virus is identified before the first doses become available to the public. Other considerations in planning include the assumption that vaccination will occur in stages utilizing priority groups and that two doses of vaccine per person will be required in order to induce an adequate immune response. Facilitation of vaccine development and production is a federal level response activity. At the local level, we will monitor federal activities including development of new methods of vaccine production, vaccine and antiviral development and production, and stockpiling. Pandemic influenza vaccine priority groups have been developed by a joint working group of the Advisory Committee on Immunization Practices (ACIP) and the National Vaccine Advisory Committee (NVAC) and are listed below. Definitions and rationale for these priority groups can be found in “Appendix D: NVAC/ACIP recommendations of pandemic influenza vaccine and NVAC recommendations on pandemic antiviral drug use” of the Department of Health and Human Services (DHHS) Pandemic Influenza Plan. These priority groups can be found in Appendix E. Due to the fact that the epidemiological characteristics of the pandemic are unknown at this time, these priority groups may be modified. Locally, we will monitor and follow federal and state priority group guidelines.

Interpandemic Period:

1. Continue and enhance current activities to promote influenza and pneumococcal vaccination. High-risk and under immunized groups will be targeted. [list current activities here]
2. Train appropriate clinic staff on Secure Wireless Inventory and Pharmaceutical Emergency Response System (SWIPERS).
3. Utilize SWIPERS in vaccine clinics and community mass prophylaxis drills to ensure system is functioning appropriately and that staff and volunteers are comfortable with using them.
4. Review and update mass vaccination and dispensing plans as appropriate.
5. Establish a medical volunteer group to assist with administration of vaccine if needed.
6. Determine and maintain estimates of the number of persons in each of the vaccine priority groups. This list will need to be revised and updated on a regular basis.

Pandemic Alert, Phases 3 & 4:

1. Monitor novel virus vaccine development and availability.
2. Monitor updates to vaccination recommendations and priority groups.

3. Assess current resources to ensure adequate staff and supplies are available. Increase volunteer recruitment efforts and obtain additional supplies as needed.
4. Send appropriate staff to training provided by ODH on vaccine related issues.
5. Ensure capability of cold chain maintenance for vaccine and establish documentation protocol to be used by vaccination clinics

Pandemic Alert, Phase 5:

1. Ensure SWIPERS, Impact SIIS, and other data systems are available for all clinics and are functioning properly to track vaccine administration.
2. Enhance volunteer recruitment and supply ascertainment as needed.
3. Ensure plans are in place for needed vaccination clinics including adequate supplies and staffing.
4. When requested, supply ODH with estimates on the number of persons in each priority group.
5. Prior to widespread availability of vaccine, we will stay abreast of changes to prioritization scheme and comply with ODH guidelines for vaccination.
6. Be prepared to receive and store SNS assets in accordance with the SNS plan.

Pandemic:

1. Continue to vaccinate population as appropriate and as vaccine supply allows.
2. Maintain inventory utilizing established data systems (SWIPERS, SIIS, etc.).
3. Follow established protocols to ensure proper storage, handling, and administration of vaccine.
4. Revise protocols as indicated
5. Report any adverse vaccine events to the national Vaccine Adverse Event Reporting System (VAERS).

Second Wave:

1. Continue to vaccinate population as appropriate and as vaccine supply allows.
2. Maintain inventory utilizing established data systems (SWIPERS, SIIS, etc.).
3. Follow established protocols to ensure proper storage, handling, and administration of vaccine.
4. Revise protocols as indicated.
5. Report any adverse vaccine events to the national Vaccine Adverse Event Reporting System (VAERS).

Return to Interpandemic (Post-Pandemic):

1. Inventory vaccine and supplies and return SNS assets as indicated.
2. Prepare an after action report and revise plans as indicated.

B. Antiviral Dispensing

During the early stages when an effective vaccine is not available, antiviral drugs will play an important role in the controlling the spread of the virus. Antiviral drugs currently available in the United States are oseltamivir, zanamivir, amantidine and rimantadine. Amantidine and rimantidine are best suited for prophylaxis while oseltamivir and zanamivir would be used for treatment. Current supplies of antivirals are not adequate to treat or provide prophylaxis for all affected persons. Therefore, locally we will consult with state and federal partners in creating a prioritization scheme for antiviral dispensing. Current pandemic antiviral drug priority groups were developed by a working group comprised of consultants, representatives of public and private sector stakeholder organizations, and academic experts. These priority groups were approved by NVAC and are listed below. Definitions and rationale for these priority groups can be found in “Appendix D: NVAC/ACIP recommendations of pandemic influenza vaccine and NVAC recommendations on pandemic antiviral drug use” of the Department of Health and Human Services (DHHS) Pandemic Influenza Plan. These priority groups can be found in Appendix E. Until more information is available on feasibility of stockpiling antivirals and the role they will play during an influenza pandemic, it should be assumed that they will only be used in high risk groups. Activities at the local level relative to antiviral use are as follows:

1. Monitor ongoing research on antiviral drugs and guidance related to stockpiling and use.
2. Determine and maintain estimates of the number of persons in each of the vaccine priority groups. This list will need to be revised and updated on a regular basis.
3. Monitor results of susceptibility testing performed by CDC.
4. Monitor updates to antiviral recommendations and priority groups.
5. Provide medical community information on availability of antivirals and guidelines for usage.

X. Emergency Medical and Other Responses

The Emergency Operations Plan (EOP) for Cuyahoga County is currently under major revision. The current CMEIMS Biological Incident Protocol addresses the county’s preparation and response to a terrorist’s use of a biological weapon or a naturally occurring disease outbreak.

A. Medical Surge

Each hospital in the county has its own internal hospital emergency plans as required by the Joint Commission of Accreditation of Health Organizations (JCAHO). Each hospital would follow their own internal plan as well as

participate in the Regional Medical Response System (RMRS). The Northeast Ohio Region Biological Incident Response Plan addresses medical surge for the region. The Center for Health Affairs has also developed a NEO Regional Hospital Bioterrorism Plan to serve as a resource to hospitals and responders to prepare for a manmade or naturally occurring biological event.

Hospitals have also signed Memorandum of Understandings (MOUs) that allow for sharing of staff, equipment, supplies, and transfer of patients. The Center for Health Affairs has conducted inquiries for each hospital regarding emergency department capacity, intensive care capacity, ventilator capacity and alternative care patient surge within the hospital facilities. This information is available upon request.

There is ongoing planning and discussion to expand surge capacity beyond hospitals. It is expected that the number of ill people needing hospitalization during a pandemic would exceed the present surge capacity of hospitals. Solutions include use of alternative care sites such as the Cleveland IX Center, schools, shuttered hospitals, etc. Neighborhood clinics and satellite care centers could be used as triage centers. Points of Dispensing sites (PODs) could be used if they are not being utilized for vaccine administration.

B. Fatality Management

The Cuyahoga County Coroner's Office has a Disaster Response Plan in Place. In addition, CCBH has developed a Fatality Management Plan as part of its All Hazards Plan that can be adapted by local health departments.

XI. Document Revision

This document should be reviewed at least annually and after every appropriate exercise. Review dates and changes should be documented. Updated pages will be replaced as needed.

An electronic copy of this plan is located on the CCBH network at:

The file is titled n://Influenza Pandemic Response Plan.

Printed copies of this document are in a binder titled Influenza Pandemic Response Plan. This is located in Epidemiology and Surveillance.

This Pandemic Flu Plan was prepared by the Cuyahoga County Pandemic Influenza Working Group. For questions, contact Andrea Arendt at 216 201-2001 x 1604.

XII. References

1. U.S. Department of Health and Human Services, HHS Pandemic Influenza Plan, November 2005
2. Harris County Public Health& Environmental Services, Public Health Preparedness and Response Plan: Pandemic Influenza and Highly Infectious Respiratory Diseases, September 2004
3. Ohio Department of Health Bureau of Infectious Disease Control Immunization Program, Influenza Pandemic Response Plan Version 2.0, September 2005
4. Ohio Department of Health, Infection Control Measures, 2004
5. SARS-Community Containment Measures, Including Non-Hospital Isolation and Quarantine, 2005

XIII. Glossary of Acronyms

CCBH: Cuyahoga County Board of Health
CCPHC: Cuyahoga County Public Health Collaborative
CPHD: Cleveland Public Health Department
CDC: Center for Disease Control and Prevention
EOC: Emergency Operations Center
EOP: Emergency Operations Plan
ICS: Incident Command System
ILI: Influenza-like illness
JIC: Joint Information Center
MARCS: Multi-Agency Radio Communication System
MOU: Memorandum of Understanding
NEO: Northeast Ohio
NIMS: National Incident Management System
ODH: Ohio Department of Health
ODHL: Ohio Department of Health Laboratory
OPHCS: Ohio Public Health Communication System
PPE: Personal Protective Equipment
RODS: Real-time Outbreak and Disease Surveillance System
SIIS: Statewide Immunization Information System
SNS: Strategic National Stockpile
SOP: Standard Operating Procedures
SWIPERS: Secure Wireless Inventory and Pharmaceutical Emergency
Response System
WHO: World Health Organization