

APPENDIX 1 TO THE ANNEX OUTBREAK PROTOCOL, DOH EOP**PANDEMIC FLU
EMERGENCY RESPONSE PLAN****I. Purpose**

The purpose of this appendix is to facilitate an effective statewide response to pandemic influenza should it emerge in New Mexico. To accomplish this, the appendix:

- Establishes a structure for a systematic, coordinated state response to pandemic influenza.
- Establishes roles and responsibilities for the Department of Health's (DOH) Divisions, Bureaus, Facilities, Districts and Offices during response to pandemic flu in New Mexico.
- Establishes infection control and isolation guidelines.
- Provides guidance to hospitals on appropriate protection of personnel, and triage and isolation procedures for patients with confirmed, probable or suspected influenza.

II. Legal Authorities, Policies and Principles

- A. On April 6, 2003, the New Mexico Public Health Response Act was signed into law. This law authorizes the Secretary of Health, in coordination with the Secretary of Public Safety to ration medical supplies and facilities if needed during a declared public health emergency.

III. Situation and Assumptions

- A. New strains of influenza viruses can emerge unpredictably and spread rapidly and pervasively through susceptible populations, sometimes causing pandemics (worldwide epidemics). This is due in large part to two features of the influenza virus: its ability to exchange genetic information between strains and its ability to occasionally "jump" species barriers between mammalian and avian hosts. Experts agree that future pandemics of influenza are likely, if not inevitable. The sudden and unpredictable emergence of pandemic influenza can cause severe health and social consequences.
- B. Pandemic influenza occurs when a novel strain of influenza virus is introduced into the human population, and is spread by droplet and contact spread. The severity of such an outbreak will exceed the severity of illness associated with annual flu season. Mortality related to a novel strain of influenza may be high.
- C. Because there will be a lack of immunity in the general population to the novel strain of influenza, two doses of vaccine will be needed to confer full immunity (an initial dose with a second dose in 30 days).
- D. Vaccination is the first line of defense against influenza viruses. However, because of a six month lead time required for vaccine production, vaccine shortages will exist, especially during the early phases of the pandemic.
- E. There will be a need to prioritize groups needing influenza vaccination. Priority groups may include those at risk due to occupational exposure (health care workers); those

persons providing essential public safety services (EMS, firefighters, police); those with certain medical conditions. The designation of priority groups will be guided by the epidemiologic pattern of the pandemic as it unfolds.

- F. Anti-viral agents will be available for a limited distribution and will likely be in short supply.
- G. Early detection and implementation of vaccination strategies, strict isolation and infection control practices can limit the spread and impact of pandemic influenza.
- H. Pneumococcal vaccination may mitigate the effects of secondary bacterial infections associated with influenza.
- I. If pandemic influenza should occur in New Mexico, it would be in one or more of the Public Health Division's Districts. It is crucial that each District is prepared to respond locally and in coordination with the Department of Health's Department Operation Center, and the incident site's emergency responders (i.e., County Emergency Manager, EMS, hospitals, county and local officials, and law enforcement).
- J. The Office of Epidemiology (EPI) within DOH will receive initial notification of the potential for or confirmation of pandemic influenza from the National Centers for Disease Control (CDC).
- K. EPI conducts ongoing sentinel surveillance for influenza-like illness and will detect an outbreak in its early stages.
- L. Health-care workers and other first responders will likely be at even higher risk of exposure and illness than the general population, impeding the provision of medical care to victims.
- M. Widespread illness in the community will also increase the likelihood of sudden and potentially significant shortages of personnel in other sectors who provide critical community services: military personnel, police, firefighters, utility workers, and transportation workers, and others.

IV. Concept of Operations

NMDOH will either be informed of, or discover, the occurrence of pandemic influenza. Notice or discovery of pandemic influenza will be categorized according to the following standard for pandemic influenza stages of alert. These stages of alert are also related to the domains of this plan—awareness, prevention, preparedness, response and recovery.

Plan Domain	Pandemic Phases		Definition
	Phase	Level	
Awareness Prevention Preparedness	0	0	Annual influenza outbreaks; no evidence that a novel influenza virus has infected humans.
		1	Novel Virus Alert: Novel virus detected in a person somewhere in the world
		2	Confirmation that the novel influenza virus has infected two or more people, but the ability of the virus to spread rapidly person-to-person and cause multiple outbreaks of disease leading to epidemics remains questionable.
		3	Pandemic Alert: Confirmation of person to person spread in the general population with at least one outbreak lasting for more than two weeks in one country.
Response (NIMS ICS used to manage)	1		Confirmation that the novel influenza virus is causing several outbreaks in one country and has spread to other countries, with consistent disease patterns indicating serious morbidity and mortality is likely in at least one segment of the population.
	2		Outbreaks and epidemics are occurring in multiple countries and spreading across the world.
	3		End of the first wave of the pandemic.
	4		Confirmation of a second or later wave caused by the same novel virus strain.
Recovery	5		Cessation of successive pandemic “waves,” accompanied by return (in the U.S.) of more typical wintertime “epidemic” cycle

Awareness

- A. *Surveillance*--The World Health Organization (WHO) conducts global surveillance for influenza, both identifying circulating strains as well as disease activity. The National Centers for Disease Control and Prevention (CDC) conducts national influenza surveillance which consists of four components: laboratory surveillance, outpatient influenza-like illness surveillance, pneumonia and influenza mortality surveillance and assessment of influenza activity in individual states. In New Mexico, sentinel surveillance for influenza-like illness is conducted from late-September to May. Reports from sentinel providers are transmitted weekly to CDC. In addition, DOH monitors viral isolates from around the state and the state laboratory is able to subtype influenza isolates. At the current time, veterinary surveillance

for animal influenza is passive, dependent on veterinarians being consulted and then veterinarians requesting sampling and testing for influenza.

Key questions to be answered through on-going surveillance efforts are:

- o Has influenza arrived in New Mexico?
- o If yes, is it a novel strain?
- o Where is disease activity occurring, and is it increasing or decreasing?
- o How many persons are affected, hospitalized, or dead?
- o Which population groups are most heavily affected?

- B. *Vaccine Delivery*—promoting influenza vaccination in the inter-pandemic period will increase demands for influenza vaccine, which in turn will stimulate manufacturers to increase production capacity to meet demand. Lastly, it will strengthen distribution channels.

Promote pneumococcal vaccination coverage in traditional high risk groups to reduce morbidity and mortality due to invasive pneumococcal disease during a pandemic. Large scale pneumococcal vaccination may not be feasible during a pandemic.

Preparedness

Pandemic Influenza preparedness involves a number of key steps:

- A. *Develop and maintain a Pandemic Influenza Response Plan.* The Executive Committee for pandemic influenza preparedness includes:

1. State Epidemiologist
2. Infectious Disease Epidemiology Bureau Chief
3. Immunization Program Manager
4. Public Health Division Director
5. Chief Medical Officer
6. State Pharmacist
7. District Health Officers
8. State Laboratory Director
9. Public Information Officer
10. Office of Health Emergency Management Director
11. Office of General Counsel

The Executive Committee will develop the plan in collaboration with stakeholders outside of NMDOH in the private and public sector, including infectious disease practitioners and physicians, hospital and health care systems, medical society and nursing organizations, local emergency planners, law enforcement, tribal communities, those that work with special needs populations and those involved with planning along New Mexico's borders.

- B. *Develop protocols for safe handling of laboratory specimens and viral testing.* A pandemic strain of influenza will be virulent and should not be cultured in all laboratories with viral culturing capabilities. Protocols will be developed for safe handling, transport and testing of specimens. These protocols will include the role of rapid testing and PCR testing when it is available.

- C. *Develop recommended influenza treatment protocols and infection control guidelines including appropriate personal protective equipment for responders in medical facilities, EMS services, and other public settings.*
- D. *Identify priority groups for targeted vaccination when pandemic influenza strain vaccine first becomes available, and develop plans for delivery of vaccine to those groups. Although the epidemiology of the unfolding pandemic may modify the identified priority groups for vaccination, certain groups are likely to be included: health care workers with direct patient contact; first responders, police, fire fighters and other public safety personnel; public health workers with direct contact with the public.*
- E. *Develop public information messages regarding influenza*
- F. *Develop plans for vaccine management, distribution and administration—*
 - 1. It is anticipated that demand for vaccine will be greater than supply, or that no vaccine will be available, early in the pandemic. Because a final decision regarding the degree of federal vaccine purchase may not be made until pandemic vaccine is being produced, vaccine delivery plans will need to address different possible scenarios:
 - a. Complete federal purchase with distribution to states;
 - b. Partial federal purchase with distribution to state, state and/or private providers purchasing the remainder; and
 - c. Minimal federal purchase (as occurs with annual influenza vaccine purchases)
 - 2. Develop contingency plans for emergency distribution of unlicensed vaccines using emergency investigational new drugs (IND) provisions which call for strict inventory control, record-keeping, and signed consent forms.
 - 3. Coordinate vaccine distribution plans with local health offices, county managers, tribal communities and private health care providers. The New Mexico Vaccine Consortium will be a partner in this effort.
- F. *Antivirals—Develop priority groups for receipt of antivirals*
 - 1. Quantify the priority populations and develop plans for distribution to these groups.
 - 2. Educate health care providers and the public of planned use of antivirals during a pandemic
 - 3. Review workman's compensation laws as they apply to health care workers and other essential workers who have taken antivirals for prophylaxis.
 - 4. Develop antiviral distribution plan.
- G. *Exercise all response plans regularly to develop proficiency*
- H. *Data Management—Develop plans for data collection and create the databases to be used during influenza pandemic including surveillance, vaccine inventory and distribution, vaccination and adverse event tracking, patient tracking, and documenting expenses of a response.*

Prevention/Mitigation

Pandemic influenza preventive measures are not available at the present time. Currently, it takes six to eight months to develop vaccine. Technologic developments may make it possible to produce adequate supplies of effective vaccine for mass vaccination of the population after the emergence of pandemic influenza.

Antiviral agents may prevent influenza if the virus is susceptible; however, prophylaxis needs to continue throughout the period of exposure which could be months. The available supply of

antiviral medication is limited and production cannot be rapidly expanded. Although oseltamivir (a neuraminidase inhibitor) is now stocked in the Strategic National Stockpile, there are not enough doses for the entire population. Available supplies will need to be targeted to priority groups with well-defined guidelines for their use.

Secondary bacterial complications of influenza infection contribute to death and illness in influenza outbreaks and pandemics. The bacterium, *Streptococcus pneumoniae*, is a leading cause of such complications, leading to pneumonia, bloodstream infections and meningitis. Bloodstream infections with *S. pneumoniae* have a case-fatality rate as high as 30% in the elderly. Pneumococcal polysaccharide vaccine is 50-80% effective in preventing invasive pneumococcal infections in the elderly. Pneumococcal vaccination is currently recommended for persons 65 years and older; those who have chronic underlying illnesses associated with increased risk, persons in long-term care facilities, and American Indian and Alaska Native populations. Currently, less than half of those recommended for vaccination have received the pneumococcal vaccine.

Promotion of pneumococcal vaccination during the inter-pandemic period will decrease the rate of influenza complications and death during a pandemic. Protection following a single dose lasts 5 years or more. Increasing routine vaccine coverage before a pandemic occurs is a feasible strategy, will decrease demand for pneumococcal vaccine during a pandemic and will mitigate the impact of influenza complications.

Response

As a pandemic develops, WHO will notify CDC and other national health agencies of progress of the pandemic from one stage to the next. CDC will communicate with state departments of health about pandemic stages, virus laboratory findings, vaccine availability, and national response coordination.

Given the issuance of a pandemic alert in the U.S. or of the discovery of pandemic influenza virus strain in New Mexico, situation analysis will be conducted to determine whether to activate the pandemic influenza response plan, or to review pandemic influenza preparedness and monitor the situation. If situation analysis results in the decision to activate the pandemic influenza response plan, the governor, the state EOC, health professionals and the public will be informed.

Upon report of a person ill with a novel strain of influenza, EPI will investigate. If the case is confirmed, EPI will notify the Office of the Secretary, the Governor (through the Secretary), the CDC, the DOH Public Health Districts, the Office of Emergency Management (OEM) through the state Emergency Operations Center (EOC), and other DOH and non-DOH health care facilities and health care providers across the State. A Situation Analysis Team (SAT) may be convened at the discretion of the DOH Secretary.

A trained DOH Emergency Operations Center Representative (EOCR) will also be identified to be the liaison between the DOH and OEM to facilitate the flow of emergency response information between the two agencies. If the State EOC and DOH DOC are activated multiple EOCR's will be selected from the EOCR's listed in the DOH Contact List to report to the State

EOC to coordinate DOH, Federal, other State agency and local government health and medical response and support requirements.

The DOH Public Information Officer (PIO) will take the lead and coordinate with the OEM PIO to provide consistent information regarding risk communication.

Activities which may be part of the response to pandemic influenza include:

- A. *Surveillance*—On-going sentinel flu surveillance may be enhanced with surveillance of outpatient and inpatient capacity at hospital and other health care providers. Hospitals, emergency departments and providers will be alerted to the increased risk and asked to report all persons with compatible clinical illness to DOH. Laboratories should be able to increase testing for influenza as needed and consider testing for antiviral resistance.
- B. *Isolation/Quarantine*—either in an identified facility, hospital or at a person's home.
- C. *Limitation of public gatherings*—such as closing schools, restricting public gatherings such as performances, concerts, etc. may be considered to limit the opportunity for spread of influenza
- D. *Vaccine Delivery*—Priority groups for vaccination should have been pre-identified. Determine if changes in these priority groups are needed as the epidemiology of the novel virus becomes available.
- E. *Antiviral*—Activate the antiviral distribution plan. Implement the data management plan for monitoring antiviral supply, distribution, and use.
- F. *Laboratory Testing*—[Briefly describe the laboratory testing protocol here.](#)
- G. *Infection Control*
- H. *Public Information*—Implement the communication plan, providing consistent messages to the public at regular intervals. Monitor media coverage and address misinformation as quickly as possible.
- I. *Data Management*—[Implement plans for data tracking and management.](#)
- J. *Disaster Mental Health*—Implement the Disaster Mental Health plan as needed.
- K. *Mortuary*—Implement OMI's mass casualty plan as needed.

Recovery

When sentinel surveillance and other sources clearly indicate that the pandemic has ended, the Secretary of Health will announce that the pandemic over, and recommend cancellation of the declaration of public health emergency. The EOP will be deactivated. Sentinel surveillance for influenza-like illness will continue.

The Executive Committee for Pandemic Preparedness will conduct a debriefing to evaluate the response to pandemic influenza, prepare and after-action report including recommendations for improving the pandemic influenza response plan.

IV. Organization and Responsibilities

Awareness

Epidemiology and Response Division, Infectious Disease Epidemiology Bureau

1. Monitor weekly reports from WHO and CDC regarding circulating strains of influenza virus.
2. In collaboration with district staff, conduct sentinel surveillance for influenza-like illness in order to monitor influenza-like illness in New Mexico
3. Monitor reports of influenza strains isolated in-state
4. Conduct surveillance for influenza and pneumonia deaths when electronic death reporting becomes available

Epidemiology and Response Division, Vital Records and Health Statistics

1. Conduct surveillance for influenza and pneumonia deaths when electronic death reporting becomes available

Scientific Laboratory Division

1. Viral isolation testing
 - a. Provide viral isolation testing and serotyping using current CDC protocols
 - b. Provides technical support to other laboratories in the state during influenza season.
 - c. Forwards any specimens that cannot be serotyped to CDC.
 - d. Provides support for transporting specimens to SLD and will forward specimens to CDC when necessary.
2. Monitor reports of influenza strains isolated in-state

Preparedness

Office of the Secretary, Public Information Officer

1. Develop public information messages regarding influenza

Office of General Counsel, General Counsel

1. Review state statutory provisions regarding:
 - a. quarantine and how they apply in a public health emergency
 - b. mandatory vaccination during an infectious disease emergency
 - c. procedures for closing businesses and/or schools and suspending public meetings during a declared public health emergency
 - d. medical volunteer licensure, liability and compensation laws for volunteers
 - e. workman's compensation as applied to health care workers and other essential workers who have taken antivirals for prophylaxis

Epidemiology and Response Division, Office of Health Emergency Management

1. Develop and maintain the pandemic influenza response plan
2. Provide training and education on the response plan for public health staff

3. Conduct exercises and drills of the response plan for public health staff to include Public Health Service Site plan for mass vaccination.
4. Based on evaluations of exercises and drills, updates the pandemic influenza plan as needed
5. In collaboration with the PIO, develop public information messages regarding influenza
6. Develop questions and answers to be given to those agencies that can provide surge capacity for responding to requests for information from the public and providers (New Mexico Poison Center)

Epidemiology and Response Division, Infectious Disease Epidemiology Bureau

1. Develop and maintain the pandemic influenza response plan
2. Participate in the conduct of exercises and drills of the pandemic influenza response plan
3. Develop recommended influenza treatment protocols and infection control guidelines to medical facilities and other public settings.
4. In collaboration with OHEM, develop questions and answers to be given to those agencies that can provide surge capacity for responding to requests for information from the public and providers (New Mexico Poison Center).
5. In collaboration with OHEM and the districts, develop data entry forms and data base for coordinated collection of information during pandemic response

Public Health Division, Immunization Program

1. Monitor the availability of influenza vaccine, nationally and locally.
2. Develop and maintain the pandemic influenza response plan

Public Health Division, Districts

1. Maintain plans for Public Health Service Sites
2. Conduct exercises and drills of the response plan for public health staff to include Public Health Service Site plan for mass vaccination
3. Conduct sentinel surveillance for influenza-like illness.
4. In collaboration with IDE, develop data entry forms and data base for coordinated collection of information during pandemic response

Scientific Laboratory Division (NEW NAME???)

1. Provide training to laboratories around the state on protocol for handling laboratory specimens prior to and during pandemic in New Mexico.

Information Technology Services Division

1. Based on requirements provided by IDE, OHEM and the Districts, develop data base for coordinated collection of information during pandemic response

Prevention/Mitigation**Public Health Division, Immunization Program**

Maintain and distribute supplies of pneumococcal vaccine.

Public Health Division, Districts

Provide pneumococcal vaccine to as appropriate.

Response

Office of the Secretary, Public Information Officer

1. Coordinate the release of public information between OEM PIO and DOH PIO

Epidemiology and Response Division, Office of Health Emergency Management

1. Assist in the request the Strategic National Stockpile if indicated and available.
2. Review public information and risk communication messages to assure that they are appropriate for the current situation.
3. Provide information (Q&A) to agencies that can provide surge capacity around responding to requests for information (New Mexico Poison Center).

Epidemiology and Response Division, Infectious Disease Epidemiology Bureau

1. Enhance surveillance for impact of influenza in New Mexico. In addition to on-going surveillance, assess the impact on bed-availability throughout the state, number of hospitalizations for influenza related conditions and absenteeism in certain industries or sectors

Scientific Laboratory Division, Laboratory

1. Provide rapid testing for pandemic strain of influenza when available.
2. Forward specimens to CDC as needed during the pandemic.
3. Provide guidance to laboratories around the state on testing and handling specimens during a pandemic.

Scientific Laboratory Division, Pharmacy

1. Assist in the monitoring of vaccine and antiviral inventory and their distribution.

Public Health Division, Immunization Program

1. Obtain and distribute vaccine when it becomes available.

Public Health Division, Districts

1. Enhance surveillance for impact of influenza in New Mexico. In addition to on-going surveillance, assess the impact on bed-availability throughout the state, number of hospitalizations for influenza related conditions and absenteeism in certain industries or sectors
2. Administer vaccine to priority risk groups.
3. Establish Public Health Service Sites for administering vaccinations.

Behavioral Health Services Division

1. Coordinate disaster mental health response statewide.

Office of the Medical Investigator

1. Provide autopsy and diagnostic services on potential cases of influenza, as necessary.

A. Infection Control

1. Hospital infection control practitioners will monitor employee health and assure appropriate follow-up for employees exposed to patients with influenza.
2. Assure that appropriate infection control procedures are followed by staff and patients
3. As much as possible, move non-critical patients out of facilities if possible to make room for disaster or acutely ill patients.
4. Provide guidance on appropriate infection control precautions in handling the remains of patients who died of influenza.

B. Data Management***Recovery*****A. Office of the Secretary**

1. Announce pandemic over
2. Inform the governor and EOC that the pandemic is over.
3. Recommend cancellation of the declaration of public health emergency.

B. Epidemiology and Response Division, Infectious Disease Epidemiology Bureau

1. Maintains contact with CDC
2. Informs the Secretary of the determination that the pandemic is over.

C. Epidemiology and Response Division, Office of Health Emergency Management

1. Participates in the development of an after-action report of the pandemic influenza response.
2. Makes revisions to the pandemic influenza response plan as recommended by the Executive Committee for Influenza Preparedness.

C. Individual assigned responsibility and delegated authority

1. Evaluation of response activities
2. Summarize and report
3. Deactivate EOP

D. Executive Committee for Pandemic Preparedness

1. Convenes a debriefing on the pandemic influenza response.
2. Prepares an after-action report of the findings including recommendations for improvements to the pandemic influenza response plan.

IV. Appendix Development and Maintenance

- B. The Pandemic Influenza plan will be updated as needed by the Epidemiology and Response Division, Office of Health Emergency Management, in collaboration with the Executive committee for pandemic influenza preparedness which includes, but is not limited to:
 1. State Epidemiologist
 2. Infectious Disease Epidemiology Bureau Chief

3. Immunization Program Manager
4. Public Health Division Director
5. Chief Medical Officer
6. State Pharmacist
7. District Health Officers
8. State Laboratory Director
9. Public Information Officer
10. Office of Health Emergency Management Director

C. After actual events or exercises, conduct de-briefs, review procedures, correct the plan and/or standard Operating Procedures (SOP's), and distribute changes within 45 days.

Attachments

1. Preliminary identification of priority groups for influenza vaccination when supplies are inadequate to cover the population.
2. Protocol for collections and handling of specimens for viral testing in those with influenza-like-illness.
3. Guidelines for appropriate PPE for responders
4. Guidelines for prevention of influenza in healthcare settings
5. Guidelines for prevention of influenza in long term care facilities
6. Guidelines for prevention of influenza in School settings
7. Guidelines for prevention of influenza in daycare settings