



New Mexico Department of Health
All-Hazard Emergency Operations Plan
Hazard Annex F: Outbreaks

Pandemic Influenza Plan

July 17, 2019

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Introduction

Approval and Implementation

The Pandemic Influenza Plan is in the Outbreaks section of Hazard Annex F, within the New Mexico Department of Health (NMDOH) All-Hazard Emergency Operations Plan (EOP). The Pandemic Influenza Plan describes the management and coordination of NMDOH resources and personnel during periods of public health emergencies or events, such as an influenza pandemic. Planning team comprised of subject matter experts, planners, and representatives of several NMDOH Divisions contributed to this plan. This plan supersedes the previous Pandemic Influenza Plan and was completed on July 17, 2019.

This Plan incorporates guidance from the U.S. Department of Health and Human Services (HHS), Centers for Disease Control and Prevention (CDC), Office of the Assistant Secretary for Preparedness and Response (ASPR), U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), and World Health Organization (WHO). It also builds on lessons learned from planned events, disasters, emergencies, trainings, and exercises.

This plan:

- Defines NMDOH emergency response roles and responsibilities, as outlined in the Emergency Support Function (ESF) #8: Public Health and Medical Services Annex to the State of New Mexico Emergency Operations Plan (EOP)
- Aligns the basic structures, processes, and protocols of the National Response Framework (NRF) guidelines with NMDOH response plans
- Incorporates National Incident Management System (NIMS) concepts by utilizing integrated command and control guidelines for local, regional, and/or national response coordination in the event of a public health or medical emergency
- Provides a basis for unified training and exercises

This Pandemic Influenza Plan is hereby approved. This plan is effective immediately and supersedes all previous editions. The following signatories agree to support the NMDOH Pandemic Influenza Plan and to carry out their functional responsibilities described in this plan.

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Record of Changes

The Director of the Epidemiology and Response Division authorizes all changes to the NMDOH Pandemic Influenza Plan, and change notifications are sent to those on the distribution list.

To annotate changes:

1. Add new pages and destroy obsolete pages
2. Make minor pen and ink changes as identified by letter
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Acknowledgement of Receipt

I, _____, certify that I have received the New Mexico Department of Health Pandemic Influenza Plan, or the changes to the Plan listed below. In the event of any questions, please contact the Bureau of Health Emergency Management (BHEM).

Change Number	Description of Change	Date of Change

Signature _____

Date _____

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Please return this signed form to:

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Record of Distribution

A single copy of this plan is distributed to each person in the positions listed below

DATE	AGENCY	TITLE
Department of Health – Epidemiology and Response Division (ERD)		
	Department of Health	Cabinet Secretary
	ERD	State Epidemiologist, Division Director
	ERD	Deputy Division Director, Deputy State Epidemiologist
	ERD	Deputy Division Director
	Emergency Medical Services Bureau (EMSB)	Bureau Chief
	Environmental Health Epidemiology Bureau (EHEB)	Bureau Chief
	Bureau of Health Emergency Management (BHEM)	Bureau Chief
Department of Health – Public Health Division (PHD)		
	PHD	Division Director
	PHD	Chief Nurse
	PHD	Medical Director
	PHD	Deputy Division Director Regions
	Public Health Regions	Emergency Preparedness Specialists
	Public Health Regions	Region Health Officers
Department of Health – Scientific Laboratory Division (SLD)		
	SLD	Division Director
	Biological Sciences Bureau	Bureau Chief
	Virology/Serology Section	Section Supervisor
	Molecular Biology Section	Section Supervisor
	SLD	Emergency Manager
Department of Health – Division of Health Improvement		
	DHI	Director

Pandemic Influenza Plan		New Mexico Department of Health
DATE	AGENCY	Title
Other State Agencies		
	Department of Homeland Security and Emergency Management	Cabinet Secretary
	Environment Department	Cabinet Secretary
	Environment Department Operational Support Division	Division Director
	State Office of Medical Investigator	Chief Medical Investigator
	UNM Center for Disaster Medicine	Director
	UNM Office of Emergency Management	Emergency Manager
	New Mexico Poison and Drug Information Center	Director
	Department of Agriculture	Cabinet Secretary
	Department of Public Safety	Cabinet Secretary
	New Mexico State Police	Chief
	New Mexico Army National Guard, Plans and Operations	Adjutant General
	New Mexico National Guard 64 th Civil Support Team (WMD-CST)	Commander
	Department of Indian Affairs	Cabinet Secretary
	Human Services Department (HSD)	Cabinet Secretary
	HSD Behavioral Health Services Division	Clinical Services Manager
	HSD Loss Prevention and Control	Emergency Preparedness Coordinator
	Information Technology Department	Cabinet Secretary
	Aging and Long-Term Services Department	Cabinet Secretary
	150th Special Operations Wing, NM Air National Guard	Cabinet Commander

Date Received	Agency	Title
Federal Government		
	U.S. Dept of Health and Human Services (HHS) Office of Assistant Secretary for Preparedness and Response (ASPR)	Region 6, Regional Emergency Coordinator (REC)
	HHS, ASPR	Field Project Officer
	HHS, Centers for Disease Control and Prevention (CDC)	Project Officer
	Indian Health Service, Albuquerque Area	Director
	Indian Health Service, Navajo Area	Director
	Veterans' Health Administration Office of Emergency Medicine	Area Emergency Manager
	377th Air Base Wing – Kirtland Air Force Base (KAFB)	Commander
State of New Mexico Tribal Governments		
State of New Mexico County Governments		
State of New Mexico Municipal Governments		
Non-Governmental Organizations		

Overview

Presidential Policy Directive (PPD) 8 National Preparedness issued in March 2011 strengthens the security and resilience of the country by preparing for the threats that pose the greatest risk to national security.¹ Through PPD 8, the National Preparedness Goal (NPG) Second Edition was developed in September 2015 and further defines the core capabilities (Prevention, Protection, Mitigation, Response and Recovery) necessary to strategically prepare for emergencies and disasters. The goal is essentially: "A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk". These risks include events such as natural disasters, disease pandemics, chemical spills and other manmade hazards, terrorist and cyber-attacks.²

The Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2019, Public Law S.1379, was enacted on June 24, 2019 . It reauthorizes the Pandemic and All-Hazards Preparedness Act (PAHPRA) of 2013, Public Law 113-5) with new authorities to sustain and strengthen national preparedness for public health emergencies involving Chemical, Biological, Radiological, or Nuclear (CBRN) agents and including emerging infectious disease threats such as pandemic influenza.³ There are three key features in the new act; enhanced programs for health care system readiness, improved vaccine and drug development activities, and a strengthened public health emergency response fund.

Under PAHPRA, the U.S. Department of Health and Human Services (HHS) is the lead agency for the National Response Framework (NRF) Emergency Support Function 8 (ESF 8).

ESF 8 is the emergency support function that outlines federal actions to supplement state, local, and tribal resources in response to a public health and medical disaster or developing health and medical emergencies (Health, Medical, and Mortuary Services). The NRF guides how the United States conducts all-hazards response.

The New Mexico Department of Health (NMDOH) participates in federal grant cooperative agreements with the Centers for Disease Control and Prevention (CDC) Public Health Emergency Preparedness (PHEP) and the HHS Office of the Assistant Secretary for Preparedness and Response (ASPR). Through these grants, the NMDOH receives technical assistance and resources that support state, local, and tribal public health departments and healthcare systems. The NMDOH has demonstrated quantifiable and sustainable progress toward achieving the fifteen public health and four 2017-2022 healthcare preparedness and response capabilities to promote prepared and resilient communities.⁴

¹ <https://www.dhs.gov/presidential-policy-directive-8-national-preparedness>

² <http://www.fema.gov/national-preparedness-goal>

³ <https://www.govinfo.gov/content/pkg/BILLS-116s1379enr/pdf/BILLS-116s1379enr.pdf>

⁴ <https://www.phe.gov/preparedness/planning/hpp/reports/documents/2017-2022-healthcare-pr-capabilities.pdf>

Seasonal Influenza

Seasonal influenza (flu) is an acute viral infection caused by influenza viruses that infect the nose, throat, and lungs. These viruses can cause mild to severe illness, spread easily from person-to-person, and circulate worldwide. Most people recover without requiring medical treatment. Common respiratory diseases related to seasonal influenza that can cause death include bacterial pneumonia and bronchitis. Complications of influenza may also include ear infections, sinus infections, dehydration, and worsening of chronic medical conditions such as congestive heart failure, asthma, and diabetes. Vaccines are the most effective way to prevent infection and severe outcomes caused by influenza viruses. The CDC recommends annual influenza vaccination for everyone six months and older with any licensed, age-appropriate, flu vaccine, with no preference expressed for any one vaccine over another.⁵

Influenza viruses spread mainly by droplets created when people cough or sneeze; less often, a person may get influenza by touching a surface or object that carries the influenza viruses and then touching their mouth, nose, or eyes. Most healthy adults are considered contagious one day prior to the onset of symptoms through about five to seven days after becoming sick. Young children and people with weakened immune systems may be contagious for a longer time.

According to a study published in 2017 that was conducted by the CDC, World Health Organization (WHO), and other global partners; new estimates are that between 291,000 and 646,000 people worldwide die from seasonal influenza-related respiratory illness each year, which is higher than the previous estimate of 251,000 to 500,000.⁶

The timing of influenza (flu) is unpredictable and may vary from season to season. Although seasonal influenza viruses are detected throughout the year, influenza activity usually begins in October and most commonly peaks in the U.S. between December and February. However, seasonal influenza activity can continue as late as May.⁷ In temperate climates, seasonal influenza epidemics occur mainly during the winter, while in tropical regions influenza may occur throughout the year and cause more irregular outbreaks. The overall health impact (e.g., infections, hospitalizations, and deaths) of a flu season varies from season to season. The CDC collects and analyzes information about year-round influenza activity in the United States and produces FluView, a weekly surveillance report and FluView Interactive that utilizes information from collaborating laboratory data and the US Outpatient Influenza-like Illness Surveillance Network (ILINet) to identify the geographic and age group distribution of influenza positive tests. The Weekly U.S. Influenza Summary Update is published weekly from October through May. The CDC also monitors influenza associated hospitalizations through the Influenza Hospitalization Surveillance Network (FluSurv-NET)⁸

⁵ <https://www.cdc.gov/flu/season/health-care-professionals.htm>

⁶ <https://www.cdc.gov/media/releases/2017/p1213-flu-death-estimate.html>

⁷ <https://www.cdc.gov/flu/season/flu-season-2018-2019.htm>

⁸ <https://www.cdc.gov/flu/weekly/index.htm>

Most influenza vaccines are developed to protect against three different influenza viruses (trivalent); two influenza A (H1N1) (H3N2) viruses and one influenza B virus, chosen from two different lineages that both circulate during most flu seasons. A quadrivalent influenza vaccine is developed to protect against two influenza A viruses and two influenza B viruses. Because influenza viruses continually change, the seasonal influenza vaccine components must also change. The effectiveness of the influenza vaccine may vary from year to year and among different populations, depending on the match between the vaccine and the influenza virus strains that are in circulation. It takes approximately two weeks after vaccination for adequate antibodies to develop that protect against influenza viruses. Receiving the current flu vaccine remains the most important protection against influenza related illness and death.

There are three different U.S. Food and Drug Administration (FDA) approved methods of producing influenza vaccine. The most common method utilizes a chicken egg-based vaccine; this method is used for both the injection (inactivated virus) and nasal spray (live attenuated virus) vaccines. The second method, approved by the FDA in 2012, is a cell-based vaccine that begins with a virus that is grown in an egg and is then reproduced in cultured cells, using fewer eggs than the previous method. On August 31, 2016, the FDA approved Seqirus, as the only cell-based flu vaccine manufacturer in the US to use animal cell-grown candidate vaccine viruses (CVVs). Cell-based flu vaccine production does not require chicken eggs and this technology has the potential for accelerated flu vaccine start up production. The third type of vaccine approved by the FDA in 2013, is a recombinant influenza vaccine that combines an isolated protein from one virus with another virus; this process can produce vaccine in the shortest amount of time because it is not limited by viruses that are adapted for growth in eggs or the development of cell-based vaccine viruses. This is the only egg-free vaccine and can therefore be produced in a shorter time frame.^{9 10}

Influenza vaccine effectiveness can vary from year to year, by virus type and subtype, and among different age and risk groups. Since 2005, CDC has conducted annual flu vaccine effectiveness studies to assess how well the vaccine works in preventing medically attended illness. Flu vaccine prevents tens of thousands of hospitalizations every year. A 2014 study showed that during the 2010 - 2012 flu season, vaccine reduced the risk of pediatric flu admissions to the ICU by 74%. During the 2016 – 2017 flu season, vaccination prevented an estimated 85,000 flu-related hospitalizations. A CDC-supported study published on August 2, 2018 and conducted over the 2012 - 2015 flu seasons, found that flu vaccination prevented severe disease among flu vaccinated adults and decreased admission to the ICU with flu by 82%.¹¹

⁹ <http://www.cdc.gov/influenza/protect/vaccine/how-influenzavaccine-made.htm>

¹⁰ <http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm094045.htm>

¹¹ <https://www.cdc.gov/flu/about/qa/misconceptions.htm>

Pandemic Influenza

Influenza pandemics are unpredictable worldwide events that can have health, economic, and social consequences. Global economic interdependence, international travel and trade increase the threat of infectious viral diseases.

An influenza pandemic occurs when new (novel) influenza A viruses emerge which can infect people easily and spread from person to person in an efficient and sustained way. People have little or no immunity to the new virus and a vaccine may not be available. The disease spreads easily from person to person, causes serious illness, and can sweep across the country and around the world in a short time¹²

Past influenza pandemics have typically originated from animal influenza viruses that change (mutate) to new forms that are able to infect humans. A zoonotic disease is any disease of animals that is communicable to humans. Influenza A viruses infect many animals; including ducks, chickens, pigs, whales, horses, and seals.

Subtypes of influenza A viruses are usually species-specific, except that birds are hosts to all known subtypes of influenza A viruses. Wild fowl can act as natural asymptomatic carriers and may spread the viruses to domestic birds. Avian influenza is a disease caused by infection with avian (bird) influenza type A viruses. Most human infections with avian influenza A viruses involve direct or close contact with infected birds. Avian influenza A viruses may also be transmitted to people through an intermediary host, such as a pig, through genetic reassortment; a process in which two or more influenza viruses infect a single host and exchange genetic material. This can result in a novel influenza A virus. Many past pandemics were caused by influenza A viruses from animals that gained the ability to infect and spread among humans by exchanging genetic information with human influenza A viruses through reassortment.

Influenza A viruses are also able to mutate in two ways: 1) antigenic drift and 2) antigenic shift. 1) Antigenic drift happens gradually over time, involves the natural mutation of known strains of influenza viruses, and may lead to some loss of immunity; this is the reason that influenza vaccines are revised on an annual basis. Influenza viruses are continually changing by antigenic drift.

2) Antigenic shift occurs infrequently and involves two or more different strains of a virus or strains of two or more different viruses that abruptly combine into a new influenza A subtype, that is capable of infecting humans. Antigenic shift produces a novel influenza A virus subtype in humans that was not previously circulating among people and to which they do not have immunity. This can occur either through direct animal (poultry)-to-human transmission or through a process called genetic reassortment, which is the combination of human influenza A and animal influenza A virus genes that creates a new human influenza A subtype virus. Influenza Type B viruses only change by the more gradual antigenic drift process.¹³

¹² https://www.who.int/influenza/preparedness/pandemic/influenza_risk_management_checklist_2018/en/
and CDC: <https://www.cdc.gov/flu/pandemic-resources/index.htm>

¹³ <http://www.cdc.gov/influenza/about/viruses/change.htm>

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Influenza viruses that have the potential to cause a pandemic are referred to as "pandemic potential" viruses. Examples of influenza viruses with pandemic potential include highly pathogenic avian influenza (HPAI) A (H5N1)¹⁴ and avian influenza A (H7N9). These are non-human viruses (i.e., they would be novel among humans, as they commonly circulate only in birds); therefore, people have little to no immunity against these viruses. Human infections with these viruses have occurred, usually from human contact with infected birds.

If either of these viruses was to shift to a virus that caused serious illness in people and was easily spread from person to person, an influenza pandemic could result. H5N1 is a highly pathogenic avian (bird) influenza virus that has caused serious outbreaks in domestic poultry in parts of Asia, Africa, the Pacific, Europe, and the Near East. Although H5N1 does not usually infect humans, more than 700 human cases of H5N1 have been reported from 15 countries since 2003, with an estimated fatality rate of 60%.

The avian (H7N9) virus is a low pathogenic virus that first infected six humans in China in March 2013, annual epidemics of sporadic human infections have occurred since then. As of December 2017, the total cumulative number of human infections with H7N9 virus was 1,565 and approximately 39% died. Most of the human infections with avian influenza viruses occur after exposure to infected poultry or contaminated environments. No evidence of sustained person-to-person spread of either virus has been found.¹⁵ The ongoing circulation of H5N1 and H7N9 continues to pose a public health threat, as these viruses have the potential to cause serious disease in people and may have the potential to shift into a form that is more transmissible among humans.

Native North American strains of avian influenza occur naturally in wild birds and can spread to domestic birds. In most cases, these influenza strains cause no sign of infection or only minor clinical signs in birds and are low pathogenic viruses; therefore, these strains of virus pose little threat to human health. LPAI (low pathogenic avian influenza viruses) have the potential to mutate into HPAI (high pathogenic avian influenza viruses), which may cause a high death rate in chickens and turkeys and can spread rapidly.

In 2014 - 2015, highly pathogenic avian influenza (HPAI) H5N1, H5N2, and H5N8 were detected in 21 U.S. states; in 2016 HPAI and LPAI H7N8 viruses were reported in Indiana; in 2017, HPAI and LPAI H7N9 viruses were reported in Alabama, Kentucky, and Georgia. These mixed origin viruses contain the Asian-origin H5 virus, which is highly pathogenic to poultry, combined with native avian influenza viruses found in wild birds. The novel HPAI H5N1 virus is not the same virus as the H5N1 virus that has been circulating in Southeast Asia, Africa, and Europe and has caused human illness.¹⁶

Since March 2015, the highly pathogenic strain of H5N2 has caused avian influenza outbreaks in domestic and large commercial chicken and turkey flocks in many poultry producing states, resulting in large economic losses. The CDC considers the risk to the public to be low, and

¹⁴ <http://www.cdc.gov/influenza/avianinfluenza/h5n1-people.htm>

¹⁵ <https://www.cdc.gov/flu/avianflu/h7n9-virus.htm>

¹⁶ <https://www.usda.gov/topics/animals/one-health/avian-influenza>

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there is no food safety concern. When infected flocks are identified, the birds are quarantined and depopulated to prevent the spread of disease.¹⁷

The “Spanish Influenza” (January, 1918 - December, 1920) occurred in three waves, infected approximately 500 million people across the world, and caused an estimated 20 - 50 million or more deaths worldwide, including an estimated 675,000 Americans. Although most influenza outbreaks affect the young, elderly, and those with weakened immune systems, in the 1918 pandemic there was an unusually high mortality rate for previously healthy young adults. Many World War I soldiers died. To maintain morale, wartime censors minimized early reports of illness and mortality which may have contributed to the high mortality rate.

This pandemic is referred to as the “mother of all pandemics” because almost all influenza cases worldwide (except human infections from avian viruses such as H5N1 and H7N7), have been caused by descendants of the 1918 virus, including ‘drifted’ H1N1 viruses and the reassorted H2N2 and H3N2 viruses.¹⁸

In 2009, a strain of influenza A (H1N1) virus emerged and spread across the world, causing the 2009 H1N1 influenza pandemic. The CDC final estimates for the H1N1 influenza pandemic were published in 2011: from April 12, 2009 to April 10, 2010, there were approximately 60.8 million cases, 274,304 hospitalizations, and 12,469 deaths in the United States due to H1N1.¹⁹ Since 2009, this virus has been widely circulating across the globe, and is now established in human populations as a seasonal influenza virus.

The rapid detection and characterization of novel influenza A viruses remain critical components in the prevention and containment of potential epidemics that can lead to pandemics. Preparedness and response to a pandemic is global in nature and the World Health Organization (WHO) has the leading role, as it defines the global guidelines for pandemic control strategies and measures.

The CDC Influenza Risk Assessment Tool (IRAT)²⁰

The CDC, along with external influenza experts, developed the Influenza Risk Assessment Tool (IRAT), it is an evaluation tool to help assess the potential pandemic risk posed by novel influenza A viruses that currently circulate in animals, but not in humans. The potential influenza pandemic risk is based on:

1. An “emergence” scenario: the risk of a novel influenza virus acquiring the ability to spread easily and efficiently in people.
2. A “public health impact” scenario: the potential severity of human disease caused by the virus (hospitalizations and deaths), the burden on society (missed work days, strain on hospital capacity, resources, and interruption of basic public services).

¹⁷ https://www.aphis.usda.gov/animal_health/emergency_management/downloads/hpai-response-plan-ppt-long.pdf

¹⁸ http://wwwnc.cdc.gov/eid/article/12/1/05-0979_article

¹⁹ http://www.cdc.gov/h1n1influenza/estimates_2009_h1n1.htm

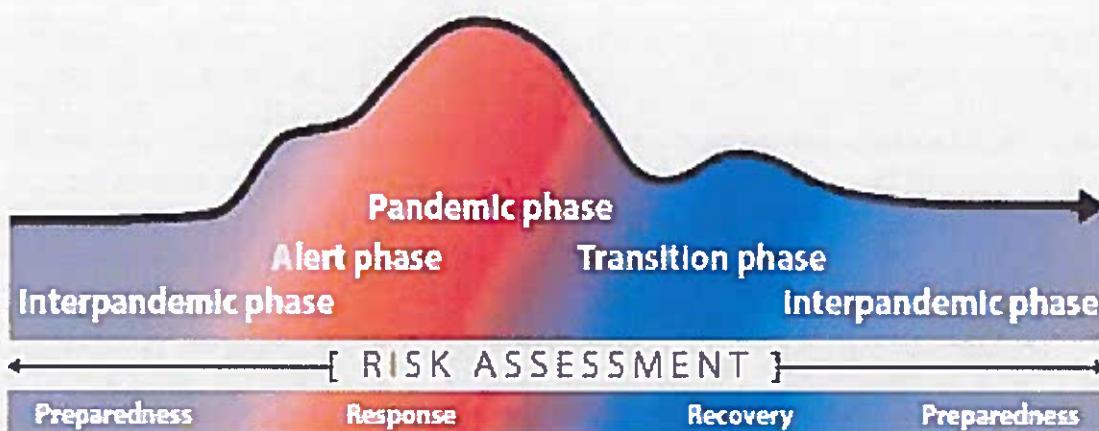
²⁰ <http://www.cdc.gov/influenza/pandemic-resources/tools/risk-assessment.htm>

Ten scientific criteria are weighted statistically, based on significance to the scenarios and grouped into three categories:

1. Properties of the virus, i.e., genetic diversity, molecular signature, host preference, transmission in lab animals
2. Attributes of the population, i.e., existing immunity, disease severity in people or animals, antigenic relationship to current or previously manufactured vaccine strains
3. Ecology and epidemiology of the virus, i.e., how widespread and in what animals are human infections with the virus occurring

A composite score for each virus is calculated, the viruses are ranked and compared by these scores as to the level of potential pandemic risk for each virus.

World Health Organization (WHO) Phases of a Pandemic



The WHO guidance is based on the principles of all-hazards emergency risk management for health that includes a global Influenza Risk Assessment and Pandemic Preparedness four-phase classification system to guide planning and response activities for an influenza pandemic.²¹

Interpandemic Phase/Preparedness the period between influenza pandemics

Normal seasonal influenza activity

Strategy: early detection, preparedness

Alert Phase/Response – a new subtype is identified in humans and increased vigilance and careful risk assessments take place Strategy: mitigation

If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities toward the interpandemic phase takes place.

²¹ <https://apps.who.int/iris/bitstream/handle/10665/259893/WHO-WHE-IHM-GIP-2017.1-eng.pdf?sequence=1>

If the risk assessments show that the new virus is developing into a pandemic strain, antiviral medications are deployed, and regulatory preparedness is intensified.

Pandemic Phase/Response – global spread of a new influenza subtype as indicated by global risk assessment, human-to-human transmission increases

Strategy: mitigation

Movement between the interpandemic phase, alert and pandemic phases may occur quickly or gradually, as indicated by the global risk assessment, principally based on virological, epidemiological, and clinical data.

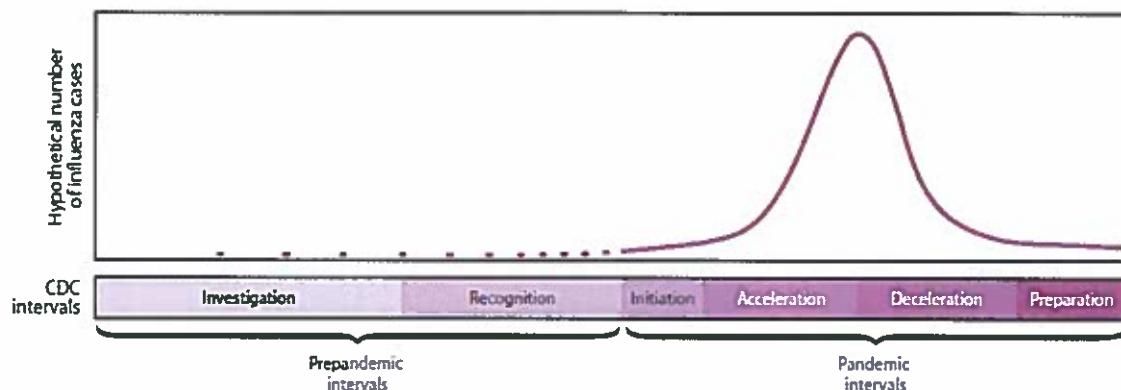
At the early stage of a pandemic, targeted containment measures may be useful in limiting local outbreaks and delaying the spread of the virus. Medical and non-medical measures are taken, in an attempt, to slow the spread of the virus and minimize morbidity, mortality, and the impact on society.

Transition Phase/Recovery – global risk drops, prompting de-escalation and reduction in response activities

Strategy: restoration of functionality

There is a possibility of a subsequent wave occurring while the first pandemic wave is abating.

Preparedness and Response Framework for Novel Influenza A virus: CDC intervals



This figure includes a hypothetical influenza outbreak curve and the corresponding preparedness and response framework for novel influenza A virus pandemics with the World Health Organization (WHO) phases and the CDC intervals. The four WHO phases include the interpandemic, alert, pandemic, and transition phases, and the CDC intervals include the prepandemic intervals (investigation and recognition) and the pandemic intervals (initiation, acceleration, deceleration, and preparation).²²

²² http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6306a1.htm?s_cid=rr6306a1_e

The CDC Influenza Pandemic Framework

The CDC framework describes the progression of influenza pandemics, using six intervals (two pre-pandemic and four pandemic) and eight domains.

The framework outlines recommendations for risk assessment, decision-making, and action. The intervals are based on events that occur along a hypothetical epidemic curve. For state and local planning; the intervals describe the progression of the pandemic within communities and provide a detailed framework for defining when to respond with various actions and interventions at any point in a pandemic.

The six intervals include:

Pre-pandemic: 1) investigation of cases of novel influenza A virus in humans, 2) recognition of increased potential for ongoing transmission of a novel influenza virus *Pandemic:* 3) initiation of a pandemic wave, 4) acceleration of a pandemic wave, 5) deceleration of a pandemic wave, and 6) preparation for future pandemic waves.

The eight domains used to organize response efforts within each interval are:

- A) incident management, B) surveillance and epidemiology, C) laboratory, D) community mitigation, E) medical care and countermeasures, F) vaccine, G) risk communications, and H) state/local coordination.²³

CDC Pandemic Severity Assessment Framework (PSAF)²⁴

When a novel influenza A virus is identified and has sustained transmission from person to person, public health officials use the PSAF to determine the impact of the pandemic. Two main factors are used to determine the impact:

- 1) Clinical Severity or how serious is the illness associated with the infection
- 2) Transmissibility or how easily the virus spreads from person to person.

These two combined factors are used to guide decisions about CDC recommendations during the pandemic.

The framework is divided into two parts:

The initial assessment takes place early in the pandemic when information may be limited and a preliminary assessment of the potential impact (e.g., low to moderate transmissibility and moderate to high clinical severity) is conducted.

The refined assessment is conducted later in the pandemic, when more information is available and there is a more accurate picture of the pandemic impact (e.g., by age group).

Purpose, Scope, Situation and Assumptions

²³ http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6306a1.htm?s_cid=rr6306a1_e

²⁴

https://www.google.com/search?q=pandemic+severity+assessment+framework&rlz=1C1ZCEB_enUS820US820&oq=Pandemic+Severtiy+As&ags=chrome.1.69i57j0I3.15016j1j7&sourceid=chrome&ie=UTF-8

Pandemic Influenza Plan**New Mexico Department of Health****Purpose**

It is the purpose of this plan to define the actions and roles necessary to provide a coordinated response within the State of New Mexico. This plan provides information for the NMDOH with a general concept of potential emergency assignments before, during, and following emergency situations. It also provides for the systematic integration of emergency resources when activated and does not replace county or local emergency operations plans or procedures.

A pandemic is unpredictable; therefore, this plan must be flexible. Flexibility and the ability to act in the face of uncertainty are the trademarks of an efficient public health system. For this plan to stay relevant, it is important to review and revise the information on a regular basis to ensure that new scientific evidence and lessons learned are incorporated.

This pandemic response plan, while primarily focused on influenza, could be applied to any pandemic caused by a respiratory virus. This plan is designed to protect the life and health of the population of the State of New Mexico. It outlines preparations to ensure that the NMDOH is adequately equipped to deal with a pandemic of any degree of severity and to respond in a coordinated and efficient manner to minimize the impact of a pandemic on the people and infrastructure of New Mexico.

This plan provides guidance for the detection, response, and recovery from an influenza pandemic, along with the challenges, decisions, and response actions related to a pandemic.

Scope

This plan applies to all participating departments and agencies of the jurisdictions contained within the geographical boundary of the State of New Mexico.

When circumstances create an actual or potential public health or medical emergency, the NMDOH coordinates health and medical personnel, facilities, supplies, and equipment; collects, evaluates, and disseminates public health surveillance information; maintains the health of the public through disease prevention and control; coordinates public information regarding health risks of the public, education, and services; manages mass fatality response; collaborates with federal, state, local, tribal, non-governmental and private sector response entities, and providers.

This plan is an annex to the NMDOH All-Hazards Emergency Operations Plan (EOP)²⁵ and describes the roles, activities, and coordination associated with responding to an influenza pandemic. Additional EOP annexes are referenced to provide specific authorities and actions associated with public health emergencies.

Situation Overview

It is difficult to predict when and where the next pandemic will originate, how quickly it will spread, and how severely it will affect particular segments of the population. Even with intensive

²⁵ <http://nmhealth.org/publication/view/plan/958/>

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planning, during a crisis there will be adjustments and changes to and clarification of the processes and resources that have been prepared under normal conditions. Planning must anticipate adjustments and must account for factors that affect the efficiency and effectiveness of procedures. These factors include: the level of threat, how quickly the pandemic develops, resistance to antiviral drugs, and scarcity of resources (availability of drugs, vaccines, protective equipment, intensive-care beds, and ventilators). State, local, and tribal government could face extreme challenges in maintaining operations due to widespread illness and increased demand on most government services. Vaccines against the new virus may not be available for six months or longer, the pandemic could last for months, and subsequent waves could continue for over a year. In addition to operational challenges, the amount of illness and death will have an emotional impact on the community.

Unique Pandemic Influenza Planning Conditions in New Mexico

New Mexico is known for its cultural and geographic diversity. However, many of the conditions within the state that make it unique also create additional challenges for pandemic influenza planning. These conditions include the following:

- New Mexico is the 5th largest state geographically and has a population of approximately 2 million people across 33 counties
- Daytime population exceeds census population data due to commercial and industrial areas near the border of Mexico
- According to census information, 14.5% of the population lives in poverty
- New Mexico ranks 32nd in the nation for access to health care
- All but one of the 33 counties are partial or full health professional shortage areas
- According to the New Mexico Indian Affairs Department, there are 23 Native American Tribes, Pueblos, or Nations with sovereign governments and varying health care systems.
- English is spoken by 64% of the population, Spanish 28%, and Navajo 8%.

U.S. Census Bureau County Health Rankings and Roadmaps:

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

<http://www.countyhealthrankings.org/app/#!/new-mexico/2014/overview>

For more information on the public health hazard profile in New Mexico, please refer to the:

1. The New Mexico Department of Health Public Health Risk Assessment (PHRA); and
2. The New Mexico Emergency Operations Plan (EOP)²⁶

²⁶ http://www.nmdhsem.org/Emergency_Operations_Plan.aspx

Planning Assumptions

- Sustained human-to-human transmission of a novel influenza virus may signal a pandemic
- An influenza pandemic may begin at any time of the year, in any place in the world, and may spread to the rest of the world within several weeks or months
- Communities may experience multiple waves of different magnitudes of a pandemic, each wave may last several months
- A severe influenza pandemic may result in the rapid spread of infection; therefore, communities across New Mexico could be simultaneously impacted
- The health care response to a severe pandemic may present extraordinary operational and ethical challenges
- The number of ill people requiring treatment could overwhelm the health care system
- Asymptomatic or minimally symptomatic people may transmit infection
- The typical incubation period (interval between infection and the onset of symptoms) for influenza is 1- 4 days (average two days). Adults shed influenza virus from the day before symptoms begin through 5-10 days after the onset of illness. Young children may shed the virus several days before the onset of illness and children can be infectious for 10 or more days after the onset of symptoms. On average, infected people will transmit infection to approximately two other people.²⁷
- Adequate supplies of antiviral medications may not be available.
- Insufficient supplies of vaccine and antiviral medicine would place greater emphasis on social distancing, infection control, and public education to control the spread of the disease
- Antiviral treatment may improve outcomes and may only have modest effects on the transmission of disease
- Increased hospitalizations, secondary complications, and mortality are expected to vary widely among population groups and communities
- A pandemic virus may cause higher case fatality rates in certain populations
- Vulnerable populations may be more severely affected
- There may be significant disruption of public and critical infrastructure including: transportation, commerce, utilities, public safety, agriculture, and communications
- An influenza pandemic may overwhelm the mortuary services in New Mexico

Concept of Operations

While all emergencies are handled locally or within the jurisdiction when possible, during an influenza pandemic there will be a need for the State to provide assistance to local government.

²⁷ <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5004a1.htm>

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The Epidemiology and Response Division (ERD) is the lead NMDOH Division for the coordination of services and support for response to a public health emergency.

During a pandemic response in New Mexico, the NMDOH All-Hazard Emergency Operations Plan (EOP) would be implemented and the Department Operations Center (DOC) would be activated.

Please see the NMDOH All-Hazard EOP and Concept of Operations for specific activation procedures and organization.²⁸

Surveillance and Epidemiologic Investigation

During a pandemic, early identification of the initial outbreak is instrumental to activating other aspects of this plan and to contain the spread of disease. This is accomplished by various surveillance systems, including: hospital and outpatient clinic, laboratory, and mortality surveillance. The NMAC 7.4.3. requires immediate reporting of confirmed or suspected avian or novel influenza virus and reporting within 24 hours of pediatric influenza deaths and laboratory-confirmed hospitalized influenza cases.²⁹

Epidemiological investigations provide vital information about the potential spread of the disease, as well as, identification of the most high-risk populations. Statewide surveillance provides important information regarding the severity, burden, geographic spread of disease, and the characteristics of the circulating viruses.

Pandemic influenza surveillance monitors influenza trends for overall burden of disease, illness severity, and for the identification of factors that may place people at high risk for complications. This surveillance data is used to target prevention resources and guide policies to reduce morbidity and mortality, as well as minimize social and economic disruption. An influenza pandemic differs from seasonal influenza in frequency, scope, and potentially severity. The NMDOH enhances influenza surveillance in order to detect the entry of the virus into the State, track the spread, and characterize the epidemiology and impact of the virus in order to optimize the response.

Routine Surveillance

The NMDOH Influenza-Like Illness (ILI) Sentinel Surveillance System conducts year-round surveillance from hospitals and outpatient clinics throughout the state and reports the data to CDC. Weekly reports to the NMDOH provide information on the proportion of all sentinel site visits of patients experiencing ILI signs and symptoms. On a weekly basis, sentinel sites submit up to 5 respiratory specimens from ILI patients to the NMDOH Scientific Laboratory Division (SLD) for influenza testing.

The New Mexico (NM) Emerging Infections Program (EIP) is part of FluSurv-NET (a population-based surveillance system for influenza related hospitalizations in children and adults). Active population-based surveillance is conducted for laboratory-confirmed influenza related

²⁸ <http://nmhealth.org/publication/view/plan/958/>

²⁹ <http://164.64.110.134/parts/title07/07.004.0003.html>

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hospitalizations in seven New Mexico counties: Bernalillo, Chaves, Dona Ana, Grant, Luna, San Juan, and Santa Fe. Every week, de-identified data are sent to the CDC, and are used to estimate weekly age-specific hospitalization rates for people hospitalized with influenza illness. Incidence rates for the counties included in the surveillance catchment area are calculated by utilizing the National Center for Health Statistics (NCHS) population estimates.

In collaboration with Physicians and the NM Office of Medical Investigator (OMI), the NMDOH Vital Records and Health Statistics Bureau collects data on all New Mexico resident influenza and pneumonia related deaths.

Data collected from NM surveillance is compiled into weekly NM influenza reports.³⁰

Laboratory Data

The Scientific Laboratory Division (SLD) currently maintains the capacity for year-round influenza testing using reverse transcriptase-polymerase chain reaction (RT-PCR) and performs testing to detect other respiratory viruses using viral culture or other molecular methods. Testing is also performed to detect other respiratory viruses using viral culture or other molecular methods.

Shipping and handling of specimens would be coordinated through ERD and SLD. A statewide courier is in place for shipping of specimens to the SLD. Enhancing Laboratory Capacity (ELC) and Emerging Infections Program (EIP) grant funds were requested to augment this capacity. Available grant funds will be used to purchase reagents and consumables for influenza testing. CDC provides kits and reagents for influenza RT-PCR testing through the International Reagent Resource.

Molecular Biology and Virology/Serology staff are trained in influenza RT-PCR methods. Additional trained staff from both sections will be utilized if the specimen volume increases beyond the capability of the Molecular Biology section.

The SLD Laboratory Information Management System (LIMS) is Public Health Laboratory Interoperability Project (PHLIP) compliant and operational with the New Mexico Health Information Collaborative (NMHIC). In addition, all influenza testing will be reported through PHLIP to CDC and be transmitted to NM ERD through NMHIC. Protocols are in place between SLD and ERD for the reporting of unusual isolations, novel strains and any other notifiable diseases with public health implication. SLD reports all notifiable information to the ERD.

Four Biological Sciences Bureau staff are on call (outside of normal business hours) to respond to emergency situations and outbreaks. If pandemic influenza testing was requested, SLD would contact the Epidemiology and Response Division for approval. On condition of approval, the CDC FDA-approved assay influenza test protocols would be used for testing. If a novel or un-typeable influenza positive was detected, the specimen would be sent to CDC for confirmation and a call would be placed to IDEB. The CDC FDA-approved assay would be used to test the specimen for influenza A/B and then sub-typed for H3, 2009 H1N1, H5, or H7. If the specimen is determined to be seasonal influenza (H3, 2009 H1N1), then it may be set up for

³⁰ <http://nmhealth.org/about/erd/ideb/isp/>

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further testing as needed. If the specimen is influenza A positive, but is unable to be sub-typed, H7 or H5 positive, then the specimen would be sent to CDC for further investigation. An algorithm plan for call down is in place within the SLD. This plan is also used for bio-terrorism/chemical-terrorism response and has been proven to work very effectively. Updated on-call lists with contact information are shared on a regular basis between IDEB and SLD staff. ERD and SLD staff are available 24/7/365.

Linkage of Animal and Human Health Surveillance Systems Laboratory Surveillance

New Mexico actively participates in the Laboratory Response Network (LRN).

The Veterinary Diagnostic Services (VDS) of the New Mexico Department of Agriculture (NMDA) performs National Animal Health Laboratory Network (NAHLN) assays. Two molecular biologists from SLD and two from VDS have been cross-trained on all NAHLN assays and sends specimens out to assays that they do not perform. SLD and VDS are in the same building and the shared location represents a significant advantage to the state of New Mexico with respect to pandemic influenza preparedness.

Animal Disease Surveillance in the United States:

National Animal Health Surveillance System - Animal surveillance, including avian influenza in wild birds and domestic poultry, is conducted by individual states, the poultry industry, and the U.S. Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS).

Diagnostic testing is performed by state and industry laboratories, and confirmatory testing is completed by USDA/APHIS Veterinary Services at the National Veterinary Services Laboratories (NVSL) in Ames, Iowa.

Animal Disease Surveillance New Mexico:

- Avian influenza in domestic poultry is required to be reported to the New Mexico Livestock Board (NMAC 21.30.4.9).
- The NM Livestock Board works in coordination with USDA and APHIS veterinarians to investigate outbreaks of avian influenza in domestic poultry. The NMDOH participates in investigations regarding potential human exposures, antiviral prophylaxis, and the quarantine/isolation of individuals.
- Diagnostic testing is performed by the New Mexico Department of Agriculture, Veterinary Diagnostic Services laboratory (VDS), and confirmatory testing is performed at the NVSL in Ames, Iowa.
- The New Mexico State Game Commission has statutory authority to adopt rules to control, eradicate, or prevent the spread of a contagious disease to or among game animals, including game birds.
- Conservation officers with the New Mexico Department of Game and Fish carry out the rules and regulations promulgated by the New Mexico State Game Commission.
- Disease surveillance of wild/game birds is carried out by conservation officers at hunter check stations, following wild bird die-offs or from live bird trapping. Diagnostic specimens are sent to VDS for initial testing and to NVSL for confirmatory testing.

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- Information about any positive results is shared between the various state and federal agriculture and public health agencies.

Medical Countermeasures (MCM)

MCMs are central to the public health response to mitigate the impact of influenza epidemics and pandemics. Diagnostic devices, antiviral drugs and other therapeutics, vaccines, respiratory protective devices, and ventilators provide the means to detect, prevent, or treat influenza.

The ASPR Biomedical Advanced Research and Development Authority (BARDA) began a pandemic influenza stockpile program to help protect the public from multiple strains of influenza viruses that have pandemic potential. BARDA also supports the stockpiling of antiviral drugs in the Strategic National Stockpile (SNS).

The National Pre-Pandemic Influenza Vaccine Stockpile (NPIVS) was established to maintain vaccine and adjuvants to address influenza viruses that have been evaluated to have the highest risk for human infection. Before a vaccine well-matched to the pandemic influenza virus is available, stockpiled pre-pandemic vaccines and adjuvants could be used for early vaccination efforts for those who are at increased risk of exposure.

Health and Human Services (HSS) Stockpiles

- Pre-pandemic vaccine; vaccine against identified viruses with pandemic potential, that may have characteristics to offer protection against the circulating novel influenza virus
- Pandemic Vaccine and needles/syringes

Strategic National Stockpile

Antiviral drugs, ventilators, and PPE

Commercial Supply

- Respiratory protective devices
- Durable medical equipment
- Antibiotics

CDC Pandemic Influenza Vaccine Distribution

1. HHS contracts with vaccine manufacturers
2. Primary sites (e.g. state health departments, doctors' offices, pharmacies, local clinics, hospitals) place orders for vaccine
3. Orders are approved by state immunization program and sent to CDC
4. CDC approves pandemic vaccine allocations to providers, based on the available supply of vaccine nationally and the number of orders received
5. With CDC approval, vaccine is provided by a CDC distributor

Pandemic Influenza Plan**Organization and Assignment of Responsibilities**

The following tables align the WHO pandemic phases, CDC Intervals for a Novel Influenza A Virus, and CDC Public Health Preparedness Capabilities. Specific New Mexico operational (response) actions and resource elements define the roles, responsibilities, and actions that take place in preparation for and the response to an influenza pandemic.

WHO: Alert Phase: A new influenza subtype is identified in humans, and increased vigilance and careful risk assessments take place/investigation of cases of novel influenza/recognition of increased potential for ongoing transmission

CDC Investigation Interval³¹ (Table 1)

State indicator: Identification of novel influenza A infection in humans

Public Health Actions: targeted monitoring and investigation

TABLE 1 Investigation Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Public Health Division ERD Infectious Disease Epidemiology Bureau (IDEb)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and Epidemiology	1. Conduct public health surveillance and detection. 2. Conduct public health and epidemiological investigations 3. Recommend, monitor, and analyze mitigation actions 4. Improve public health surveillance and epidemiological investigation systems	1. Hospitals report hospitalizations and deaths, due to lab confirmed novel influenza infection 2. Passive: Health care providers instructed via the Health SLD and report to the on-call epidemiologist 3. Active: Seven-county EIP surveillance system in Bernalillo, Chaves, Dona Ana, Grant, Luna, San Juan and Santa Fe counties for hospitalized patients with positive rapid influenza tests 4. Sentinel provider site network 5. Sentinel provider sites report weekly on % of total visits due to ILI 6. Complete enhanced case investigation for all pediatric mortality cases 6. Utilize pneumonia and influenza mortality data from the NMDOH Bureau of Vital Records and Health Statistics	1. Patient interviews, medical records, standardized case report forms 2. Health Alert Network (HAN) 3. FluSurv-NET/Emerging Infections Program (EIP) 4. Sentinel provider site network 5. Weekly mortality reports from Vital Records via file transport protocol (FTP) 6. NMDOH website

³¹ Adapted from <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6306a2.htm> and aligned with <https://www.cdc.gov/cpr/readiness/capabilities.htm>

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Domain: Surveillance and Epidemiology <i>(continued from previous page)</i>		New Mexico Department of Health
7. Collaborate with the Office of the Medical Investigator to investigate pneumonia and influenza deaths	8. Schools, correctional facilities, long-term care facilities and similar settings report clusters of ILI to the NMDOH Infectious Disease Epidemiology Bureau (IDEB)	7. Epidemiologists, University of New Mexico (UNM) surveillance officers, regional Public Health nurses, data entry staff, 24/7/365 on-call staff

9. Determine infection control and isolation/quarantine measures
10. Disseminate appropriate information about diagnosis and treatment of patients with suspected novel influenza infection
11. Maintain updated information and resources on the NMDOH website and through the HAN

TABLE 1 Investigation Interval: Incident Management - Emergency Operations Coordination

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Public Health Division	Emergency Operations Coordination	1. Evaluate public health emergency operations 2. Preliminary assessment to determine the need for public health activation	1. Convene Situational Analysis Team (SAT) 2. Review NMDOH response plans, procedures, and protocols 3. Coordinate activities and response plans with state animal health officials, as appropriate	1. NMDOH All-Hazard Emergency Operations Plan EOP), Standard Operating Guidelines (SOGs), procedures, protocols
Epidemiology and Response Division (ERD)	Domains: Incident Management	3. Develop incident response strategy	4. Review and exercise all aspects of an influenza response	2. Sufficient number of staff trained in NIMS, ICS, EOC, DOC, JIC, RSS, POD operations
Infectious Disease Epidemiology Bureau (IDEB)	State/Local Coordination	4. Evaluate public health emergency operations	5. Determine whether state or federal assistance is required to support the review and update of response plans 6. Provide technical assistance, as appropriate, to regional and local partners for reviewing plans, guidance, and communication channels	3. Drills/exercises to test the plans and determine potential gaps 4. After-Action Reports (AARs) from exercises and real-world events
Bureau of Health Emergency Management (BHEM)				

TABLE 1 Investigation Interval: Laboratory

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: Laboratory	1. Manage laboratory activities 2. Perform sample management. 3. Conduct testing and analysis for routine and surge capacity 4. Support public health investigations 5. Report results	1. Review Laboratory response plans/protocols/procedures 2. Train staff to ensure proficiency in influenza testing under high sample volume conditions, allows use of additional thermocyclers and extraction platforms 3. Participate in proficiency testing to assess and maintain competency in influenza testing ³² 4. Prepare and provide collection kits to approved submitters, as directed by ERD 5. Facilitate submission of specimens to SLD, and test samples using kits provided by the CDC, 6. Perform testing for influenza on all suspect cases, as directed by the CDC and ERD 7. Perform viral culture on a subset of specimens to detect other respiratory viruses and obtain isolates for submission to CDC, forward samples and isolates to CDC, as directed 8. Send results electronically to CDC and the NMDOH ERD via Laboratory Information Management System (LIMS) 9. Mail results to submitters	1. Sufficient number of trained staff 2. Thermocyclers and extraction platforms 3. Laboratory Response Network (LRN) 4. CDC sample collection kits 5. Laboratory Information Management System (LIMS)

³² <https://wwwnc.cdc.gov/eid/article/24/7/18-0028/article>

TABLE 1 Investigation Interval: Incident Management – Information Sharing

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH All	Information Sharing Domain: Incident management	1. Identify stakeholders to incorporate into information flow 2. Identify and develop rules and data elements for sharing information 3. Exchange information to determine a common operating picture	1. Review information sharing plans/protocols/procedures 2. Share information with NMDOH entities. 3. Share information with healthcare providers 4. Share information with emergency management agencies 5. Share information with federal agencies (CDC, ASPR, and others as identified) 6. Share information with Community Health Workers and Community Health Representatives 7. GIS/Crisis Mapping	Two-Way Information Sharing Systems: 1. Telephone 2. Email 3. Radio 4. EMResources 5. CEMP 6. WebEOC 7. GIS/Crisis Mapping

TABLE 1 Investigation Interval: Community Mitigation

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD Public Health Division (PHD) Regions	Community Preparedness Domain: Community mitigation	1. Determine risks to the health of the jurisdiction. 2. Build community partnerships to support health preparedness 3. Engage with community organizations to foster public health, medical, and mental/ behavioral health social networks 4. Coordinate training or guidance to ensure community engagement in preparedness efforts	1. Send updated information to health care providers and hospitals 2. Advise the public about personal protective measures (stay home when ill, respiratory etiquette, hand hygiene) 3. Provide preparedness activities 4. Conduct (N-95 Respiratory) Fit testing and Personal Protective Equipment (PPE) training 5. Collaborate with Local Emergency Planning Committees (LEPCs), stakeholders, school, day care businesses and community organizations	1. State HAN 2. School Health Advocates (SHA)

TABLE 1 Investigation Interval: Medical Care and Countermeasures

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH	Domains: Medical care and countermeasures	1. Collaborate with pharmacies and health care providers to dispense antiviral medications to identified populations	1. Review Medical Countermeasure Plan, POD plans, and Countermeasure Operational Guide 2. Review antiviral and vaccine protocols 3. Maintain situational awareness of antiviral use and availability, by continual monitoring and conducting queries of pharmacies, tracking of DOH antiviral medication use	1. Pharmacy warehouse 2. Cold chain management supplies, vaccines are shipped directly to the Public Health Offices (PHO) they have storage capacity, understand cold chain procedures, and distribute to region specific areas
ERD	Antiviral medications	2. Report adverse events	4. Coordinate antiviral ordering, distribution, and tracking 5. Reassign staff or hire temp staff to assist with antiviral and vaccine distribution	3. Track agreements, vaccines, and antiviral medication using the NMSIIS; all PHOs are in the system
IDEB	CDC may increase seasonal influenza vaccine distribution		6. Collaborate with the NMDOH Immunization Program to order seasonal influenza vaccine	4. Region specific teams
BHEM			7. Maximize resources between Public Health offices and schools, conduct School Kids Influenza Immunization Project (SKIIP) training and/or POD training	5. PHD staff, Nurse Managers, DNS, and School Health Advocates
PHD			8. Collaborate with schools and day care businesses to distribute seasonal influenza vaccines	6. LEPCs
Infectious Disease Bureau			9. Collaborate with emergency managers, first responders and volunteer organizations	7. NM MRC Serves volunteers 8. Volunteer Organizations Active in Disaster (VOAD) 9. Staff trained in emergency response roles
Immunization Program				
Director's Office				
Regional Offices				

TABLE 1 Investigation Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	INVESTIGATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary	Emergency Public Information and Warning	1. Establish and participate in information system operations 2. Establish avenues for public interaction and information exchange 3. Issue public information, alerts, warnings, and notifications	1. Review Risk Communication Plan 2. Review pandemic messaging 3. Exercise communication response to a pandemic influenza event 4. Prepare for possible JIC activation 5. Meet with communication partners 6. Update website 7. Convene NMDOH Communication Team 8. Send information to providers and hospitals via HAN 9. Distribute education about NPI preventative measures 10. Collaborate with the LEPCs about recommendations and distribute preventative measures education 11. Share information with Community Health Workers and Community Health Representatives	1. Risk Communication Plan 2. Media Distribution List 3. NMDOH Communication Team 4. Pandemic Influenza Messaging 5. Contact List of Partners 6. Press release: NPI preventative measures 7. Press release: novel influenza vs. seasonal influenza 8. Fact sheet on novel influenza 9. State Health Alert Network (HAN) 10. NMDOH website and social media

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TABLE 1 Novel Influenza A virus pandemic (Investigation Interval): investigation of novel influenza A infection in humans
The following information expands upon the functions and activities outlined for the investigation interval:

Enhanced Surveillance

NMDOH starts enhanced surveillance when a novel influenza virus is identified anywhere in the world, or if there is a highly suspicious cluster of respiratory illness in New Mexico or another part of the world with sustained human-to-human transmission. This enhanced surveillance includes education for healthcare providers, the general public, and private partners. Sentinel clinical and laboratory sites throughout New Mexico conduct influenza-like illness monitoring and perform laboratory testing for confirmation of the virus.

Communication with Healthcare Providers

The New Mexico Administrative Code mandates that healthcare providers contact the NMDOH ERD at 505-827-0006, to report any suspected cases of avian or novel influenza strains.

Controls at U.S. Port of Entry

The NMDOH ERD worked closely with the CDC El Paso Quarantine Station to develop the Albuquerque Sunport Communicable Disease Emergency Response Plan: Guidelines for Preventing the Introduction, Transmission, and Spread of Communicable Diseases from Foreign Countries into the United States. The ABQ Plan is specific to the Albuquerque Sunport, which receives a small number of international flights from Mexico.

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WHO: Alert Phase - A new subtype is identified, and increased vigilance and careful risk assessments take place/investigation of cases of novel influenza/recognition of increased potential for ongoing transmission.

CDC Recognition Interval (Table 2)

State Indicator: Increasing number of human cases of novel influenza A illness are identified and the virus has the potential to spread from person-to-person. Public Health Actions: control of the outbreak, treatment of sick persons

TABLE 2 Recognition Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	ACTIONS	Recognition Interval	RESOURCE ELEMENTS
NMDOH ERD Infectious Disease Epidemiology Bureau (IDEB)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and epidemiology	<ol style="list-style-type: none"> Conduct public health surveillance and detection Conduct public health and epidemiological investigations. Recommend, monitor, and analyze mitigation actions Improve public health surveillance and epidemiological investigation systems 	<ol style="list-style-type: none"> Conduct surveillance of hospitalized patients with lab confirmed, novel/unsubtypeable influenza infection Review pneumonia and influenza mortality data from Bureau of Vital Records and Health Statistics and the Office of the Medical Investigator Sentinel provider sites continue weekly % of total visits due to ILI reports and submission of specimens to SLD Continue receiving reports of novel/unsubtypeable cases and clusters/outbreaks via 24/7/365 on-call service at 505-827-0006 Conduct enhanced case investigation and assess contacts of novel or subtypeable influenza infections reported to the 24/7/365 on-call service, hospitalized influenza network, and the mortality surveillance systems Continue conducting enhanced case investigation of novel influenza on all pediatric mortality cases Establish an electronic case report form and report cases, according to the Nationally Notifiable Diseases Surveillance System, to CDC via the New Mexico Electronic Disease Surveillance System (NM-EDSS) If animal cases are identified, expand implementation of joint investigation plan with state agriculture officials 	24/7/365 on-call service at 505-827-0006	<ol style="list-style-type: none"> Patient interviews, medical records, standardized case report forms Death records from Bureau of Vital Records and Health Statistics and the Office of Medical Investigator Hospitalized influenza network Mortality surveillance systems Electronic case report form New Mexico Electronic Disease Surveillance System (NM-EDSS) Nationally Notifiable Diseases Surveillance System

TABLE 2 Recognition Interval: Incident Management – Emergency Operations Coordination

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOGNITION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Epidemiology and Response Division (ERD)	Emergency Operations Coordination	1. Conduct preliminary assessment to determine the need for public activation	1. The Situational Analysis Team (SAT) considers: a. Activation of the Department Operations Center (DOC), or if already activated, a higher level of activation 2. Activate public health emergency operations	1. NMDOH All-Hazard Emergency Operations Plan (EOP), Standard Operating Guidelines (SOGs), procedures, protocols 2. Sufficient number of staff trained in NIMS, ICS, EOC, DOC, JIC, RSS, POD operations 3. Drills/exercises to test the plans and determine potential gaps 4. After-Action Reports (AARs) from exercises and real-world events
Bureau of Health Emergency Management (BHEM)	Domains: Incident management State/local coordination	3. Develop incident response strategy 4. Manage and sustain the public health response 5. Evaluate public health emergency operations	2. If DOC is activated, coordinate and support NMDOH response activities from the DOC 3. DOC staff develops Incident Action Plan (IAP), submits to NMDOH leadership for review and approval 4. Forecast future resource needs for a potential response 5. Continue to coordinate with all partners	

TABLE 2 Recognition Interval: Laboratory and Community Mitigation

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOGNITION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: Laboratory	1. Manage laboratory activities. 2. Perform sample management 3. Conduct testing and analysis for routine and surge capacity 4. Support public health investigations 5. Report results	1. Prepare collection kits for distribution to approved submitters 2. Samples will be tested using kits provided by CDC 3. Viral culture will be performed on a subset of specimens to detect other respiratory viruses and obtain isolates for submission to CDC 4. Test specimens as indicated by the Influenza Right Size Roadmap developed by CDC and APHL 5. Send results electronically to CDC and ERD via the Laboratory Information Management System 6. Mail results to submitters 7. Be vigilant for any modification of testing guidelines sent by the CDC and ERD	1. SLD collection kits 2. CDC testing kits 3. Influenza Right Size Roadmap 4. Laboratory Information Management System (LIMS) 5. CDC testing guidelines
NMDOH ERD PHD	Non- Pharmaceutical Interventions Domain: Community Mitigation	1. Engage partners and identify factors that impact nonpharmaceutical interventions 2. Determine nonpharmaceutical interventions 3. Implement nonpharmaceutical interventions 4. Monitor nonpharmaceutical interventions	1. Review legal, policy, and regulatory authorities that enable or limit the ability to recommend and implement non-pharmaceutical interventions 2. Implement community mitigation/non-pharmaceutical intervention (NPI) measures: <ul style="list-style-type: none">• Voluntary home isolation of ill persons• Respiratory etiquette, hand hygiene• Infection control• Voluntary home quarantine of contacts• Use of face masks• Consider temporary closure of child care facilities and schools• Social distancing measures	1. Legal, policy, and regulatory guidance documentation 2. Public Service Announcements 3. NMDOH website 4. Social media

TABLE 2 Recognition Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOGNITION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary ERD BHEM IDEB PHD	Emergency Public Information and Warning Domain: Risk Communication	<p>1. Activate the emergency public information system</p> <p>2. Determine the need for a joint public information system</p> <p>3. Establish and participate in information system operations</p> <p>4. Establish avenues for public interaction and information exchange</p> <p>5. Issue public information, alerts, warnings, and notifications</p> <p>6. Provide a single release point of information</p> <p>7. Continue Non-pharmaceutical interventions (NPI) messaging</p> <p>8. Facilitate rumor control for media outlets</p>	<p>1. Continue/initiate actions from previous interval</p> <p>2. Develop or update a media-relations and outreach plan</p> <p>3. Disseminate risk communication messages, including: what is known, what is not known, and what is being done by public health officials.</p> <p>4. Prepare educational information about non-pharmaceutical mitigation strategies such as: social distancing, sheltering in place, quarantine, and isolation</p> <p>5. Disseminate messages for travelers, as well as, community mitigation messages; when to seek care, and how to care for ill persons at home as appropriate</p> <p>6. Conduct briefings with local, regional, and state response partners; businesses; tribes, and health-care facilities; to include: the potential for escalation, response actions underway, and preparedness steps that partners should consider</p> <p>7. Monitor/Update the NMDOH Website and Social Media Messaging</p> <p>8. Prepare Influenza Hotline for Activation</p> <p>9. Prepare PSAs for Media</p> <p>10. Prepare flyers, charts, and brochures</p> <p>11. Provide information and update clinicians, Community Health Workers, Community Health Representatives and stakeholders through the state health alert network</p>	<p>1. Risk Communication Plan</p> <p>2. Media Distribution List</p> <p>3. NMDOH Communication Team</p> <p>4. Pandemic Influenza Messaging</p> <p>5. Contact List of Partners</p> <p>6. Press release: prevention measures</p> <p>7. Press release: novel influenza vs. seasonal influenza</p> <p>8. Fact sheet on novel influenza</p> <p>9. State Health Alert Network (HAN)</p> <p>10. NMDOH website and social media</p> <p>11. NMDOH Influenza Hotline</p>

TABLE 2 Recognition Interval: Medical Care and Countermeasures

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOGNITION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD BHEM IDEB PHD Infectious Disease Bureau Immunization Program Director's Office Regional Offices	Medical Countermeasure (MCM) Dispensing Domains: Medical care and countermeasures antiviral medications Stockpiled pre-pandemic influenza vaccine may be sent to PHD via Vaccine for Children (VFC) program Influenza vaccine specific to the pandemic virus may take up to 6 months to produce, unlikely to be available at this time	1. Identify and initiate MCM distribution/ dispensing strategies 2. Receive MCM (antivirals, PPE, pre-pandemic vaccine) 3. Activate distribution modalities 4. Disperse MCM to identified populations 5. Report adverse events	1. Send updated treatment guidelines to providers and hospitals 2. Notify VFC contacts about the potential for a distribution operation 3. Continue collaboration with pharmacies and healthcare partners to dispense antiviral medication and track availability 4. Collaborate with emergency managers and stakeholders 5. PHD Director and the Immunization Program coordinate antiviral ordering and distribution 6. PHD Immunization Program—assess any modifications needed for NMISIIS 7. LEPCs	1. Pharmacy warehouse 2. Supplies for MCM distribution of antivirals and vaccines 3. Receipt of pre-identified/stockpiled pandemic-potential influenza vaccine through the VFC system to the PHD Immunization Program 4. Tracking agreements in the NMISIIS system 5. Antiviral availability/distribution tracking 6. Region specific teams 7. LEPCs 8. NM MRC Serves 9. Staff trained in emergency response roles

Pandemic Influenza Plan

WHO: Pandemic Phase - Global spread of a new influenza subtype as indicated by global risk assessment, human-to-human transmission increases and acceleration of a pandemic wave.

New Mexico Department of Health

CDC Initiation Interval (Table 3)

State Indicator: Initiation of a pandemic wave; a novel influenza A virus has the ability to spread in a sustained manner from person-to-person.

TABLE 3 Initiation Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	INITIATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD Infectious Disease Investigation Epidemiology Bureau (IDEB)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and epidemiology	1. Conduct public health surveillance and detection 2. Conduct public health and epidemiological investigations 3. Recommend, monitor and analyze mitigation actions 4. Improve public health surveillance and epidemiological investigation systems	1. Continue enhanced surveillance; conduct case investigation, and response 2. Consider statewide surveillance for influenza hospitalizations 3. Continue surveillance of hospitalized patients with lab confirmed novel/unsubtypable influenza infection 4. Continue review of pneumonia and influenza mortality rates from Bureau of Vital Records and Health Statistics and the Office of the Medical Investigator 5. Sentinel provider sites' weekly reporting 0% of total visits due to ILI and submission of specimens to SLD 6. Conduct enhanced case investigation and assessment of contacts of novel or unsubtypable influenza infections reported to the 24/7/365 on-call service, hospitalized influenza network, and mortality surveillance systems 7. Continue conducting enhanced case investigation of novel influenza on all pediatric mortality cases 8. Continue reporting cases nationally using the New Mexico Electronic Disease Surveillance System (NM-EDSS)	1. Death records from Bureau of Vital Records and Health Statistics and Office of Medical Investigator 2. 24/7/365 on-call service at 505-827-0006 3. Hospitalized influenza network 4. Mortality surveillance systems 5. Electronic case report form 6. New Mexico Electronic Disease Surveillance System (NM-EDSS) 7. Nationally Notifiable Diseases Surveillance System

TABLE 3 Initiation Interval: Incident Management – Emergency Operations Coordination

ORGANIZATION	CAPABILITY	FUNCTIONS	INITIATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Epidemiology and Response Division (ERD)	Emergency Operations Coordination	1. Conduct preliminary assessment to determine the need for public activation or level to continue activation 2. Activate public health emergency operations 3. Revise incident response strategy 4. Manage and sustain the public health response 5. Evaluate public health emergency operations	1. Initiate rapid needs assessment and reconcile inventory of in-state caches of Personal Protective Equipment (PPE) and available MCM, in preparation for a potential Strategic National Stockpile (SNS) request 2. Continue or initiate actions described for the previous interval 3. Activate Department Operations Center (DOC), if already activated, consider a higher level of activation 4. Consider declaring a public health emergency 5. Maintain situational awareness of antiviral use and availability, by continual monitoring and conducting queries of pharmacies, tracking of DOH antiviral use	1. NMDOH All-Hazard Emergency Operations Plan (EOP), Standard Operating Guidelines (SOGs), procedures, protocols 2. Sufficient number of staff trained in NIMS, ICS, EOC, DOC, JIC, RSS, POD operations 3. After-Action Reports (AARs) from exercises and real-world events

TABLE 3 Initiation Interval: Laboratory

ORGANIZATION	CAPABILITY	FUNCTIONS	Initiation Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: Laboratory	1. Manage laboratory activities 2. Perform sample management 3. Conduct testing and analysis for routine and surge capacity 4. Support public health investigations 5. Report results	1. Confirm and test for cases of influenza as required for virologic surveillance 2. Facilitate submission of specimens to SLD 3. Provide influenza collection kits as directed by ERD 4. Test specimens for influenza as directed by CDC and ERD 5. Provide results for testing to submitters, ERD, and CDC 6. Prepare collection kits for distribution to approved submitters 7. Samples will be tested using kits provided by the CDC 8. Forward samples and isolates to CDC, as directed 9. Perform viral culture on a subset of specimens to detect respiratory viruses, and to obtain isolates for submission to the CDC 10. Send results electronically to CDC and ERD via the Laboratory Information Management System 11. Results will be mailed to submitters	1. SLD collection kits 2. CDC testing kits 3. Influenza Right Size Roadmap 4. Laboratory Information Management System (LIMS) 5. CDC testing guidelines

TABLE 3 Initiation Interval: Community Mitigation

ORGANIZATION	CAPABILITY	FUNCTIONS	Initiation Interval ACTIONS	RESOURCE ELEMENTS
NMDOH ERD PHD	Non-Pharmaceutical Interventions Domain: Community Mitigation	1. Engage partners and identify factors that impact nonpharmaceutical interventions 2. Determine nonpharmaceutical interventions 3. Implement nonpharmaceutical interventions 4. Monitor nonpharmaceutical interventions	1. Develop and provide recommendations about social distancing, face mask usage and temporary child care closures 2. Distribute educational information about preventive measures such as voluntary home isolation of ill persons, respiratory etiquette, hand hygiene, and infection control 3. Determine if school closures should be recommended or not	1. Legal, policy, and regulatory guidance documentation 2. Public Service Announcements 3. NMDOH website 4. Social media

TABLE 3 Initiation Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	Initiation Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary	Emergency Public Information and Warning	1. Activate the emergency public information system 2. Determine the need for a joint public information system 3. Establish and participate in information system operations 4. Establish avenues for public interaction and information exchange 5. Issue public information, alerts, warnings, and notifications	1. Activate the NMDOH Communication Team 2. Coordinate regular internal NMDOH communication and information 3. Partial DOC staffing by NMDOH Communication Team 4. Provide the public and partners with educational information on the following topics: social distancing, sheltering in place, nonpharmaceutical interventions, quarantine, and isolation 5. Disseminate novel influenza strain risk communication messages 6. Provide regular internal NMDOH communication and information 7. Disseminate messages, including: when to seek care and how to care for ill persons at home 8. Conduct regular briefings with communication partners and stakeholders 9. Monitor/Update the NMDOH Website 10. Post social media messaging 11. Continue activation of hotline 12. Release all public information in English and Spanish 13. Outreach and education campaign to vulnerable populations 14. Vaccine information when available 15. Promote seasonal influenza vaccination 16. Provide information and update clinicians, community health workers, community health representatives, and stakeholders through the state health alert network	1. Risk Communication Plan 2. Media Distribution List 3. NMDOH Communication Team 4. Pandemic Influenza Messaging 5. Contact List of Partners 6. Press release: prevention measures 7. Press release: novel influenza vs. seasonal influenza 8. Fact sheet on novel influenza 9. State Health Alert Network (HAN) 10. NMDOH website and social media 11. NMDOH Influenza Hotline
ERD IDEB BHBM PHD	Domain: Risk Communication			

TABLE 3 Novel influenza A virus pandemic (initiation interval): Initiation of pandemic wave
The following information expands upon the functions and activities outlined for the initiation interval:

Enhanced Surveillance

The NMDOH coordinates statewide influenza surveillance. During a pandemic, the NMDOH would:

- Distribute the current recommendations to health care partners about enhanced surveillance for the detection of the first cases of the pandemic virus.
- Facilitate the collection and testing of appropriate specimens, as recommended, for early detection of the pandemic virus.
- Increase testing and the frequency of reporting virologic data. The most intense testing is necessary during the early stages of a pandemic in order to detect the introduction of the virus into the state, region, or new community.

As part of the effort to monitor antigenic and genetic changes, and changes in antiviral resistance patterns in the pandemic virus the SLD sends a subset of virus isolates to CDC. The CDC will advise the NMDOH about the number and clinical criteria for these isolates.

The NMDOH uses data from Influenza-like Illness (ILI) surveillance, hospital surveillance, mortality surveillance, and laboratory virologic surveillance as well as both rapid testing and viral culture data to:

- Monitor the impact of the pandemic on health in NM.
- Track trends in the influenza disease activity and identify populations that are severely affected.
- Identify an increase in ILI in the community, this works as an early warning system.

The NMDOH communicates the heightened need for timely and complete surveillance data to all partners, ensures that all sentinel provider surveillance sites are reporting weekly, and that active hospital surveillance is ongoing. State Influenza activity level is reported in a timely manner through the Health Alert Network, the media, the NMDOH Influenza Webpage, NM Poison and Drug Information Center, Nurse Advice New Mexico, and the NMDOH Epidemiology and Response Division 24/7/365 on-call service.

TABLE 3 Novel influenza A virus pandemic (initiation interval): initiation of pandemic wave
The following information expands upon the functions and activities outlined for the initiation interval:

Laboratory Data

The SLD sends influenza results from the Laboratory Information Management System (LIMS) to the New Mexico Health Information Cooperative (NMHIC), where the information is available to the NMDOH Epidemiology and Response Division (ERD). ERD can query the LIMS for influenza results. The SLD also reports influenza data to the public Health Laboratory Information System (PHLIS). Through this process, SLD works closely with ERD and other stakeholders to ensure that the data is easily transmissible and that all systems are Public Health Information Network (PHIN) compliant.

Influenza-related Hospitalization Surveillance

The NMDOH tracks hospitalization rate trends.

The NMDOH uses the web-enabled NM-Electronic Disease Surveillance System (NM-EDSS) to track statewide influenza related hospitalizations during all phases and intervals of a pandemic. The system allows hospital personnel to enter infectious disease related data directly into the system from the hospital, via the internet. Secure access and limited rights were granted to infection control practitioners for them to enter and view data, including influenza hospitalizations specific to their associated hospital.

Statewide Communication

Communication with healthcare providers, government, businesses, media, and the public is an important component of the pandemic response.

Please see the Risk Communications Annex Plan

Please see the Interoperable Communications Plan

Pandemic Influenza Plan**New Mexico Department of Health****TABLE 3 Novel influenza A virus pandemic (initiation interval): initiation of pandemic wave**

The following information expands upon the functions and activities outlined for the initiation interval:

Communication with Healthcare Providers

The NMDOH maintains a Health Alert Network (HAN) that is coordinated with the CDC HAN. The purpose of the New Mexico HAN is to enable public health practitioners to prepare for and respond to public health threats, such as pandemic influenza, by providing secure and redundant methods to rapidly communicate critical situation information to the appropriate key providers in the public health arena. The NMDOH HAN operates independently of the state network and computing infrastructure. Though connected to the state network for administrative purposes, the HAN operations do not require nor rely on the state information technology network for operations or functionality. In addition, the NM DOH HAN is physically located outside of state computer facilities. The site has excellent physical security; including pass-card and biometric security scanning, as well as multiple sources for electricity and back-up power.

Access and Functional Needs Populations

Please see the NMDOH Access and Functional Needs Plan. W:\BHEM\MASTER\BHEM_Plans\Annex 7 Access and Functional Needs

NMDOH incorporates the access and functional needs populations throughout public health and hospital preparedness programs. The NMDOH goal is for a community-based and statewide level of preparedness that promotes resiliency and inclusion of all residents of New Mexico.

Training regarding access and functional needs populations and groups is provided and includes: health emergency preparedness, community outreach, socio-economic profiles, identified providers of services for access and functional needs populations, and data regarding the numbers and types of access and functional needs groups in each county.

TABLE 3 Novel influenza A virus pandemic (initiation interval): initiation of pandemic wave
The following information expands upon the functions and activities outlined for the initiation interval:

Clinical Guidelines and Disease Management

The ability to provide effective treatment and disease management for people who become infected with pandemic influenza is a critical capacity within a pandemic influenza plan. If antiviral drugs are effective against the novel form of influenza causing the pandemic, it is crucial to provide information about antivirals to health care partners and to coordinate a statewide plan for distribution of these medications. In a pandemic, effective antivirals may be in limited supply; therefore, the NMDOH may utilize information from the CDC and develop priority groups to guide the distribution. Health care facilities may be overwhelmed; information about home care for sick individuals as well as what specific symptoms indicate the need for advanced health care are important and will help to relieve the stress on the healthcare system.

Disseminate information to healthcare partners, including:

- The clinical case definition of the novel influenza infection;
- Updates regarding local clusters of disease, in the early stages of the pandemic;
- Evolving clinical case definitions and epidemiologic information;
- Reporting requirements, that may change as the pandemic unfolds;
- Infection control standards for the home, outpatient clinic, inpatient hospital, and institutional settings;
- Clinical information regarding the evaluation and anticipated course of infection, based upon information from the WHO and the CDC;
- Information about the availability and appropriate use of antiviral medication;
- Evolving information about the efficacy of antiviral medications for treatment and prophylaxis of the pandemic strain;
- Information about the availability and recommended use of influenza vaccine;
- Evolving information about the sub-groups of people that are most likely to experience serious complications from infection;
- Recommendations for alterations in standards of care, which may become necessary if the healthcare resources become overwhelmed; and
- Guidance to monitor resistance to antiviral drugs.

Pandemic Influenza Plan	New Mexico Department of Health
TABLE 3 Novel Influenza A virus pandemic (initiation interval): initiation of pandemic wave The following information expands upon the functions and activities outlined for the initiation interval:	
Distribution of Antiviral Drug Allocations	
Please see the Medical Countermeasure (MCM) Plan for more information. W:\BHEM\MASTER\BHEM Plans\Annex 2 Medical Counter Measures	
The NMDOH will distribute antiviral medication, protective equipment, and other ancillary medical supplies, if indicated. Contracts and/or Memorandum of Agreement (MOAs) exist between NMDOH and other related agencies.	
Plans are in place to administer antiviral drugs in accordance with applicable federal and state requirements, including in compliance with Emergency Use Orders from the Federal Food and Drug Administration.	
Plans do not currently exist for antiviral drugs that might need to be administered under Investigational New Drug protocols. Plans do exist for administration under Emergency Use Authorizations.	
Coordination with New Mexico Pueblos, Tribes, Nations, and the Indian Health Service	
The NMDOH collaborates with tribal partners in pandemic influenza emergency preparedness planning and response, including Points of Dispensing (POD) and Medical Countermeasure (MCM) distribution and dispensing.	
Emergency Medical Systems (EMS)	
The NMDOH will provide guidance to EMS agencies during the planning of State and community pandemic influenza mitigation and response. EMS agencies are essential to pandemic influenza planning and response.	

Pandemic Influenza Plan

WHO: Pandemic Phase - Global spread of a new influenza subtype as indicated by global risk assessment, human-to-human transmission increases/initiation and acceleration of a pandemic wave.

New Mexico Department of Health

CDC Acceleration Interval (Table 4)

State Indicator: Consistently increasing rate of pandemic influenza cases identified in the State, indicating established transmission.

TABLE 4 Acceleration Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	ACCELERATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD Infectious Disease Epidemiology Bureau (IDEB)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and epidemiology	1. Conduct public health surveillance and detection 2. Conduct public health and epidemiological investigations 3. Recommend, monitor, and analyze mitigation actions. 4. Improve public health surveillance and epidemiological investigation systems.	1. Continue surveillance of hospitalized patients with lab confirmed novel/unsubtypeable influenza infection 2. Continue review of pneumonia and influenza deaths from Bureau of Vital Records and Health Statistics and the Office of the Medical Investigator 3. Continue sentinel provider sites weekly reporting of % of total visits due to influenza-like illness (ILI), and submission of specimens to the SLD 4. Continue receiving reports of novel/unsubtypeable clusters/outbreaks via 24/7/365 on-call service at 505827-0006 5. Continue conducting enhanced case investigation of novel influenza on all pediatric mortality cases 6. Continue collecting and nationally reporting cases, using the standardized case definition and investigation form, in the New Mexico Electronic Disease Surveillance System (NM-EDSS) 7. Analyze and report data from surveillance systems to identify changes in New Mexico influenza epidemiology	1. Death records from Vital Records and Health Statistics and Office of Medical Investigator 2. 24/7/365 on-call service at 505-827-0006 3. Hospitalized influenza network 4. Mortality surveillance systems 5. Electronic case report form 6. New Mexico Electronic Disease Surveillance System (NM-EDSS) 7. Nationally Notifiable Diseases Surveillance System

TABLE 4 Acceleration Interval: Incident Management – Emergency Operations

ORGANIZATION	CAPABILITY	FUNCTIONS	ACTIONS	ACCELERATION INTERVAL	RESOURCE ELEMENTS
NMDOH Epidemiology and Response Division (ERD)	Emergency Operations Coordination Domains: Incident management State/local coordination	1. Continue public health emergency operations 2. Review and revise incident response strategy 3. Manage and sustain the public health response 4. Evaluate public health emergency operations	1. Continue or initiate actions described for the previous interval 2. Consider a higher level of activation of the Department Operations Center (DOC) 3. Consider declaring a public health emergency, if it has not been declared 4. Continue to coordinate with all partners 5. Support maintenance of critical infrastructure and key resources as appropriate	Acceleration Interval	1. NMDOH All-Hazard Emergency Operations Plan (EOP), Standard Operating Guidelines (SOGs), procedures, and protocols 2. Sufficient number of staff trained in: NIMS, ICS, EOC, DOC, JIC, RSS, POD operations 3. Drills/exercises to test the plans and determine potential gaps 4. After-Action Reports (AARs) from exercises and real-world events

TABLE 4 Acceleration Interval: Laboratory

ORGANIZATION	CAPABILITY	FUNCTIONS	ACCELERATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: L a b o r a t o r y	1. Manage laboratory activities and sample management 2. Conduct testing and analysis for routine and surge capacity 3. Support public health investigations	1. Prepare collection kits for distribution to approved submitters 2. Samples are tested using kits provided by CDC 3. Viral culture is performed on a subset of specimens, to detect other respiratory viruses, and obtain isolates for submission to CDC 4. Results are sent electronically to CDC and ERD via the Laboratory Information Management System and mailed to submitters	1. SLD collection kits 2. CDC testing kits 3. Influenza Right Size Roadmap 4. Laboratory Information Management System (LIMS) 5. CDC testing guidelines

TABLE 4 Acceleration Interval: Medical Care and Countermeasures

ORGANIZATION	CAPABILITY	FUNCTIONS	ACCELERATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD BHEM IDEB PHD Infectious Disease Bureau Director's Office Regional Offices	Medical Countermeasure (MCM) Dispensing Domains: Medical care and countermeasures Potential receipt/distribution of pandemic/specific influenza vaccine in limited amounts Antivirals	1. Identify and initiate MCM distribution strategies 2. Receive MCM 3. Activate dispensing modalities 4. Distribute and dispense MCM to identified populations 5. Report adverse events	1. Send updated treatment guidelines to providers and hospitals 2. Notify VFC contacts about the potential for a distribution and dispensing operation 3. ASPR distributes the first limited quantities of pandemic influenza vaccine, most likely based on population per state/territory 4. Ensure that first response agencies are prepared to provide MCM to critical infrastructure personnel 5. Collaborate with emergency managers and stakeholders	1. Pharmacy warehouse 2. The first limited amount of pandemic vaccines may be shipped through the Vaccine for Children (VFC) program to PHD 3. Cold chain management supplies for MCM distribution 4. Vaccine will be dispersed through the regional public health offices

TABLE 4 Acceleration Interval: Community Mitigation

ORGANIZATION	CAPABILITY	FUNCTIONS	ACCELERATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD PHD	Non - Pharmaceutical Interventions Domain: Community Mitigation	1. Engage partners and identify factors that impact nonpharmaceutical interventions 2. Review and revise nonpharmaceutical interventions 3. Consider implementation of additional nonpharmaceutical interventions 4. Monitor nonpharmaceutical interventions	1. Consider implementing social distancing measures: a. temporary closure of child care facilities, schools, and workplaces b. postpone or cancel mass gatherings 2. Distribute education information about preventive measures	1. Legal, policy, and regulatory guidance documentation 2. Public Service Announcements (PSAs) 3. NMDOH website 4. Social media

TABLE 4 Acceleration Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	ACCELERATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary ERD BHEM IDEB PHD	Emergency Public Information and Warning Domain: Risk Communication	1. Activate the emergency public information system 2. Determine the need for a joint public information system 3. Establish and participate in information system operations 4. Establish avenues for public interaction and information exchange 5. Issue public information, alerts, warnings, and notifications	1. Activate the Warning and Emergency Public information (WEPI) Coordination Group at the JIC 2. Assemble the NMDOH Communication Team at the State EOC and/or NMDOH DOC, or local EOC 3. Maintain situational awareness at the DOC 4. Coordinate NMDOH internal communication and information. 5. Release updated Information to the public and Media on regular basis 6. Respond to misinformation in media and social media 7. Monitor and update the NMDOH website 8. Release information on prevention, antivirals, and Symptoms 9. Conduct media advisories on a regular basis 10. Release all public information in English and Spanish. 11. Provide the public and partners with updated educational information about social distancing; sheltering in place; non-pharmaceutical interventions; quarantine and isolation 12. Provide updated information to clinicians, community health workers, community health representatives, and stakeholders through the State Health Alert Network (HAN)	1. Risk Communication Plan 2. Media Distribution List 3. NMDOH Communication Team 4. Pandemic Influenza Messaging 5. Contact List of Partners 6. Press release; prevention measures 7. Press release; novel influenza vs. seasonal influenza 8. Fact sheet on novel influenza 9. State Health Alert Network (HAN) 10. NMDOH website and social media 11. NMDOH Influenza Hotline 12. CDC Conference Calls 13. CDC Webinars 14. WEPI Coordination Group

TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave

The following information expands upon the functions and activities outlined for the acceleration interval:

Healthcare System Planning

The impact of an influenza pandemic on the health care system could be overwhelming. The number of ill people requiring outpatient medical care and hospitalization could cause a surge situation. This would require hospitals and clinics to modify the operational structure to respond to high patient volumes and maintain functionality of critical systems. The health care system would have increased demands for service while the medical workforce may experience absenteeism. The demand for inpatient beds and ventilators could increase above the normal rate and patients would need to be prioritized for services. The use of alternate care sites may be implemented to relieve demand on hospital emergency departments, and to care for people who do not require hospital admission. The demand for home care and social services could increase dramatically. Emergency Medical System (EMS) responders could have extremely high call volumes and might also have a reduction in available staff. The number of fatalities could overwhelm the resources of the morgues and funeral homes.

Some considerations:

1. Maintain health care services, address a potential surge in patients and sustain essential services
2. Emphasize infection control measures in all health care facilities.
3. Address an increase in demand for health care services by:
 - Modifying admission/discharge policies;
 - Implementing visitor guidelines to minimize unnecessary exposure
 - Deferring or canceling elective procedures
 - Prioritizing laboratory and radiology services
 - Creating alternate triage locations; Opening alternate care facilities; and Increasing security
4. There may be illness and absenteeism in health care workers, as demands for health care resources and services increase
5. Community based organizations could have difficulty sustaining critical services and assistance to the access and functional needs populations

Pandemic Influenza Plan**New Mexico Department of Health****TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave**

The following information expands upon the functions and activities outlined for the acceleration interval:

Ethical Distribution of Scarce Medical Resources

Ethical considerations must be integrated throughout the process; a successful response to a pandemic depends on the ability to incorporate ethical principles in a way that is understood and supported by responders and the community at large.

Health care and public health data should be incorporated into the system for health care delivery during a pandemic. In managing a pandemic response, considerations would include:

- Health care needs to treat influenza and other important medical conditions
- The availability of health care personnel and other resources
- The effectiveness of applying available resources to various health care delivery methods/sites to treat influenza and other conditions

During a pandemic, transparency of the processes used to establish, manage and coordinate the system for health care delivery is critical in achieving community support.

During overwhelming patient surge conditions and/or conditions with limited and insufficient resources, there are procedural decisions to be made, including:

- Identification of essential clinical services, including elements of critical care delivery and prophylactic treatment that will continue during medical surge
- Use and allocation of pharmaceuticals and equipment
 - Criteria for determining the prioritization of patients to receive the limited and available medical resources
 - Criteria for the care of patients who qualify for essential clinical services
 - Criteria for patients who are terminally ill or mortally injured and may require palliative care
 - Policies and procedures for documentation of financial expenditures and other costs resulting from response to patient surge

Notification to hospitals is accomplished through the State HAvBED system. Data received from participating hospitals are displayed on the HAvBED report, which is available on an ongoing basis. HAvBed links hospitals with transport agencies, the New Mexico Department of Homeland Security and Emergency Management, and the NMDOH.

Crisis Standards of Care Annex to the EOP:W:\BHEM\MASTER\BHEM Plans\Annex 19 Crisis Standards of Care

TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave

The following information expands upon the functions and activities outlined for the acceleration interval:

Mitigation Strategies/Limiting the Spread of the Disease

Preventing a novel strain of influenza from spreading may be difficult. Adherence to infection control measures, non-medical interventions such as social distancing, isolation and quarantine, restriction of travel, and the provision of vaccine and antiviral medication, can reduce the spread of the disease.

As guided by the epidemiology of the disease, the NMDOH may implement non-medical measures to decrease the spread of disease.

Influenza is highly infectious and can be transmitted by people before they develop symptoms, therefore quarantine of exposed people may be a strategy for slowing the spread of the disease.

Isolation and quarantine restrictions may be either voluntary or enforced. Facilities with less mobile populations (long term care facilities, nursing homes, prisons) may be requested to restrict access to the facilities in order to prevent exposure.

Social distancing strategies such as closing schools, community centers and other public gathering points, as well as canceling public events may be considered.

Communication and Education

The New Mexico Health Alert Network (HAN) will be utilized to inform health care providers and facilities. The HAN is a health alert system that provides information and updates on health threats or outbreaks throughout the State to health care professionals, emergency managers, public safety, and other responders across the state.

Please refer to the NMDOH Risk Communication Plan for more information.

TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave

The following information expands upon the functions and activities outlined for the acceleration interval:

School Closure/Child Social Distancing

School closure is the dismissal of students from school (including public and private schools as well as colleges and universities), restriction of school-based activities, and the closure of childcare programs. School closure may or may not be useful during a pandemic. Social distancing in the community also helps to reduce out-of-school social contacts and community mixing.

Through the Public Health Emergency Response Act § 12-10A-1, *et seq.*, NMSA (1978) and the Public Health Act § 24-1-1, *et seq.*, NMSA (1978) the Governor of New Mexico has the power to cancel public gatherings. This could include temporarily closing schools.

Additionally, the Public Education Department requires each school in New Mexico to submit a school-level safety plan inclusive of pandemic influenza preparedness as part of the school district (or state charter school) state school plan. The expectation of the site-specific plan includes the involvement of stakeholders (e.g., the lead emergency response agency, district administrators, local public health representative, school health and mental health professionals, teachers, food services directors, and parent representatives). The plan includes opportunities to provide education to staff, students, and families on current and reliable pandemic information. The plan should also delineate the communication process in the event of a pandemic. Further information on safe school plans in New Mexico may be obtained at: https://webnew.ped.state.nm.us/wp-content/uploads/2017/12/SHSB_SafeSchoolsPlanRubric2017.pdf

Community & Workplace/Adult Social Distancing

Adult social distancing consists of measures put in place to reduce contact among adults in the community and workplace, and this may include: cancellation of large public gatherings, alteration of workplace environment and schedules to decrease social density and preserve a healthy workplace without disrupting essential services.

All community-based strategies described above are used in combination with individual infection control measures, such as hand washing and cough etiquette.

Decisions about what interventions will be used during a pandemic are based on the observed severity of the event; the impact on specific populations; the expected benefit of the interventions; the feasibility of success; the direct and indirect costs; as well as the consequences on critical infrastructure, healthcare delivery, and society.

TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave

The following information expands upon the functions and activities outlined for the acceleration interval:

Workforce Management and Support

Widespread illness due to a pandemic would increase the potential for sudden and significant workforce shortages in critical community services such as: military personnel, law enforcement, firefighters, utility workers, transportation workers, human services, and those agencies that provide essential infrastructure services to the public.

Please refer to the NMDOH Continuity of Operations (COOP) Plan for more information

Mortuary Service and Mass Fatality Management

Planning for many fatalities from an influenza pandemic is a challenge at many levels. The number of deaths may overwhelm the resources of the CMI, morgues, funeral homes, and cemeteries.

Considerations:

- Identification and documentation of victims;
- Management of temperature for decedents;
- Options other than cold storage units;
- Controlled holding facilities;
- Release of remains to family members;
- Temporary interment of mass fatalities;
- Cremation and burial of mass fatalities;
- Legal requirements for autopsies or other processes (such as deaths at home);
- Local transport of remains from home or collection point directly to morgue;
- Security measures at the collection points;
- Coordination with local authorities; and
- Database synchronization and networking to support information management.

Please refer to the NMDOH Fatality Management Plan for more information

TABLE 4 Novel influenza A virus pandemic (acceleration interval): acceleration of pandemic wave

The following information expands upon the functions and activities outlined for the acceleration interval:

Influenza-related Mortality Surveillance**Vital Records & Health Statistics - Statewide electronic death reporting system**

The NMDOH receives data from hospitals, physicians, midwives, funeral directors, the Office of the Medical Investigator, tribes, pueblos, and individuals. NMDOH utilizes a statewide E-Vitals system, to electronically transfer and record death certificates in order to better track deaths and the causes of those deaths, including pneumonia and influenza deaths. E-Vitals is an Electronic Death Registration (EDR) system that automates the transfer of death certificate information by using the Internet.

Office of the Medical Investigator (OMI)

The OMI investigates any death occurring in the state of New Mexico that is sudden, violent, untimely, unexpected, or when a person is found dead and the cause of death is unknown. All autopsy services are conducted in the central office and are performed by forensic pathologists with the assistance of morphology services. [NM Mass Fatality Plan](#)

OMI and NMDOH share information through the death syndromic surveillance system at the OMI. Information is shared by emergent telephone protocols, email, monthly meetings, tracking infectious disease related deaths, and remote access at NMDOH to the OMI database and electronic transfer of death certificate data to the NMDOH E-Vitals System.

Mortality Reporting

The NMDOH collects state and local influenza-associated mortality data through the E-Vitals (Electronic Vital Records Registration System or the NM Influenza Surveillance Coordinator).

The NMDOH follows CDC guidelines for uniform data collection and reporting and also reports statewide mortality data of the 122 Cities Mortality Reports and pediatric deaths to the CDC, through the NM-Electronic Disease Surveillance System (NM-NEDSS) Base System, the Emerging Infection Program, or the NM Influenza Surveillance Coordinator.

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WHO: Transition Phase/Recovery - Global risk drops, prompting de-escalation and reduction in response activities/deceleration of a pandemic wave.

CDC Deceleration Interval (Table 5)

State Indicator: Consistently decreasing rate of pandemic influenza cases in the state.

TABLE 5 Deceleration Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	Deceleration Interval ACTIONS	RESOURCE ELEMENTS
NMDOH ERD Infectious Disease Epidemiology Bureau (IDEB)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and epidemiology	1. Conduct public health surveillance and detection 2. Conduct public health and epidemiological investigations 3. Recommend, monitor, and analyze mitigation actions 4. Improve public health surveillance and epidemiological investigation systems	1. Continue surveillance of hospitalized patients with lab confirmed novel/unsubtypeable influenza infection. 2. Continue review of pneumonia and influenza deaths from New Mexico Records and Health Statistics and the Office of the Medical Investigator (OMI) 3. Continue sentinel provider sites weekly reporting of % of total visits due to influenza-like illness (ILI) and submission of specimens to Scientific Laboratory Division. 4. Continue receiving reports of novel/unsubtypeable clusters/outbreaks via 24/7/365 on-call service at: 505- 827-0006 5. Continue conducting enhanced case investigation of novel influenza on all pediatric mortality cases. 6. Continue collecting and nationally reporting cases, using the standardized case definition and investigation form in the New Mexico Electronic Disease Surveillance System (NM-EDSS)	1. Death records from NM Records and Health Statistics and Office of Medical Investigator 2. 24/7/365 on-call service at 505-827-0006 3. Hospitalized influenza network 4. Mortality surveillance systems 5. Electronic case report form 6. New Mexico Electronic Disease Surveillance System (NM-EDSS) 7. Nationally Notifiable Diseases Surveillance System

TABLE 5 Deceleration Interval: Incident Management

ORGANIZATION	CAPABILITY	FUNCTIONS	Deceleration Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Epidemiology and Response Division (ERD) BHEM	Emergency Operations Coordination Domains: Incident management State/local coordination	<ol style="list-style-type: none"> Conduct preliminary assessment to determine the need for public deactivation Review and revise public health emergency operations Review and revise incident response strategy Manage and sustain or deactivate the public health response Evaluate and consider demobilizing public health emergency operations 	<ol style="list-style-type: none"> Continue actions described for the previous interval Coordinate with all partners Support maintenance of critical infrastructure and key resources as appropriate 	<ol style="list-style-type: none"> NMDOH All-Hazard Emergency Operations Plan (EOP), Standard Operating Guidelines (SOGs), procedures, protocols Decrease number of staff trained in NIMS, ICS, EOC, DOC, JIC, RSS, POD operations Drills/exercises to test the plans and determine potential gaps After-Action Reports (AARs) from real-world events Review AARs to determine potential gaps and revise plans

TABLE 5 Deceleration Interval: Laboratory – Medical Care and Countermeasures

ORGANIZATION	CAPABILITY	FUNCTIONS	Deceleration Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: L	1. Manage laboratory activities 2. Perform sample management 3. Conduct testing and analysis for routine and surge capacity 4. Support public health investigations	1. Prepare collection kits for distribution to approved submitters 2. Test samples using kits provided by CDC 3. Viral culture is performed on a subset of specimens to detect other respiratory viruses and obtain isolates for submission to CDC 4. Send results electronically to CDC and ERD via the Laboratory Information Management System 5. Mail results to submitters	1. SLD collection kits 2. CDC testing kits 3. Influenza Right Size Roadmap 4. Laboratory Information Management System (LIMS) 5. CDC testing guidelines
NMDOH ERD BHEM IDEB PHD Infectious Disease Bureau Immunization Program Director's Office Regional Offices	Medical Countermeasure (MCM) Dispensing Domains: Medical care and countermeasures Vaccine Antivirals	1. Review and consider deactivating MCM strategies 2. Deactivate dispensing modalities 3. Report adverse events	1. Initiate the demobilization process 2. Maintain statewide situational awareness with healthcare entities and emergency management agencies 3. Maintain communications with the CDC 4. Assess the status of state-wide vaccination 5. Initiate targeted cessation of surge capacity strategies as appropriate 6. Monitor inventory and distribution	1. MCM Management and Distribution resources, including cold chain management supplies Emergency Operations Coordination 2. Information sharing systems, equipment and resources 3. HAN 4. REPS and PHO 5. Resource & Logistics Coordinator, SNS Coordinator, PH Regions

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NMDOH ERD PHD	Community Preparedness	Domain: Community Mitigation	Domain: Community Mitigation
	<p>Community Preparedness</p> <ol style="list-style-type: none"> Determine remaining risk to the health of the jurisdiction Collaborate with community partners Coordinate training or guidance to ensure community engagement in preparedness efforts continues 	<p>Domain: Community Mitigation</p> <ol style="list-style-type: none"> Assess, plan for, and implement targeted cessation of community mitigation measures, if appropriate Assist with evaluating the effectiveness and adverse impact of community mitigation measures Provide planning assistance with cessation of community mitigation and border health measures Coordinate training or guidance to ensure community engagement in preparedness efforts continues 	<p>Domain: Community Mitigation</p> <ol style="list-style-type: none"> Legal, policy, and regulatory guidance documentation Public Service Announcements NMDOH website Social media Health promotion

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TABLE 5 Deceleration Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	Deceleration Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary	Emergency Public Information and Warning	1. Deactivate the emergency public information system	1. Communication team: prepare for possible additional pandemic wave	1. Risk Communication Plan
ERD	Domain: Risk Communication	2. Deactivate the joint public information system	2. Maintain situational awareness	2. Media Distribution List
IDEB BHEM	3. Participate in information system operations	3. Information about vaccination campaign, if available	3. Data on morbidity and mortality released	3. NMDOH Communication Team
PHD	4. Deactivate avenues for public interaction and information exchange	4. Continued posting on social media regarding vaccine availability	4. Pandemic Influenza Messaging	
		5. Outreach and education to community organizations representing vulnerable population, including community health workers and community health representative	5. Contact List of Partners	
		6. Updated education and information for possible second wave	6. Press releases	
		7. Updated education and information for possible second wave	7. State Health Alert Network (HAN)	
		8. Monitor/update website	8. NMDOH website and social media	
		9. Outreach to partners/stakeholders regarding possible additional pandemic waves	9. NMDOH Influenza Hotline	
		10. CDC Conference Calls	10. CDC Conference Calls	
		11. CDC Webinars	11. CDC Webinars	
		12. WEPI Coordination Group	12. WEPI Coordination Group	

WHO: Interpandemic Phase/Preparedness - The period between pandemics/preparation for future pandemic waves.

CDC Preparation Interval⁷² (Table 6)

State indicator: There is no/low pandemic influenza activity with possible outbreaks in the state, possible 2nd wave with potentially higher severity than initial wave

TABLE 6 Preparation Interval: Surveillance and Epidemiology

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOVERY AND PREPARATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH ERD Infectious Disease Investigation Epidemiology Bureau (IDEB)	Public Health Surveillance and Epidemiological Investigation Domain: Surveillance and epidemiology	1. Conduct public health surveillance and detection 2. Conduct public health and epidemiological investigations 3. Recommend, monitor, and analyze mitigation actions 4. Improve public health surveillance and epidemiological investigation systems	1. Continue case confirmation of selected cases to monitor progress of the pandemic and to detect acceleration to the next wave 2. Begin conducting routine interpandemic surveillance 3. Maintain/enhance surveillance of hospitalized patients with lab-confirmed novel influenza infection in seven county EIP surveillance system 4. Maintain/enhance reporting and review of pneumonia and influenza deaths from Vital Records and Health Statistics and the OMI 5. Maintain/enhance surveillance of sentinel provider sites weekly reporting of % of total visits due to ILI 6. Maintain/enhance 24/7/365 outbreak surveillance system for reporting of clusters of influenza infection in schools, prisons, long term care facilities, and other institutional settings 7. Conduct enhanced case investigation of a sample of influenza infections reported through the 24/7/365 service, hospitalized influenza network, or mortality surveillance systems and for all pediatric mortality cases	1. Mortality records from Vital Records and Health Statistics and Office of Medical Investigator (OMI) 2. 24/7/365 on-call service at 505-827-0006 3. hospitalized influenza network 4. mortality surveillance systems 5. electronic case report form 6. New Mexico Electronic Disease Surveillance System (NM-EDSS) 7. Nationally Notifiable Diseases Surveillance System

TABLE 6 Preparation Interval: Incident Management

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOVERY AND PREPARATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Epidemiology and Response Division (ERD)	Emergency Operations Coordination Domains: Incident management State/Local Coordination	<ol style="list-style-type: none"> 1. Conduct assessment to determine the need for public activation 2. Deactivate public health emergency operations, if not already deactivated 3. Review and revise incident response strategy 4. Demobilize and evaluate public health emergency operations 	<ol style="list-style-type: none"> 1. Demobilize public health resources and personnel 2. Resume normal operations. 3. Prepare for subsequent waves 4. Create an after-action report to document lessons learned 5. Suspend the public health emergency declaration, if one was declared 6. Continue to coordinate with all partners 7. Support maintenance of critical infrastructure and key resources, as appropriate 	<ol style="list-style-type: none"> 1. NMDOH All-Hazard Emergency Operations Plan (EOP), Standard Operating Guidelines (SOGs), procedures, protocols 2. Sufficient number of staff trained in NIMS, ICS, EOC, DOC, JJC, RSS, POD demobilization operations 3. After-Action Reports (AARs) from real-world events 4. Revise plans after determining gaps from AARs

TABLE 6 Preparation Interval: Laboratory – Medical Care and Countermeasures

ORGANIZATION	CAPABILITY	FUNCTIONS	RECOVERY AND PREPARATION INTERVAL ACTIONS	RESOURCE ELEMENTS
NMDOH Scientific Laboratory Division (SLD) Biological Sciences Bureau	Public Health Laboratory Testing Domain: Laboratory	1. Manage laboratory activities 2. Perform sample management 3. Conduct testing and analysis for routine and surge capacity 4. Support public health investigations 5. Report results	1. Prepare collection kits for distribution to approved submitters 2. Test samples using kits provided by CDC 3. Viral culture will be performed on a subset of specimens to detect other respiratory viruses and obtain isolates for submission to CDC 4. Results are sent electronically to the CDC and ERD via the Laboratory Information Management System (LIMS) 5. Return to normal testing levels as indicated by the Right Size Influenza Roadmap	1. SLD collection kits 2. CDC testing kits 3. Influenza Right Size Roadmap 4. Laboratory Information Management System (LIMS) 5. CDC testing guidelines
NMDOH ERD BHEM IDEB PHD Director's Office Regional Offices	Medical Countermeasure (MCM) Dispensing Domains: Medical care and countermeasures Vaccine	1. Identify and initiate or deactivate MCM strategies as necessary 2. Deactivate dispensing modalities 3. Report adverse events	1. Maintain statewide situational awareness with health care partners and emergency management agencies. 2. Continue demobilization process 3. Monitor medical surge trends 4. Replenish stockpiles or caches, if resources are available 5. Monitor antiviral dispensing and usage trends 6. Continue to vaccinate, with a focus on hard-to-reach populations, in anticipation of a subsequent wave	1. MCM Management and Distribution resources 2. Emergency Operations Coordination 3. Information sharing systems, equipment and resources 4. HAN 5. REPS and PHO 6. Resource & Logistics Coordinator, SNS coordinator, PH Regions

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NMDOH ERD PHD	<p>Community Preparedness</p> <ol style="list-style-type: none"> Determine risks to the health of the jurisdiction Build community partnerships Engage with community organizations to foster public health, medical, mental/behavioral health, and social networks Coordinate training or guidance to ensure community engagement in preparedness efforts <p>-----</p> <p>Community Recovery</p> <ol style="list-style-type: none"> Identify and monitor public health, medical, and mental/behavioral health system recovery needs Coordinate community public health, medical, and mental/behavioral health systems recovery operations Implement corrective actions to mitigate damages from future incidents 	<p>1. Determine risks to the health of the jurisdiction</p> <p>2. Build community partnerships</p> <p>3. Engage with community organizations to foster public health, medical, mental/behavioral health, and social networks</p> <p>4. Coordinate training or guidance to ensure community engagement in preparedness efforts</p> <p>-----</p> <p>Community Recovery</p> <ol style="list-style-type: none"> Identify and monitor public health, medical, and mental/behavioral health system recovery needs Coordinate community public health, medical, and mental/behavioral health systems recovery operations Implement corrective actions to mitigate damages from future incidents 	<p>1. Modify community mitigation measures as necessary</p> <p>2. Continue to promote community mitigation preparedness activities on standby for a subsequent wave</p> <p>3. Collaborate with partners to sustain and improve recovery, mitigation, and preparedness activities</p> <p>4. Social media</p> <p>5. Health promotion</p> <p>1. Legal, policy, and regulatory guidance documentation</p> <p>2. Public Service Announcements</p> <p>3. NMDOH website</p> <p>4. Social media</p> <p>5. Health promotion</p>

TABLE 6 Preparation Interval: Risk Communication

ORGANIZATION	CAPABILITY	FUNCTIONS	Recovery and Preparation Interval ACTIONS	RESOURCE ELEMENTS
NMDOH Office of the Secretary ERD BHEM IDEB PHD	Emergency Public Information and Warning Domain: Risk Communication	1. Deactivate the emergency public information system 2. Maintain and participate in information system operations 3. Continue avenues for public interaction and information exchange 4. Issue public information notifications about current situation	1. Consider JIC deactivation if not already deactivated 2. Continue vaccination campaign for at risk populations 3. Continue communications with partners/stakeholders 4. Prepare for possible additional pandemic wave 5. Continue monitoring of situation and communication needs. 6. Continue NMDOH internal information sharing and communication 7. Update website for possible pandemic wave 8. PSAs with information on planning for possible additional pandemic wave 9. Coordinate frequency of communication partner updates. 10. Monitor media and social media	1. Risk Communication Plan 2. Media Distribution List 3. NMDOH Communication Team 4. Pandemic Influenza Messaging 5. Contact List of Partners 6. Press release 7. Fact sheet on novel influenza 8. State Health Alert Network (HAN) 9. NMDOH website and social media 10. NMDOH Influenza Hotline 11. CDC Conference Calls 12. CDC Webinars 13. WEPI Coordination Group

Information for the previous tables was incorporated from:

WHO: https://www.who.int/influenza/preparedness/pandemic/influenza_risk_management/en/
CDC: <https://www.cdc.gov/flu/pandemic-resources/pdf/pan-flu-report-2017v2.pdf>

Communications

Communication with the Public

Dissemination of timely, accurate and credible information with partners and the public is one of the most important components of a pandemic influenza response. The trust of the public depends on the spokesperson and the transparency, frequency, accuracy, and honesty of the information, as well as the respect for cultural beliefs and the respectful handling of the relay of fatalities.

An influenza pandemic activates the Warning and Emergency Public Information (WEPI) Coordination Group within the Joint Information Center (JIC). The WEPI Coordination Group is composed of the Public Information Officers (PIOs) from state agencies.

The NMDOH has a professional working relationship with the New Mexico Poison and Drug Information Center (NMPDIC). The NMPDIC developed surge capacity information to help inform telephone callers seeking information about issues of public health. The NMDOH has collaborated with the NMPDIC during several influenza outbreaks in the past (seasonal or regional) to inform the public about influenza vaccine supply, vaccine clinic locations, and other issues. The New Mexico Poison and Drug Information Center provides public service 24/7/365. It is a program that is affiliated with the College of Pharmacy at the University of New Mexico Health Sciences Center, and therefore has access to pharmaceutical expertise. The Center is certified as a Regional Poison Center by the American Association of Poison Control Centers.

Refer to the NMDOH Risk Communication Plan for more information.

Direction, Control, and Coordination

The Epidemiology and Response Division (ERD) is the lead NMDOH division for the coordination of services and support for response to a public health emergency. Refer to the NMDOH All-Hazard Emergency Operations Plan (EOP) for more information.

Administration, Finance and Logistics

The NMDOH All-Hazard Emergency Operations Plan (EOP) outlines the NMDOH administration and logistics requirements: documenting all emergency-related expenditures, assessing the extent of deaths and injuries during an incident, damage to property, and an accounting of property, personnel and equipment.

Plan Development and Maintenance

This Section describes the procedures for maintaining and revising the NMDOH Pandemic Influenza Plan. This plan is continuously evaluated and improved through a cycle of planning, organizing, training, equipping, exercising, evaluating, and taking corrective action. Plan development and maintenance follows guidance from the FEMA Comprehensive Preparedness Guide (CPG) 101, Version 2.0. This “whole community” planning process includes people with access and functional needs, children, and those with household pets and service animals, as well as volunteer, faith-based, non-profit and private sector organizations.

The NMDOH Pandemic Influenza Plan is reviewed and approved by the:

1. BHEM Bureau Chief
2. ERD Deputy Director for Programs
3. Infectious Disease Epidemiology Bureau Chief/Deputy State Epidemiologist
4. ERD Division Director/State Epidemiologist

This plan is implemented and evaluated during real-world events or simulated emergencies (exercises) to provide practical, controlled operational experience and training to emergency response personnel. Refer to the NMDOH All-Hazard Emergency Operations Plan (EOP) for more information on plan development and maintenance.

Authorities and References

Legal Authority

Federal

The Robert T. Stafford Disaster Relief and Emergency Assistance, Public Law 93-288, as amended (April 2013), 42 U.S.C. 5121 et seq.

Pandemic and All-Hazards Preparedness Reauthorization Act (PAHPRA), Public Law No.113-5 (March 2013)

Pandemic and All-Hazards Preparedness Act (PAHPA), Public Law No. 109-417 (December 2006)

Presidential Policy Directive (PPD) 8 National Preparedness, issued in March 2011

State

New Mexico All Hazard Emergency Management Act (AHEMA) §12-10-11 through 13, New Mexico Annotated (NMSA) (1978).

PHA §24-1-15.L.(3), NMSA (1978) and the New Mexico Public Health Emergency Response Act (PHERA), §12-10A-1.G and L., and Section 12-10-11 through 13 NMSA (1978).

New Mexico Public Health Act, Sections 24-1-1, et seq., NMSA 1978
Section 24-1-15 Reporting of Contagious Diseases

Legal Authority for Isolation and Quarantine in New Mexico

Background

According to the Public Health Act, the New Mexico Department of Health (NMDOH) has the authority and responsibility to investigate, control, and abate disease. During epidemics and sources of mortality or other conditions of public health, the NMDOH may establish or require isolation or quarantine of any animal, person, institution, community, or region. (NMSA 1978 § 24-1-3.C and NMSA 1978 § 24-1-3.D, respectively). Isolation and quarantine help protect the public by preventing exposure to people who have or may have a contagious disease. Isolation separates and restricts the movement of sick people with a contagious disease from people who are not sick with that disease. Quarantine is the separation and restriction of movement of people who have potentially been exposed to a contagious disease, until it can be determined whether they become sick or no longer pose a risk to others (e.g., based on time elapsed from their potential exposure).

During a public health emergency, the Secretary of the NMDOH may isolate or quarantine a person as necessary by using the procedures set forth in the Public Health Act and associated regulations; including the Public Health Emergency Response Act (PHERA) (NMSA 1978 § 12-10A-8 to 12-10A-11). This approach would only be instituted if all other voluntary approaches were to fail. While broad public health police powers exist in New Mexico,

limitations on those powers also exist and are respected by the NMDOH. The NMDOH complies with the legal responsibility that “isolation or quarantine shall be by the least restrictive means necessary to protect against the spread of a threatening communicable disease or a potentially threatening communicable disease to others and may include confinement to a private home or other private or public premises” (NMSA 1978 § 12-10A-8). Legal job protections also exist, such that “an employer or an agent of an employer shall not discharge from employment a person who is placed in isolation or quarantine” (NMSA 1978 § 12-10A-16 (2003). New Mexico law also contains provisions for mandatory medical treatment (NMSA 1978 § 24-1-15.1).

Procedures

In an event that involuntary detention is felt to be necessary, the following provides the legal authority for obtaining an Ex Parte Order or issuance of a Public Health Order.

Voluntary Isolation or Quarantine

A person with or having a substantial likelihood of having a threatening communicable disease shall be advised of the risks and rights and requested to voluntarily remain in isolation or quarantine. Only in the event that reasonable attempts to achieve voluntary isolation or quarantine fail, will legal steps be taken. Voluntary agreement should be executed under applicable statute (Public Health Act or Public Health Emergency Response Act).

Involuntary Isolation or Quarantine

A healthcare provider or law enforcement official will contact the New Mexico Department of Health at 505-827-0006, if they believe involuntary isolation or quarantine is necessary. The Epidemiology and Response Division will consult with the department’s Office of General Counsel to determine whether to obtain an order for isolation or quarantine.

Involuntary Isolation or Quarantine - Public Health Emergency Not Declared.

- a. NMSA 1978 §24-1-15 (Health and Safety - Public Health Act – Isolation; quarantine; protocol indicates that:
 - i. A public health official shall petition the court, and the court shall immediately grant a temporary ex parte order of protection to isolate or quarantine an individual if there is a substantial threat to the public health and safety. The petition must show that the individual:
 1. Is; infected with, reasonably believed to be infected with or exposed to a threatening communicable disease;
 2. Poses a substantial likelihood of transmission because of inadequate separation from others; and
 3. Has refused voluntary treatment, testing, evaluation, detention, or observation.
 - ii. While in temporary isolation or quarantine a person shall be entitled to legal representation and permitted to communicate on any matter in a way that does not create a risk of infection for others.

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<p>iii. An evidentiary hearing shall be held within 5 days. After the hearing, the court may continue the order of protection with regular review of the order within 90 days and every 90 days thereafter.</p> <p>iv. The order of protection shall be terminated, and the person released if:</p> <ol style="list-style-type: none">1. The person is certified by a public health official to pose no further risk to the public health;2. At a hearing, it can no longer be shown that the person is infected with, reasonably believed to be infected with, or exposed to a threatening communicable disease, or that the person will not comply with voluntary treatment and contagion precautions; or,3. There are exceptional circumstances which exist warranting the termination of the court order.	

Involuntary Isolation or Quarantine – Public Health Emergency Declared pursuant to the Public Health Emergency Response Act.

- b. NMSA 1978 § 12-10A-7 (Procedures for isolation or quarantine of persons) indicates:
- i. Before isolating or quarantining a person, the Secretary of Health shall apply for and obtain a written ex parte order of protection from a court.
 - ii. Notice shall be given to the affected person(s) unless immediate and irreparable injury, loss or damage will result.
 - iii. The court shall grant the ex parte order of protection if clear and convincing evidence exists that isolation or quarantine is warranted to respond to the public health emergency.
 - iv. The petition must:
 1. state the specific facts justifying the isolation or quarantine;
 2. state the persons, group or class of persons affected;
 3. state that the affected person(s) have the right to a court hearing with legal representation; and
 4. be served as soon as practicable to persons isolated or quarantined.
 - v. The Secretary of Health shall coordinate with the secretary of public safety and the state director of homeland security and emergency management regarding execution of the order.
 - vi. A person who is isolated or quarantined can request a hearing at any time before the expiration of the ex parte order of protection. However, a person cannot be isolated or quarantined pursuant to an ex parte order of protection for longer than five days without a court hearing.
 - vii. The isolation or quarantine shall automatically terminate when the order expires, or if the Secretary of Health notifies the court that it is no longer needed to protect the public.

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- b. NMSA 1978 § 12-10A-8 (Isolation or quarantine authorized; protection of a person isolated or quarantined) indicates:
- i. Conditions of isolation or quarantine:
 1. Isolation or quarantine is by the least restrictive means and may include confinement to a private home or other private/public premises;
 2. Isolated persons are confined separately from quarantined persons;
 3. Health status is monitored regularly to determine the need to continue isolation or quarantine;
 4. There is a reliable means to communicate at all times with health officials, family and others, and to call for emergency health services;
 5. If a quarantined person becomes actively infectious or presents a substantial likelihood of being infectious, they will be isolated pursuant to the Public Health Act or the Public Health Emergency Response Act;
 6. Adequate food, clothing, shelter, sanitation, medication and treatment, and medical and mental health care, will be provided;
 7. Methods of communication with others are provided, accommodations are made for religious practice, and updates on the status of the public health emergency are made available;
 8. The premises used for isolation or quarantine are safe and hygienic and are designed to minimize the likelihood of transmission of infection or other injury; and
 9. Forms are provided for the person to document consent or objection to the isolation or quarantine.
 - ii. A person who is isolated or quarantined may request a court hearing regarding treatment or the terms and conditions of isolation or quarantine pursuant to NMSA 1978 § 12-10A-11. If such a petition is filed, a hearing must be held within seven days. A request for a hearing does not alter an order for isolation or quarantine.
 - iii. A person in isolation or quarantine has the right to refuse treatment, testing, examination, vaccination, specimen collection and preventive treatment programs; however, refusal may prolong isolation or quarantine.
 - iv. Unauthorized persons shall not enter the isolation or quarantine area, and if doing so creates danger to public health, those persons may be subject to isolation or quarantine.

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- v. Household or family members have a right to enter an isolation or quarantine area if they sign a consent form stating the potential health risks, the isolation and quarantine guidelines, and the consequences of entering the area, including possible isolation or quarantine, and the state shall not be held responsible for those consequences.
- c. NMSA 1978 § 12-10A-9 (Temporary hold on secretary's order) indicates:
 - i. If a delay in isolating or quarantining a person will significantly jeopardize the department's ability to prevent or limit the transmission of a threatening communicable disease, then the secretary of health may issue a public health order to isolate or quarantine a person without first obtaining court order.
 - ii. An ex parte order of protection must be applied for within 24 hours following the procedures of the Public Health Emergency Response Act. The petition must state the facts in support of the need to issue a temporary hold by public health order.
- d. NMSA 1978 § 12-10A-10 (Court hearing to contest isolation or quarantine):
 - i. A person who is isolated or quarantined under a temporary hold, ex parte order, or continuing order may petition the court to contest detainment at any time prior to the expiration of the order or hold.
 - ii. A hearing shall be held within three days of the petition being filed but filing of a petition does not stay an order of isolation or quarantine.
 - iii. The secretary of health may petition the court to extend an order for isolation or quarantine beyond the time stated in the temporary hold, ex parte order, or continuing order. Notice of a hearing on the extension must be served at least three days prior to the hearing. A court may order an extension of isolation or quarantine if there is clear and convincing evidence that failure to do so would result in an imminent health threat to others.
 - iv. Isolation or quarantine shall not continue for longer than thirty days from the date of a court order unless the Secretary of Health petitions for an extension.
 - v. Isolation or quarantine will be terminated when the Secretary of Health notifies the court that the conditions warranting isolation or quarantine no longer exist.
- e. NMSA 1978 § 12-10A-16 (Job protection for a person who is isolated or quarantined):
 - i. An individual who is isolated or quarantined pursuant to the Public Health Emergency Response Act may not be discharged from employment by an employer or agent of an employer.

References

Federal

Presidential Policy Directive (PPD) 8 National Preparedness, issued in March 2011

<http://www.fema.gov/national-preparedness-goal>

Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 (PAHPRA)

<https://www.govtrack.us/congress/bills/113/hr307/text>

Pandemic and All-Hazards Preparedness Act (PAHPA) Fact Sheet

http://ho.org/uploadedFiles/Programs/Preparedness/Public_Health_Emergency_Law/Emergency_Authority_and_Immunity_Toolkit/11-PAHPA%20FS%20Final%203-12%20v2.pdf

H.R.6375 Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2018

<https://www.congress.gov/bill/115th-congress/house-bill/6378/text>

Emergency Support Function 8 (ESF 8)

https://www.fema.gov/media-library-data/20130726-1825-25045-8027/emergency_support_function_8_public_health_medical_services_annex_2008.pdf

U.S. Census Bureau

<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>

World Health Organization (WHO)

<https://www.who.int/influenza/preparedness/pandemic/en/>
http://www.who.int/mediacentre/factsheets/avian_influenza/en/

Centers for Disease Control and Prevention (CDC)

<http://www.pandemicinfluenza.gov>
<https://www.cdc.gov/flu/pandemic-resources/index.htm>

U.S. Food and Drug Administration (FDA)

<http://www.fda.gov/BiologicsBloodVaccines/Vaccines/ApprovedProducts/ucm094045.htm>

Emergency Use Authorization <http://www.fda.gov/RegulatoryInformation/Guidances/ucm125127.htm>

State

NMDOH Emergency Operations Plan: <http://nmhealth.org/publication/view/plan/958/>

NMDOH Pandemic Influenza Plan:

NMDOH influenza surveillance: <https://nmhealth.org/about/erd/ideb/isp/>

NMDOH Influenza and Respiratory Disease Report: <https://nmhealth.org/data/view/infectious/2181/>

NMDOH Crisis Standards of Care Plan:

NMDOH Access and Functional Needs Plan:

NMDOH Risk Communications Plan:

NMDOH Medical Countermeasures Plan:

New Mexico Vital Records: <https://nmhealth.org/about/erd/bvrhs/vrp/>

New Mexico Health Statistics: <https://nmhealth.org/about/erd/bvrhs/hsp/>

Appendices

A. Clinical Laboratory Policies and Procedures Include:

- The ability to test for influenza viruses year-round
- Performing PCR testing for rapid detection and sub-typing of influenza viruses
- Protocols for safe specimen collection and testing
- How and to whom a potential case of novel influenza should be reported
- Mechanism for submitting specimens to referral laboratories
- Protocols for proper handling and shipment of specimens
- Protocols for notifying and reporting any novel specimen findings
- Exchange specimen-level data electronically among laboratories
- Call-down procedures

The Scientific Laboratory Division currently maintains the capacity for year-round influenza testing using reverse transcriptase-polymerase chain reaction (RT-PCR) and culture methods (includes immunoinfluenzaorescence (IF) confirmation and sub typing). Any out of season influenza positives or in season un-typeable or novel positives would include immediate notification to Epidemiology and Response Division (ERD). The specimen would be immediately forwarded to CDC. Routine forwarding of specimens to CDC will continue as requested.

Shipping and handling of specimens would be coordinated through ERD and SLD. A statewide courier is in place for shipping of specimens to the SLD. ELC and EIP grant funds were requested to augment this capacity. Grant funds will be used to purchase reagents and consumables for influenza testing. CDC provides kits and most of the reagents for influenza RT-PCR testing through the Influenza Reagent Resource.

Results are reported to CDC through PHLIP (Public Health Laboratory Interoperability Project) electronically using HL7 as soon as results are approved throughout the year. As part of the effort to monitor antigenic and genetic changes and antiviral resistance pattern changes in the pandemic virus, SLD will forward a subset of influenza positives to CDC as directed by them. SLD will continue to follow the most current CDC guidelines for influenza testing.

SLD has protocols for safe handling of specimens. SLD routinely reports lab results to ERD through NMHIC (New Mexico Health Information Collaborative). Urgent results will also be reported by phone to ERD. Other clinical laboratories in the state, also routinely report positive laboratory findings.

Molecular Biology and Virology/Serology staff is trained in influenza RT-PCR methods. Additional trained staff from both sections will be utilized if the specimen volume increases beyond the capability of the Virology/Serology section.

SLD has implemented a new Laboratory Information Management System (LIMS). The LIMS is PHLIP compliant and operational with the NMHIC. In addition, all influenza testing will be reported through PHLIP to CDC and be transmitted to NM ERD through NMHIC. Protocols are in place between the Scientific Lab and ERD for the reporting of unusual isolations, novel strains and any other notifiable diseases with public health implication. SLD reports all notifiable information to the ERD.

EOP Hazard Annex F: Outbreaks**Exchange specimen-level data electronically among laboratories****Other clinical laboratories**

SLD reports all influenza testing results to submitters via paper copies of reports that are sent through the mail (USPS). All novel influenza reports will first go to ERD for investigation.

State public health laboratories

New Mexico has only one state public health laboratory – New Mexico Department of Health

CDC

During a pandemic, IDEB will use the New Mexico Electronic Disease Surveillance System to send CDC all results electronically. Notifications to CDC will occur in 'real-time' as the cases investigations are completed. First in US or first in state laboratory-confirmed pandemic influenza results will be phoned to the CDC EOC. See B1.1. SLD will use its long-standing system of specimen delivery to send to CDC any first in US or first in state pandemic influenza specimens for confirmation.

Call-down procedures

Four Biological Sciences Bureau staff are on call (outside of normal business hours) to respond to emergency situations and outbreaks. If pandemic influenza testing was requested, Virology would contact the Epidemiology and Response Division for approval.

On condition of approval, the CDC FDA-approved assay influenza test protocols would be used for testing. If a novel or un-typeable influenza positive was detected, the specimen would be sent to CDC for confirmation and a call would be placed to IDEB. The CDC FDA-approved assay would be used to test the specimen for influenza A/B and then sub-typed for H1, H3, 2009 H1N1, H5, or H7. If the specimen is determined to be seasonal influenza (H1, H3, 2009 H1N1), then it may be set up in culture if needed. If specimen is influenza A positive, but is unable to be sub-typed, H7 or H5 positive, then the specimen would be sent to CDC for further investigation. An algorithm plan for call down is in place within the SLD and for the SLD integration into the IDEB and BHEM. This plan is also used for BT/CT response and has been proven to work very effectively. Updated on call lists with contact information are shared on a regular basis between IDEB and SLD staff. IDEB and SLD staff are available 24/7/365.

SLD staff can be contacted at 383-9000 during normal work hours and on call staff can be contacted at 260-7295 outside of normal working hours.

B. Mass Vaccination Procedures and Protocols

Novel Vaccine Planning Assumptions:

1. Vaccine may not be available for at least six months after the pandemic influenza onset
2. Supplies of vaccine may be limited initially yet demand for vaccine may be high
3. New Mexico may receive vaccine doses in batches of varying sizes
4. Vaccination may take place over many months and involve vaccinating an unprecedented number of persons
5. During an influenza pandemic, only United States (US) manufactured influenza vaccines will be available for purchase in the US
6. Priority groups for pandemic vaccination will be determined at the national level
Priority groups may include:
 - Pregnant women
 - People who live with or care for children <6 months of age
 - Native Americans
 - Health care and emergency medical services personnel
 - Persons between the ages of 6 months through 24 years of age; and
 - People from ages 25 through 64 years who are at higher risk for complications because of chronic health disorders or compromised immune systems
7. Because vaccine supply may initially be limited, the Advisory Committee on Immunization Practices (ACIP) may identify specific groups as most vulnerable or critical to maintain essential health services.
8. Priority groups may be targeted to receive the vaccine before others.
9. Priority groups may change based on epidemiologic information as the influenza pandemic progresses.
10. Priority groups may change based on key resources and the need to maintain state and local jurisdictional critical infrastructure.
11. Although states will be asked to vaccinate according to the national priority group ranking, states will have some flexibility in defining their priority groups, and sub-prioritizing within them.
12. If vaccine is available in sufficient quantities, priority groups will be vaccinated simultaneously.
13. The federal government will purchase all pandemic influenza vaccine through the first year.
14. Pandemic influenza vaccine will be allocated to states in proportion to their total population, New Mexico accounts for 0.6% of the country's population.
15. There may be a need for rapid training and/or increasing the scope of practice of certain healthcare providers to administer large quantities of vaccine throughout New Mexico.
16. The NMDOH will continue to operate as a centralized public health system, utilizing NMDOH Regional Public Health Offices (PHOs) throughout the State.
17. PHO clinical staff will operate under protocols approved by the NMDOH Public Health Division (PHD); these protocols may be adapted from the seasonal influenza immunization protocols stored on the PHD Intranet.
18. Mass vaccination plans will incorporate significant private medical sector participation.
19. Antibody production adequate to confer immunity may require two-doses of vaccine separated by a minimum time interval.

Vaccine Prioritization

Vaccination prioritization is based on the CDC guidance to states. The following section provides guidance for vaccinating priority groups and lists which agencies/organizations will provide the immunizations. In some cases, a combination of public and private sector organizations will deliver vaccinations. Strategies to access each priority group are included. Any combination of these strategies may be used over the course of the active vaccination phase to reach a priority group. As demand for vaccination is met in each priority group, vaccination will be offered to the next priority group.

Priority groups:

1. Priority Group: Healthcare workers and emergency services personnel

Assumptions: Most health care facilities and health care provider groups will vaccinate their own staff.

Primary venues: Occupational setting, providers' offices.

Groups include: Hospitals, private health care providers offices, clinics, home health care providers, hospice services, blood banks, long term care facilities, dialysis facilities, ambulatory surgery centers, and emergency medical services personnel

Strategies:

- Assess the ability of each group to vaccinate their own staff, provide messaging that this is an expectation.
- Assess the ability of each group to provide vaccination to other groups unable to vaccinate their own staff.

2. Priority group: Pregnant women, people who live with or care for children <6 months of age, children 6 to 59 months of age

Assumptions:

- Public health will be a major resource in vaccinating this group. It is estimated that public health providers will vaccinate approximately 40% of this group.
- Private providers and hospitals will also be a major resource in vaccinating this group. It is estimated that private providers and hospitals will vaccinate 60% of this group.
- 50% of pregnant women in New Mexico are eligible for Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) services. WIC clinics provide an opportunity to reach pregnant women, young children and parents of infants<6 months during their benefits appointments.
- Many providers of obstetrical and prenatal services are not part of the NMDOH Vaccines for Children (VFC) system and may not have the facilities and pharmacy licenses necessary to receive and handle vaccines.

Primary Venues: WIC clinics, Obstetricians (OB), family practitioners, pediatricians, community clinics, and rural health clinics.

Strategies:

- NMDOH will invite those listed as primary venues to register for receipt of pandemic influenza vaccine.
- NMDOH PHOs will assign vaccination nurse(s) to provide influenza vaccination, dependent on demand and capacity, to all WIC clients at the time of their appointment.
- ANMDOH PHO Health Services staff will offer vaccine, when available, to any client with a positive pregnancy test.
- NMDOH will collaborate with Children Youth and Family Department (CYFD) to identify and coordinate the provision of vaccination at child care locations throughout the state.
- NMDOH will encourage pediatricians and family practitioners to vaccinate new parents and household contacts of children less than six (6) months of age.
- NMDOH will encourage pediatricians and family practitioners to vaccinate all children 6-59 months of age seen in their offices.
- NMDOH will encourage hospitals to offer pandemic influenza vaccines at discharge to children, pregnant and postpartum women, and household contacts of newborn infants, before and during the influenza season.

Strategies for children 6-59 months of age:

- NMDOH PHD will assist child care and day care center staff to organize “groups” for vaccination.
- Schools and child care centers will send vaccine influenza information and consent forms home for parent/guardian signature. The former NMDOH PHD School Kids Influenza Immunization Project (SKIP) protocol may be adapted for this process.
- To facilitate obtaining consent, NMDOH PHD will consider offering vaccinations at day care centers during hours when parents are picking up their child (ren).
- To make vaccinations available to children whose parents work, NMDOH DRAFT PHD will consider “after hours” clinics at public health offices.
- WIC will provide client referrals to NMDOH PHOs for on-demand pandemic influenza vaccination.
- NMDOH PHOs will accept walk-ins for vaccination.
- Schools and community providers will alert child care and day centers when vaccination clinics are available to provide vaccinations.

3. Priority group: Persons between the ages of 5 and 24 years of age**Assumptions:**

- The NMDOH Public Health Division will be a major resource in vaccinating this group. It is estimated that public health, in coordination with Public Education Department (PED) and student health services will vaccinate 80% of this priority group, as staffing patterns allow. The NMDOH PHD School Kids Influenza Immunization Project (SKIP) protocol may be adapted for this process.
- Private providers, especially those caring for children and young adults with special health care needs, will vaccinate about 20% of this priority group.
- NMDOH will coordinate with PED and the New Mexico Higher Education Department (HED) to work with schools and student health centers in colleges and universities.
- School districts will be a major resource in vaccinating this group.

- Student health services at community colleges and universities will be a major resource in vaccinating young adults.

Primary venues: Schools, colleges and universities, and to a limited extent, health care provider offices.

Strategies for school age children:

- NMDOH public health office staff will work with schools to plan and implement mass vaccination clinics in the schools.
- Most of these clinics will take place at each school.
- School nurses will participate in administering influenza vaccine.
- VFC schools are required to enter vaccination administration in New Mexico Statewide Immunization Information System (NMSIIS).
- School nurses will send influenza vaccine information and consent forms home for parent/guardian signature.
- School nurses will organize "groups" for vaccination.
- School nurses will have the signed consent available for each group prior to outreach dates.
- NMDOH PHD, with school nurses, will use the NM MCR Serves, to recruit volunteers to assist in school-based mass vaccination clinics.
- NMDOH PHD, with other recruited health care providers, will coordinate and staff vaccination outreach at community-based events.
- Pandemic Influenza vaccine will be made available for private health care providers to administer to their patients.
- Children with special health care needs will be referred to their private health care providers or to the local NMDOH Public Health Region office.

Strategies for Colleges and Universities:

NMDOH PHD will work with college and university student health centers to plan for vaccinating students at their respective institutions.

4. Priority Group: People within ages 25 through 64 years who are at higher risk for complications of novel influenza virus because of chronic health disorders or compromised immune systems

Assumptions:

- NMDOH will have a role but will not be the main source of vaccination for this target group.
- Many adult providers are not part of the current VFC system and may not have facilities and pharmacy licenses to receive and handle vaccine.
- Hospitals, clinics and pharmacies will be the main source of vaccination for this group.

Primary venues: Occupational settings, community clinics, pharmacies, primary health care providers' offices.

Strategies:

- NMDOH PHOs will schedule vaccination clinic hours and will accept walk-in for vaccination.

- NMDOH will enroll health care providers and systems as vaccine providers. DOH will work with large private clinical provider groups such as hospital-based outpatient clinics, pharmacies, private vaccination organizations, home health care service organizations, Veterans Administration, and Indian Health Services to provide mass-vaccination clinics.
- Hospitals will vaccinate high-risk adults before discharge.

5. Priority group: All others

Assumptions:

- NMDOH will have a role but will not be the main source of vaccination for this target group.
- Private providers, hospital-sponsored clinics, and pharmacies will be the main source of vaccination for this group.

Primary venues: Occupational settings, community clinics, pharmacies, primary health care

providers' offices.

Strategies:

- NMDOH PHOs will schedule clinic hours and will accept walk-in for vaccinations.
- NMDOH will enroll health care providers and systems as vaccine providers.
- NMDOH will work with large private clinical provider groups such as hospital-based clinics, pharmacies, private vaccine organizations, home health care service organizations, Veterans Administration, and Indian Health Services to provide mass-vaccination clinics

Vaccine Allocation

Initial allocations of vaccine will be based on county population estimates for each of the priority groups and on resource assess indicators. The NMDOH Immunization program will determine the quantity of vaccine to distribute to the PHOs, hospitals, and providers based on these allocations.

Vaccine Distribution

The NMDOH will utilize several methods for distribution of the novel influenza vaccine for providers and clinics. Large providers in the state (such as pharmacies, hospitals, health care systems, universities, private mass vaccinator) that can properly store shipment of 100 doses or greater will be shipped directly from the CDC contractor. Smaller provider offices and clinics that have limited storage capacity will receive shipment from the state contracted third party distributor. The NMDOH Public Health Regional Offices will serve as points of distribution for their regions. These sites will also serve to support public health clinics, mass vaccination clinics at schools and other venues.

Staffing Mass Vaccination

Sources of staffing will include NMDOH staff, and health emergency workers recruited through NM MRC Serves. NM MRC Serves recruits teams of volunteers according to several categories of criteria and need. Every individual available through NM MRC Serves will be appropriately licensed and credentialed for the assigned task. Additional vaccination resources will come from other state agencies, health profession schools, pharmacies, teams of Emergency Medical Technicians (EMTs), and the local healthcare workforce. Teams of EMTs will be created to

assist in vaccination clinics. Intermediates and Paramedics may vaccinate as part of their scope of practice.

Provider agreements will be established with agencies able to provide vaccinating staff. All who are interested in contracting with NMDOH to provide vaccinators are asked to complete a substitute W9 to be enrolled in the state vendor system. Draft agreements are shared for their review prior to establishing the agreement. The provider agreement can be executed within 1-2 days.

NMDOH will utilize video conferencing and online training modules to train those NMDOH personnel, healthcare providers, and volunteers who pre-register to participate in vaccination clinic efforts. Volunteers will also be provided "just-in-time" training, based on their job description, on the date of the vaccination clinic

All clients presenting for vaccination:

1. Will be screened for contraindications prior to receiving the vaccine
2. Will receive a Vaccine Information Sheet developed by CDC
3. Will sign a consent form or have form signed by legal representative before vaccination
4. Will be given information on what to do if they experience an adverse event following vaccination, and how to report that event
5. Will, if necessary, be instructed to return for a second dose during a specified time frame.
All vaccinations will be documented in the New Mexico Statewide Immunization Information System (NMSIIS).

Data Collection

To ensure optimal use of a new pandemic influenza vaccine, public health offices, and participating vaccination providers should be prepared to collect data on vaccine supply and distribution, vaccine coverage, vaccine effectiveness, and vaccine safety.

NMDOH will utilize NMSIIS, the state immunization registry, to track vaccine inventory and coverage.

- NMSIIS can track vaccine recipients and provide regular reports on the doses administered.
- NMSIIS includes a reminder and recall report that could be utilized to recall patients for a second dose, if necessary.
- NMSIIS may be expanded to include data elements needed for vaccine administration reporting and tracking during an influenza pandemic.

New Mexico will follow CDC guidelines for reporting pandemic vaccine doses administered through the Countermeasure and Response Administration (CRA) application.

Vaccine effectiveness will be assessed by comparing rates of influenza-related illness, hospitalization, and/or death among vaccinated and unvaccinated persons. These studies will be implemented by CDC in collaboration with health care and university partners, and with state and local health departments that participate in influenza surveillance systems.

Vaccine safety will be monitored through the national Vaccine Adverse Events Reporting System (VAERS).

Vaccine Safety Monitoring

The key to preventing serious adverse reactions to vaccines is screening. All persons should be screened for contraindications and precautions before receiving the vaccine dose. Effective screening is not difficult and can be accomplished with the approved medical screening template.

Vaccine recipients may also report adverse reactions directly into VAERS. Prior to receiving a vaccination, all individuals will be required to receive and review a Vaccine Information Statement, which includes information about reporting adverse reactions

The NMDOH Immunization Program Manager is designated as Vaccine Safety Coordinator (VSC). The Infectious Disease Bureau Medical Director for the NMDOH will be the first back-up and the NMDOH PHD Medical Director will serve as an additional back-up. The VSC is the point of contact with CDC for issues related to vaccine safety reporting and surveillance. Within NMDOH, the VSC serves in a liaison capacity between the NMDOH PHD Immunization Program and the Epidemiology and Response Division for vaccine safety and adverse events surveillance.

NMDOH Regional Immunization Coordinators will promptly disseminate safety information to all providers administering vaccine, so that those potentially affected by safety issues receive appropriate guidance and/or intervention.

Emergency Use Authorization

The use of the pandemic influenza vaccine may be without FDA licensure. An Emergency Use Authorization (EUA) permits the FDA Commissioner to allow medical countermeasures to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases where there are no adequate, approved, and available alternatives. The pandemic influenza vaccine may be authorized by the FDA Commissioner under an EUA. The draft January 2017 guidance document on EUA can be found at

<http://www.fda.gov/RegulatoryInformation/Guidances/ucm125127.htm>

C. Pandemic Influenza Vaccine Allocation and Targeting – CDC Guidance

Based on the CDC Interim updated Planning Guidance on Allocating and Targeting Pandemic Influenza Vaccine During an Influenza Pandemic ³³

The 2018 Interim updated guidance replaces the 2008 Guidance and uses updated pandemic severity categories based on the current CDC Pandemic Severity Assessment Framework³⁴ and lessons learned from the 2009 H1N1 pandemic response, including; the unpredictability of pandemic severity and timing, variability of the impact on critical infrastructure functions, challenges with overall vaccine supply and variability among manufacturers, and the need for flexibility at the state, tribal, and local levels to best manage vaccine supplies to meet local needs. The guidance also includes the consideration that two doses of vaccine and co-administration of adjuvant may be required to produce protective immunity in some scenarios. Pharmacists and pharmacy technicians have also been moved to Tier 1, because they may be dispensing and giving pandemic vaccine immunizations.

In preparedness for any future influenza pandemic, effective allocation and administration of pandemic influenza vaccine is important in preventing influenza and reducing the effects of a pandemic on public health. Vaccine remains the most effective tool against the spread of influenza.

Although the U.S. government is working to establish a pre-pandemic influenza vaccine stockpile of bulk vaccine against viruses with pandemic potential, the supply may not be sufficient, and it currently takes months to develop vaccine against the specific identified strain of influenza virus causing the pandemic. Therefore, vaccine targeting decisions may have to be made. Such decisions should be based on vaccine supply, pandemic severity and impact, potential for disruption of community critical infrastructure, and operational considerations.

The objectives guiding vaccine allocation and use during a pandemic are to reduce the impact of the pandemic on health and minimize disruption to society. Ethical issues must be considered in planning for a phased response to pandemic vaccination because, initially, some people will receive vaccination before others.

General Principles

- The need for targeting vaccine to maintain national security, health care, essential community services, and critical infrastructure will depend on the severity of the pandemic and availability of vaccine. Considerations must also be made for:
 - Populations identified for early vaccination
 - Rates of workplace absenteeism and the ability to supply essential products/services
- Allocation of pandemic vaccines by the U.S. government will, most likely, be based on population

³³ <https://www.cdc.gov/flu/pandemic-resources/pdf/2018-Influenza-Guidance.pdf>

³⁴ <https://www.cdc.gov/flu/pandemic-resources/national-strategy/severity-assessment-framework.html>

- CDC recommends that states follow the national guidance to ensure fairness and uniformity
 - Within guidance parameters, states have the authority to distribute vaccine to meet specific needs in their populations
 - The high risk groups are not known in advance. Several potential scenarios may be considered for planning purposes
- An influenza pandemic differs from other national emergencies by the threat posed and event duration - populations targeted for vaccination may differ from other emergency responses
 - Recommendations of groups for early vaccination are based on pandemic severity and transmissibility, vaccine supply, the identified groups at highest risk of complications, and those who maintain critical functions
 - CDC recommends that states, in coordination with tribes and communities, identify critical occupations and prioritized groups for early vaccinations
 - Recommendations may change as the pandemic progresses, (i.e., new scientific information, changes in vaccine production capacity, advances in health care/public health response measures)
- During a severe influenza pandemic, the most critical workforce will likely be vaccinated in temporary closed mass vaccination points of distribution (PODs)
- Prepare to vaccinate critical workforce (Tiers 1- 3) with 2 doses of pandemic vaccine, separated by 21 days, within 4 weeks of vaccine availability
- Prepare to vaccinate 80% of the population with 2 doses, separated by 21 days, within 12 weeks of pandemic vaccine availability

Framework for Targeting Pandemic Influenza Vaccine

Categories

There are four broad pandemic vaccination population groups that cover the entire population:

1. Homeland and national security
2. Health care and community support services
3. Other critical infrastructure
4. General population

Population Groups: People targeted for vaccination are defined by occupation, age group, or risk level

- Everyone in the U.S is included in at least one vaccination population group
- If not included in an occupational group, people will be vaccinated as part of the general population based on age/health status
- If included in more than one population group, people should be vaccinated at the highest tier group membership
- Occupational groups (i.e., national security, health care) do not include the entire workforce, only a person who, based on the nature of their role or occupation, are individually critical for providing essential services
- H1N1 lesson learned: in a pandemic and other public health emergencies, it may be necessary to adapt designations to local realities by decisions at state, local, and provider level

Tiers: Theoretically, across categories, all groups designated for vaccination within a tier have equal priority for vaccination. Groups within tiers may vary depending on pandemic severity and supply

Tier 1: The highest priority population groups in all four categories, to receive vaccination if there is a limited supply

Groups within Tier 1 may change depending on the pandemic characteristics

It may be necessary to sub-target Tier 1, if the vaccine is in very short supply; specify persons and groups to be included in a focused target of Tier 1 (i.e., front-line health care providers, most medically vulnerable)

Tier 2: Targets groups in the homeland and national security category

Tier 3: Remaining groups that protect homeland and national security, provide health care, and maintain critical infrastructure

Tier 4: Groups in the general population. In a pandemic with a high/very high level of severity, high risk adult populations (aged 19-64) who have underlying medical conditions and older adults (65 and older)

Tier 5: Includes healthy adults (aged 19-64)

Critical Workforce: Workers with critical skills, experience, certification, or licensure status whose absence would create a crisis or collapse of critical functions - particularly in a severe pandemic

Guidance Framework at-a Glance

Categories- Pandemic vaccination population groups are clustered into four broad categories (homeland and national security, health care and community support services, other critical infra-structure, and the general population). These four categories together cover the entire population.	Tiers- Across categories, vaccine will be allocated and administered according to tiers where all groups designated for vaccination within a tier have equal priority for vaccination. Groups within tiers vary depending on pandemic severity.
Population Groups- People targeted for vaccination defined by occupation, age group, or risk level.	Critical Workforce- Workers with critical skills, experience, certification or licensure status whose absence would create severe bottlenecks in or the collapse of critical functions.

Table 1. Category, vaccination population groups, estimated number in population group, and tiers for low, moderate, and high/very high pandemic severityAccessible version at https://www.cdc.gov/flu/pandemic-resources/national-strategy/planning-guidance/guidance_508.html#table-1

Category	Population Group	Estimated Number ³	Low Severity ⁴	Moderate Severity	High/Very High Severity
Homeland and national security	Deployed ⁵ & mission essential personnel	850,000			
	Essential military support & sustainment personnel	650,000			
	Intelligence services	150,000			
	National Guard personnel	500,000			
	Other domestic national security personnel	150,000			
	Other active duty military & essential support	1,500,000			
Health care and community support services	Public health personnel	300,000			
	Inpatient health care providers	3,200,000			
	Outpatient & home health providers	2,600,000			
	Health care providers in long-term care facilities	1,600,000			
	Pharmacists & pharmacy technicians	725,000			
	Community support & emergency management	600,000			
	Mortuary services personnel	50,000			
Other critical infrastructure	Emergency services & public safety sector personnel (EMS, law enforcement, & fire services)	2,000,000			
	Manufacturers of pandemic vaccine & antivirals	50,000			
	Communications/information technology (IT), electricity, nuclear, oil & gas, water sector personnel, & financial clearing & settlement personnel	2,200,000			
	Critical government personnel - operational & regulatory functions	425,000			
	Banking & finance, chemical, food & agriculture, pharmaceutical, postal & shipping, & transportation sector personnel (critical infrastructure with greater redundancy)	3,400,000			
	Other critical government personnel	400,000			
General population	Pregnant women	4,000,000			
	Infants & toddlers 6-35 months old	11,000,000			
	Household contacts of infants <6 months old	4,500,000			
	Children 3-18 years old with high risk condition	7,000,000			
	Children 3-18 years old without high risk condition	62,000,000			
	Adults 19-64 years old with high risk condition	38,000,000			
	Adults ≥65 years old	41,000,000			
	Healthy adults 19-64 years old	132,000,000			

D. Influenza Antiviral Medications

Although a vaccine well matched to the circulating novel influenza virus would be the best line of defense during an influenza pandemic, vaccine development currently takes several months. The most effective medical countermeasures (MCM) would be identified after the characteristics of the pandemic virus are known: transmissibility, virulence, antigenic properties, and susceptibility and clinical responsiveness to antiviral drugs.

In an influenza pandemic, prior to the availability of the specific pandemic influenza vaccine, the Governor or Governor Appointed Representative (GAR), after consultation with the DOH Secretary, may request the Strategic National Stockpile (SNS) influenza-specific managed inventory. This may include; antiviral medication, ventilators, and personal protective equipment (PPE).

Antiviral medications have proven to be effective in decreasing the severity of influenza complications, shortening the length of illness (by approximately 1-2 days), decreasing hospital admissions, length of stay, and mortality. Early implementation of antivirals after an influenza pandemic has been identified, with consistent person to person transmission of the novel virus, may prove successful in decreasing the spread of infection.

FDA approved antiviral medications in the SNS include the neuraminidase inhibitors; oseltamivir (Tamiflu®), in capsule and suspension formulas, and zanamivir (Relenza®), in an inhaled formulation. Peramivir (Rapivab®) is also included in the SNS, for intravenous administration, in patients who have severe influenza illness and are hospitalized.

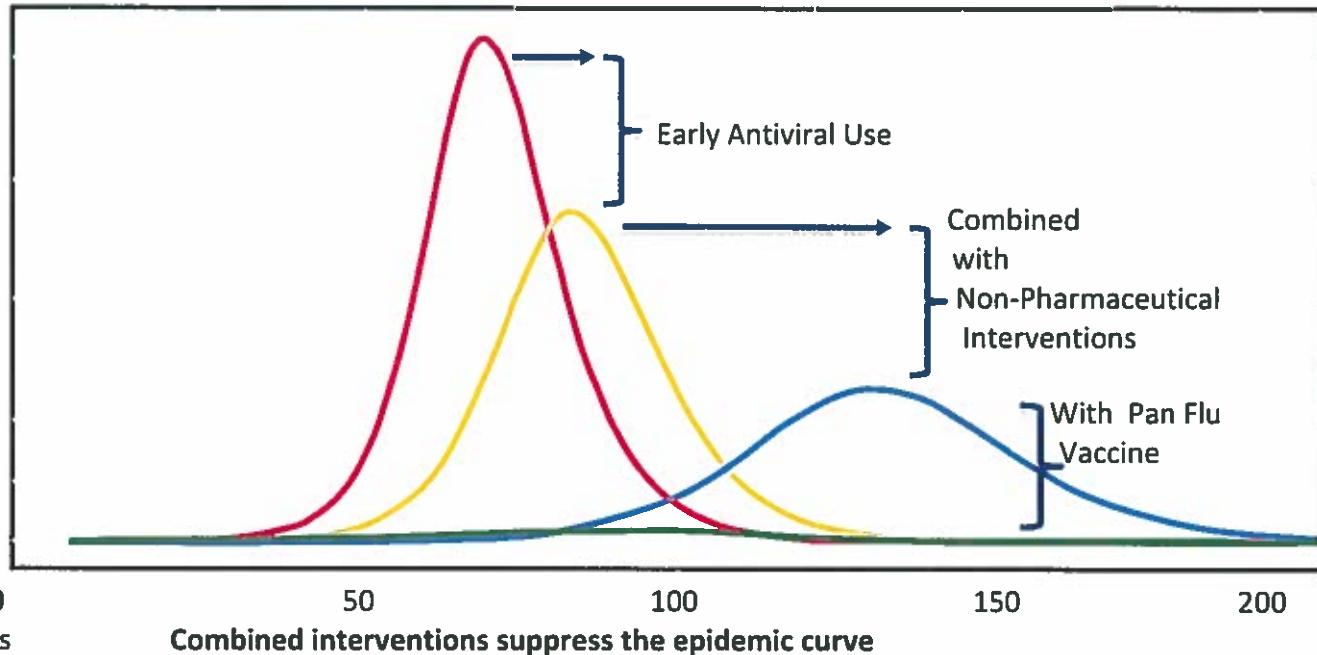
Planning Assumptions

- Antiviral medication may be helpful before a pandemic vaccination is available or for those for whom vaccine use is medically contraindicated
- Antiviral use may help to decrease hospitalization, morbidity, and mortality rates
- Antivirals used in combination with community mitigation measures/non-pharmaceutical interventions may help to reduce transmission of the virus
- Effectiveness of antiviral medications against a new pandemic influenza strain is unknown
- Influenza viruses change and may become resistant to currently licensed and approved antiviral medications
- Early treatment is a more efficient use of antiviral medications than prophylaxis
- If possible, antiviral treatment should be given within the first 48 hours of disease onset
- Antiviral treatment is recommended, as early as possible, for any patient with confirmed or suspected influenza who is: hospitalized and has severe, complicated, or progressive illness
- Antiviral treatment may benefit patients with severe, complicated or progressive illness, and in hospitalized patients even when started after 48 hours of illness onset
- Current antiviral use guidelines, including high risk groups and prioritization recommendations, would be revised by the CDC, when epidemiologic data on the specific pandemic virus is known
- Mild or uncomplicated influenza cases, outside of target populations, should be treated at home to reduce impact on the healthcare system

Interventions to Slow Pandemic Influenza Acceleration

*Adapted from: BARDA Agent-Based Simulation

New Infections per Day



H1N1

After detection of the new influenza A(H1N1) pdm09 virus in April 2009, a public health emergency

was declared by the federal government on April 26, 2009. On June 12th the World Health Organization (WHO) declared a global pandemic. Vaccine against the novel H1N1 influenza virus

was not widely available until after 6 months of sustained transmission. By May 6, 2009 the CDC had distributed 11 million of the 50 million antiviral treatment courses from the Strategic National Stockpile (SNS).³⁵ The antivirals were pushed out to states/territories without states making request to CDC for SNS influenza medical countermeasures (MCM). The CDC has been stockpiling influenza antiviral drugs in the SNS since 2004.

During the 2009 H1N1 pandemic, the FDA issued the first Emergency Use Authorization (EUA) for the investigational antiviral drug, peramivir. Through the Pandemic and All-hazards Preparedness Reauthorization Act (PAHPRA), legal authorities in support of public health emergencies allow the FDA to extend expiration of stockpiled products, such as antiviral medications. The Public Readiness and Emergency Preparedness (PREP) Act provides liability protections for individuals involved in the development, manufacturing, testing, distribution, dispensing, and use of federally stockpiled medical countermeasures (including antivirals).³⁶

High Risk Patients Generally Recommended for Antiviral Treatment Include;

- Children younger than 2 years

³⁵ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0016094>

³⁶ <https://www.federalregister.gov/documents/2015/12/09/2015-31087/pandemic-influenza-medical-countermeasures-amendment>

- Adults 65 years and older
- People with chronic pulmonary (including asthma), cardiovascular (except hypertension alone), renal, hepatic, hematological (including sickle cell disease), and metabolic disorders (including diabetes mellitus), neurologic and neurodevelopment conditions, epilepsy (seizure disorders), stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury
- People with immunosuppression, including that caused by medications or by HIV infection
- Women who are pregnant or postpartum (within 2 weeks after delivery)
- People younger than 19 years old who are receiving long-term aspirin- or salicylate-containing medications
- American Indians/Alaska Natives
- People who are extremely obese (i.e., body mass index is equal to or greater than 40)
- Residents of nursing homes and other chronic care facilities

Medical Countermeasures (MCM)

An initial pandemic influenza response may require rapid targeted antiviral treatment strategies. Due to the requirement of a prescription for each person who receives the medication, mass dispensing through open Point of Distribution (POD) sites be difficult.

If the federal government pushes antiviral medication to states/territories, as occurred in 2009, the current federal plan for distribution and dispensing of antivirals during an influenza pandemic is to send the medication to state health departments. The state and regional health offices would serve as primary distributors of antivirals to other facilities and to the public. The amount of medication released

would be based on the state population. The logistics of distributing, dispensing, and storing large quantities of antivirals, possibly for over a year, may be difficult. Therefore, CDC is working on new distribution plans to include private sector distribution partners, such as pharmaceutical distributors and pharmacies that handle distribution, dispensing, and tracking of pharmaceuticals on a daily basis.³⁷

CDC Countermeasures and Response Administration (CRA) System³⁸

The CRA system is an emergency preparedness and response information system designed to track the administration and dispensing of countermeasures (i.e., pharmaceuticals, vaccines, and other medical material, such as PPE) during a public health emergency. CRA tracks medical countermeasure dispensing and vaccine administration at both individual and aggregate levels, enabling public health departments to analyze and report data to CDC. CRA data is unidentified patient information; during data entry, a unique identifier is assigned to each individual/patient record to allow capture and retrieval of information without using identifying information per the HIPPA privacy rule.

Antiviral Distribution

³⁷ Timely Antiviral Administration During an Influenza Pandemic: Key Components, Anita Patel, PharmD CDC; (Am J Public Health.2018;108:S215-S220. Doi:10.2105/AJPH.2018.304609)

³⁸ <https://www.cdc.gov/cseis/dhis/cra/index.html>

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New Mexico DOH will follow CDC guidelines for reporting and tracking medical countermeasures received by the state, including vaccine doses administered, and antiviral medications and PPE dispensed, using the Countermeasure and Response Administration (CRA) application.

During an influenza pandemic, the DOH ERD Division would distribute CDC and DOH information to healthcare providers that includes antiviral use guidelines, identification of high risk groups, and prioritization recommendations. The information would be updated as new CDC or DOH guidelines become available. Decisions by DOH leadership would include the appropriate distribution of antiviral medication received by the state, DOH antiviral dispensing recommendations, and, if necessary, the potential re-direction of pharmaceutical assets within the state.

The DOH developed and maintains collaborative partnerships with CVS, Walgreens, and Walmart, the three largest pharmacy distributors within the state. This allows a continuous review of the current antiviral medication stockpiled or available within the state.

The ERD Bureau of Health Emergency Management (BHEM) would maintain situational awareness of antiviral use and availability, by continual monitoring and queries of pharmacies (including hospital pharmacies) and the tracking of DOH antiviral medication use in the CRA system. Prior to distributing state stockpiled antivirals, a signed letter/check list will be required from every healthcare entity requesting the medication. This requirement is to help ensure that antiviral medications are dispensed only to the identified high risk groups and that CDC and DOH prioritization recommendations and guidelines are followed. BHEM would maintain a data base of the entities with signed attestation letters.

Antiviral distribution will be based on an assessment of available medication and an estimate of the acute (hospitalized) and non-acute (home care) cases within the state.

SNS ANTIVIRAL MEDICATIONS for TREATMENT of INFLUENZA				
Antiviral Agent	Effective Against	Ages	Use	not Recommended
Oral Oseltamivir /Tamiflu	Influenza A & B	any	Acute Care Home care	N/A
Inhaled Zanmivir/Relenza	Influenza A & B	>7yr	Acute Care	underlying respiratory disease
Intravenous Peramivir/ Rapivab	Influenza A & B	> 2yr	Hospitalized	N/A

Additional Tools

FLU on Call ³⁹ is an effort by CDC in collaboration with United Way Worldwide and other partners to establish a national network of telephone help lines, staffed by information specialists and medical professionals, designed to be used during a severe influenza pandemic.

The goals are to:

- Improve access to antiviral medication
- Reduce the need for face-to-face clinical encounters
- Direct sick people to the level of care they need
- Reduce surge on medical facilities

MedFinder ⁴⁰ is a free, online service for providers and the public to locate nearby (by zip code) pharmacies, clinics, or other healthcare facilities with medication or vaccine availability.

³⁹ <https://www.astho.org/Flu-on-Call/>

⁴⁰ <https://www.medfinder.us/>

E. Acronyms

A

ACP	Access Control Point
AC	Area Command
AG	Attorney General
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
ASD	Administrative Services Division (NMDOH)
ASPR	Assistant Secretary for Preparedness and Response, Office of (HHS)

B

BHEM	Bureau of Health Emergency Management (NMDOH)
BHSD	Behavioral Health Services Division (NMDOH)
BLM	Bureau of Land Management (U.S.)
BIA	Bureau of Indian Affairs (U.S.)

C

CAP	Civil Air Patrol
CAT	Crisis Action Team
CDC	Centers for Disease Control and Prevention
CEO	Chief Executive Officer
CEP	Civil Emergency Preparedness
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CID	Construction Industries Division
CISM	Critical Incident Stress Management
COG	Continuity of Government
COOP	Continuity of Operations Plan
CRI	Cities Readiness Initiative
CYFD	Children, Youth and Families Department

D

DAC	Disaster Assistance Center
DAP	Disaster Assistance Program
DFA	Department of Finance & Administration
DFO	Disaster Field Office
DHS	Department of Homeland Security (U.S.)
DHSEM	Department of Homeland Security and Emergency Management
DMAT	Disaster Medical Assistance Team
DMORT	Disaster Mortuary Operational Response Team
DOC	Department Operations Center
DOD	Department of Defense
DOE	Department of Energy
DOH	Department of Health
DOT	Department of Transportation
DPS	Department of Public Safety
DSR	Damage Survey Report

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DUA Disaster Unemployment Assistance

E

EAS Emergency Alert System
ECT Emergency Coordination Team
ED Environment Department
EDD Economic Development Division
EMAC Emergency Management Assistance Compact
EMC Emergency Management Center
EMS Emergency Medical Service
EMSB Emergency Medical Systems Bureau
EMSCOM Emergency Medical Services Communications System
EMT Emergency Medical Technician
EMNRD Energy, Minerals and Natural Resources Department
EOC Emergency Operations Center
EOCR Emergency Operations Center Representative
EOP Emergency Operations Plan
EPA Environmental Protection Agency
EPLO Emergency Preparedness Liaison Officer
ERD Epidemiology and Response Division
ERO Emergency Response Officer
ERT-A Emergency Response Team – Advance Element
ERTL Emergency Response Team Leader
ESF Emergency Support Function

F

FAA Federal Aviation Administration
FBI Federal Bureau of Investigation
FCO Federal Coordinating Officer
FEMA Federal Emergency Management Agency
FIA Federal Insurance Administration
FMS Federal Medical Station

G

GAR Governor's Authorized Representative
GCO Grant Coordinating Officer
GSD General Services Department

H

HAN Health Alert Network
HazMat Hazardous Materials
HCC Healthcare Coalition
HCO Healthcare Organization
HHS Health and Human Services, Department of (U.S.)
HMERP Hazardous Materials Emergency Response Plan
HPP Hospital/Healthcare Preparedness Program
HSD Human Services Department

I

IC Incident Commander

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ICP Incident Command Post
ICS Incident Command System
IDEB Infectious Disease and Epidemiology Bureau
IFG Individual Family Grant
IMAS Intrastate Mutual Aid System
ISO Information Systems Officer

J

JFO Joint Field Office
JIC Joint Information Center
JIS Joint Information System

K

KAFB Kirtland Air Force Base

L

LAN Local Area Network
LEA New Mexico Law Enforcement Academy
LEOC Local Emergency Operations Center
LEPC Local Emergency Planning Committee
LGH Local Government Handbook
LTSD Long Term Services Division (NMDOH)

M

MAC Multi-Agency Coordination (Group or System)
MCM Medical Countermeasures
MOU Memorandum of Understanding
MRC Medical Reserve Corps
MSCA Military Support to Civil Authorities
MTD Motor Transportation Division

N

NAWAS National Warning System
NFIP National Flood Insurance Program
NGO Non-Governmental Organization
NIMS National Incident Management System
NMANG New Mexico Air National Guard
NMARNG New Mexico Army National Guard
NMEOC New Mexico Emergency Operations Center (State EOC)
NMBMMR New Mexico Bureau of Minerals and Mines Resources
NMCD New Mexico Corrections Department
NMDOH New Mexico Department of Health
NMDA New Mexico Department of Agriculture
NMLB New Mexico Livestock Board
NMNG New Mexico National Guard
NMSA New Mexico Statutes, annotated
NRF National Response Framework
NRT National Response Team

NTAS National Terrorism Advisory System

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NWC National Warning Center

NWS National Weather Service

O

OCA Office of Cultural Affairs

OGC Office of General Counsel

OMI Office of the Medical Investigator

ONRT Office of Natural Resource Trustee

OSHA Occupational Safety and Health Act

P

PAHPRA Pandemic and All-Hazards Preparedness Reauthorization Act of 2013

PDA Preliminary Damage Assessment

PHD Public Health Division (NMDOH)

PHEP Public Health Emergency Preparedness

PHERA Public Health Emergency Response Act

PHLIP Public Health Laboratory Interoperability Project

PHS Public Health Service, United States

PIO Public Information Officer

POC Point of Contact

POD Point of Dispensing

PRC Public Regulatory Commission

R

RACES Radio Amateur Civil Emergency Services

RADEF Radiological Defense

REPS Regional Emergency Preparedness Specialist (PHD)

RLD Regulation and Licensing Department

ROC Regional Operations Center (PHD)

RPP Radiological Protection Program

RSS Receipt, Stage and Store (site)

S

SAR Search and Rescue

SARA Super Amendment Reauthorization Act

SARDA State and Regional Disaster Airlift

SAT Situational Analysis Team

SCM Survivable Crisis Management

SCO State Coordinating Officer

SEO State Engineer Office

SEOP State Emergency Operations Plan

SFHA Special Flood Hazard Area

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SITREP Situation Report

SLD Scientific Laboratory Division (NMDOH)
SNS Strategic National Stockpile
SPO State Personnel Office
SOG Standard Operating Guidelines
SOP Standard Operating Procedures
SRCA State Records Center and Archives

T

TAGNM The Adjutant General of New Mexico
TRD Taxation and Revenue Department

U

UAC Unified Area Command
UC Unified Command
UCG Unified Coordination Group
UHF Ultra-High Frequency
UNM University of New Mexico
UNMH University of New Mexico Hospital
USDA United States Department of Agriculture
USGS United States Geological Survey

V

VA U.S. Department of Veterans Affairs
VHA Veterans' Health Administration (U.S. Dept. of Veterans Affairs)
VHF Very High Frequency
VOAD Volunteer Organizations Active in Disaster

W

WHO World Health Organization
WIPP Waste Isolation Pilot Plant
WSMR White Sands Missile Range

Attachments

Attachments are stand-alone documents included as references due to their relevance or applicability to the Pandemic Influenza Plan. They are not physically attached to this document as they may be available by hyperlink, contain sensitive information, and/or belong to agencies external to the NMDOH.

A. Albuquerque International Sunport Communicable Disease Emergency Response Plan

Guidelines for Preventing the Introduction, Transmission, and Spread of Communicable Diseases from Foreign Countries into the United States (September 2013)

B. New Mexico Department of Health All-Hazard Emergency Operations Plan (EOP)

<http://nmhealth.org/publication/view/plan/958/>

C. New Mexico Department of Health Ebola Virus Disease Response Plan

<http://nmhealth.org/publication/view/plan/953/>

D. New Mexico Department of Health Medical Countermeasure Distribution and Dispensing Plan

[NM DOH Medical Counter Measure Plan](#)

E. State of New Mexico All-Hazards Emergency Operations Plan (EOP)

G. Crisis Standards of Care Plan

[NM DOH Crisis Standards of Care Plan](#)

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