

Annex Title: Incident Specific Annex, Disease Outbreak, Pandemic Influenza

Lead Division: Disease Control and Environmental Epidemiology Division (DCEED)

Internal Supporting Divisions/Offices: Executive Offices, Health Facilities and Emergency Medical Services Division, Prevention Services Division, Laboratory Services Division, Center for Health and Environmental Information and Statistics Division, and Consumer Protection Division

External Supporting Agencies: Division of Emergency Management, Department of Agriculture, Department of Human Services, Department of Public Safety, Department of Transportation, Department of Wildlife, Department of Personnel Services, Department of Higher Education, Department of Policy and Finance, Department of Military Affairs, American Red Cross, Salvation Army and Voluntary Organizations Active in Disaster

I. Purpose

The purpose of this incident-specific annex (herein known as the Pandemic Influenza Annex) to the Colorado Department of Public Health and Environment (CDPHE) Internal Emergency Response Implementation Plan (herein known as the “Basic Plan”) is to reduce mortality and morbidity, and minimize social disruption in Colorado, by providing a guide for the CDPHE response to an influenza pandemic.

II. Scope

Because the response to pandemic influenza will use much of the same infrastructure as is needed for a response to other communicable disease outbreaks, this incident-specific annex to the Basic Plan highlights areas that are specific to pandemic influenza and therefore require additional consideration.

In particular, this annex describes how CDPHE will undertake planning and coordination; surveillance, investigation (including laboratory), and protective health measures; vaccine and antiviral drugs; healthcare system and emergency response; and communications and outreach activities by World Health Organization (WHO) Phase and associated U.S. Department of Health and Human Services (HHS) Stage in the State of Colorado. See Attachment 1 - Phases of a Pandemic.

III. Legal Authority

CDPHE and local public health agencies (LPHA) have statutory authority to investigate and control causes of epidemic and communicable diseases affecting the public health. The Colorado Board of Health has the authority to require reports of such diseases to public health officials and public health officials in turn have access to medical records relating to these diseases. Additionally, CDPHE and LPHAs have statutory authority to establish, maintain and enforce isolation and quarantine and to exercise physical control over property and the persons within Colorado. See Attachment 2 – Public Health Powers.

Colorado is also in a unique position to have the Governor’s Expert Emergency Epidemic Response Committee (GEEERC). The GEEERC was statutorily created in 2000 to develop a public health response to acts of bioterrorism, pandemic influenza and epidemics caused by novel and highly fatal infectious agents. It is chaired by the CDPHE Executive Director and consists of 18 other statutorily designated people representing state agencies, public health officials, various health care professions and the Attorney General. The basic function of the GEEERC is to provide recommendations to the Governor of Colorado on reasonable and appropriate measures to reduce or prevent the spreading of disease.

As the Governor of Colorado has broad powers to meet the response needs of an emergency, the Governor may suspend any regulatory statute provisions, state agency orders, rules, or regulations that would prevent, hinder, or delay emergency response efforts. Based on this authority, the GEEERC has created several draft executive orders that could be signed by the Governor in order to facilitate response to a public health emergency. See Attachment 3 – GEEERC Draft Executive Orders.

IV. Assumptions

Several features set pandemic influenza apart from other public health emergencies or community disasters:

- A. Susceptibility to the pandemic influenza virus strain will be universal.
- B. The clinical disease attack rate will be about 30% in the overall population. Illness rates will be highest among school-age children (about 40%) and decline with age. Among working adults, an average of 20% will become ill during a community outbreak.
- C. Of those who become ill with the new strain of influenza, approximately 50% will seek outpatient medical care.
- D. In an infected community, a pandemic outbreak will last about six to eight weeks. At least two pandemic disease waves are likely. The seasonality of a pandemic cannot be predicted with certainty.

E. The number of hospitalizations and deaths will depend on the virulence of the pandemic virus. Because the virulence of the influenza virus that causes the next pandemic cannot be predicted, two scenarios are presented based on extrapolation of past pandemics. Estimates are based on extrapolation from past pandemics in the United States using Colorado-specific census data in the Centers for Disease Control and Prevention’s (CDC) FluAid program.

Estimated number of episodes of illness, healthcare utilization, and death associated with moderate and severe pandemic influenza scenarios in Colorado

2005 Estimated Colorado Population = 4,722,460

Characteristic	Moderate (1958/68)	Severe (1918)	Assumptions
Illness	1,416,738	1,416,738	30% of CO population becomes ill
Outpatient medical care	708,369	708,369	50% of ill persons seek outpatient care
Hospitalization	13,616	155,841	1-11% of ill persons require hospitalization
ICU Care	2,027	23,376	0.1-1.6% of ill persons require ICU care
Mechanical ventilation	1,021	11,688	0.07-0.8% of ill persons require ventilation
Deaths	3,290	29,956	0.2-2.1% of cases die

*Note that these estimates do not include the potential impact of interventions not available during the 20th century pandemics.

F. Based on the above extrapolation for a severe pandemic, Colorado deaths are estimated to be approximately 29, 956. It is assumed that a pandemic will occur in 2 waves lasting 6 – 8 weeks each. If the number of Colorado deaths is spread out over 2 waves of 8 weeks each, Colorado can expect to see approximately 347 deaths per day. This estimate includes 80 deaths per day that Colorado typically has. As a direct calculation, this estimate does not take into account traditional epidemiologic bell curves seen in disease outbreaks. Therefore, this number will likely be smaller at the onset of the wave, rise steeply at the peak and decrease at the end of the wave. This cycle will likely repeat with the second wave.

G. Risk groups for severe and fatal infections cannot be predicted with certainty. During annual fall and winter influenza season, infants and the elderly, persons with chronic illnesses and pregnant women are usually at higher risk of complications from influenza infections. In contrast, in the 1918 pandemic, most deaths occurred among young, previously healthy adults.

H. In a severe pandemic, it is expected that absenteeism may reach 40% due to illness, the need to care for ill family members, and fear of infection during the peak weeks of a community outbreak, with lower rates of absenteeism during the weeks before and after the peak. Certain public health measures (closing schools, quarantining household contacts of infected individuals, “snow days”) are likely to increase rates of absenteeism.

- I. The typical incubation period (interval between infection and onset of symptoms) for influenza is two days. It is assumed that this would be the same for a novel strain that is transmitted between people by respiratory secretions.
- J. Persons who become ill may shed virus and can transmit infection for up to one day before the onset of illness. Viral shedding and the risk of transmission will be greatest during the first two days of illness. Children usually shed the greatest amount of virus and therefore are likely to pose the greatest risk for transmission.
- K. On average, infected persons will transmit the infection to approximately two other people. Some estimates from past pandemics have been higher, with up to about three secondary infections per primary case.
- L. Outbreaks can be expected to occur simultaneously throughout much of the U.S., preventing shifts in human and material resources that usually occur in response to other disasters.
- M. Localities must be prepared to rely on their own resources to respond. The effect of influenza on individual communities will be relatively prolonged (weeks to months) in comparison to other types of disasters.
- N. Healthcare workers, public health workers, and other responders (i.e., law enforcement and firefighters) may be at higher risk of exposure and illness than the general population, further straining the pandemic response.
- O. Effective prevention and therapeutic measures, including vaccine and antiviral agents, may be delayed and, initially, in short supply or not available.
- P. Substantial public education regarding the need to target priority groups for vaccination and possibly for antiviral medication, and rationing of limited supplies is paramount to controlling public panic.
- Q. Adequate security measures must be in place while distributing limited supplies of vaccine or antiviral medication.

V. Concept of Operations

A. General

1. The national response to a pandemic will largely reflect the ability of states and local communities to respond. Because of the potential impact of a pandemic and the need to coordinate a number of partners to effectively respond, planning for such an event has been ongoing in the State of Colorado.
2. Planning and coordination between CDPHE, HHS, local health departments and nursing services, Tribal Nations and the Colorado healthcare system will ensure effective implementation of public health response activities and delivery of quality health care, despite the probable increased demand for services.
3. Response to a pandemic will trigger expansion of ongoing disease control activities and functions within the public health and medical communities. Enhancement of these services will require the activation of the CDPHE Departmental Operations Center (DOC) and establishment of linkages with other state and local agencies under the auspices of the Colorado State Emergency Operations Plan (SEOP).

B. Roles and Responsibilities

1. U.S. Department of Health & Human Services

HHS is responsible for nationwide coordination of a pandemic influenza response. Specific areas of responsibility include the following:

- a. Coordinate pandemic response activities with the international community, often interacting with the WHO.
- b. Provide guidelines for pandemic response planning activities for the state, local and tribal public health agencies.
- c. Recommend clinical and virological surveillance guidelines for the state, local and tribal health agencies.
- d. For new influenza strains: collect information about the epidemiology and clinical characteristics; provide recommendations on the diagnosis and treatment; develop reference strains and reagents for diagnosis of new influenza strains, and distribute reagents to state and local laboratories.

- e. Monitor the public health impact of the pandemic at the national level. Provide states with guidelines for monitoring and reporting and make recommendations for changes to response strategies.
- f. Recommend appropriate infection control guidelines.
- g. Recommend and evaluate community measures to prevent and control spread of the new influenza strain.
- h. Provide guidelines to the state, local and tribal levels for monitoring the effectiveness of public health measures to control spread of the new viral strain, and provide feedback to the states and the world.
- i. Implement international and interstate travel restrictions and recommend travel-related and community containment measures as necessary to prevent introduction and transmission of pandemic disease.
- j. Work with pharmaceutical companies on development, evaluation, licensing and production of effective vaccines. Assess vaccine effectiveness and safety in population-based studies.
- k. Purchase antivirals and vaccines for distribution to Strategic National Stockpile (SNS) sites around the country. Provide guidelines for distribution of antiviral medications, vaccines and other supplies from the SNS sites.
- l. Recommend strategies for implementing a vaccination program, and for monitoring and investigating related adverse events. Provide guidelines for determination of populations at highest risk, and guidelines for strategies for vaccination and antiviral use.
- m. Conduct studies to assess the effectiveness of antivirals against the new influenza strain, and to assess the safety of use of the antivirals, if not already done.
- n. Provide a streamlined payment mechanism through the Centers for Medicare and Medicaid and work with prescription drug plans and Medicare managed care plans. Communicate specific guidance and support the pandemic influenza response activities of hospitals, home health agencies, skilled nursing facilities and other healthcare providers, suppliers and practitioners that participate in Medicare and Medicaid.
- o. Communicate with and provide technical assistance through Health Resources and Services Administration to support pandemic response activities of state primary care associations, health centers, and other community-based providers.

Promote coordination with the National Hospital Bioterrorism Preparedness Program for surge capacity plans.

- p. Provide information to state and local public health agencies, and to the media, about what is happening globally in terms of development of new strain(s) of influenza, and about what could happen.
- q. Provide guidance for state and local public education and information campaigns.

2. Colorado Department of Public Health and Environment

CDPHE is responsible for coordination of the pandemic influenza response statewide and between regional jurisdictions. Specific areas of preparedness responsibility include the following:

- a. Integrate public health and healthcare pandemic influenza planning with other general planning activities. Identify and coordinate public and private sector partners needed for effective planning and response statewide. See Attachment 4 - Interagency Influenza Coordinating Committee.
- b. Maintain situational awareness by monitoring progression of the pandemic and assessing the public health/medical needs of Colorado. Provide data to federal, state, bordering state and local partners regarding current status in Colorado.
- c. Activate the CDPHE DOC to coordinate Emergency Support Function (ESF) #8 – Health and Medical activities in response to progressing phases of the pandemic, as appropriate. Coordinate with the SEOC/Multi-agency Coordination Center (MACC).
- d. Develop, with concurrence of the GEEERC, a collaborative prioritization and utilization system of vaccine, antiviral and other scarce resources. See Attachment 5a and 5b – Vaccine and Antiviral Prioritization Lists.
- e. Receive, secure, manage, apportion, transport and distribute influenza vaccine and antiviral medications through Colorado’s SNS program.
- f. Provide guidance, resources and technical assistance to local health departments, nursing services, Tribal Nations, healthcare entities and other agencies and organizations on pandemic influenza planning, response, and training and exercise efforts.
- g. Coordinate with the public and private healthcare system to ensure a cohesive healthcare response network statewide to handle inpatient and outpatient care.

- h. Coordinate epidemiologic activities statewide including data collection, surveillance, detection and management of suspect cases and contact tracing. See Attachment 6a - Influenza Surveillance: Pandemic Alert and Pandemic Phases and Attachment 6b – Surveillance for Pandemic Influenza Hospitalizations and Hospital Deaths.
- i. Provide guidance to healthcare providers, emergency medical services, health facilities, etc regarding influenza-specific protocols such as decontamination of surfaces and transport vehicles, personal protective equipment (PPE), disease transmission and infection control procedures.
- j. Coordinate laboratory response specimen testing and confirmation capacity statewide. Coordinate specimens sent to CDC Laboratory.
- k. Coordinate mass fatalities management and response including guidance for retrieval, storage and disposition of bodies, death certificates and next of kin notification.
- l. Provide guidance for, with the concurrence of the GEEERC, and coordinate implementation of non-pharmaceutical containment measures such as social distancing, quarantine, isolation, “snow days” and limiting or closure of public gatherings. See Attachment 7 – Community Containment Measures.
- m. Coordinate and support resource requests, as appropriate, for equipment, supplies and volunteers with the Colorado Division of Emergency Management (CDEM) and CDC.
- n. Coordinate and manage statewide all public health and medical volunteers needed to maintain effective pandemic response through the Colorado Public Health and Medical Volunteer System (CPHMVS).
- o. Coordinate timely, accurate and consistent messages to media, public and response partners about pandemic influenza planning, response and recovery. Activate a joint information system or center (JIS/JIC) for public health and medical messages, as needed.
- p. Identify spokesperson(s) responsible for addressing pandemic influenza-related public information and media requests.
- q. Maintain data management systems for tracking resources and information as well as surveillance activities.
- r. Document and track all state public health response expenses in real time.

3. Local Public Health

Local public health is responsible for coordination of the pandemic influenza response within their local and regional jurisdictions. Specific areas of responsibility include the following:

- a. Identify and coordinate public and private partners to assist with preparedness activities (planning, training, and exercises) as well as local or regional response to an outbreak.
- b. Activate public health DOCs or participate in county local EOCs to coordinate ESF #8 – Health and Medical activities in response to progressing phases of the pandemic, as appropriate. Coordinate with the CDPHE DOC and local/regional EOC within jurisdiction.
- c. Receive, secure, manage, transport and dispense (for vaccination or prophylaxis) influenza vaccine and antiviral medications to residents in their communities through the SNS program.
- d. Initiate, coordinate and support mass fatality response in jurisdiction. Coordinate with coroner’s office (if applicable).
- e. Provide data to CDPHE regarding current status of situation in jurisdiction via situation reports, including resource and volunteer requests.
- f. Identify, train, and equip staff and volunteers to activate a pandemic response upon notification within jurisdiction.
- g. Coordinate timely, accurate and consistent messages to media, public and response partners about pandemic influenza planning, and response and recovery activities in jurisdiction. Participate in a public health or jurisdictional JIS/JIC, as appropriate.
- h. Identify spokesperson(s) responsible for addressing pandemic influenza-related public information and media requests.
- i. Manage all resources and document/track all expenses in real time.

C. Divisional Annex Implementation Procedures:

Activities within this annex have already commenced per the current WHO phase. New or enhanced activities will begin upon confirmation from WHO and CDC that a new WHO Phase has been reached. See Attachment 1 - Phases of a Pandemic.

D. Inter-pandemic Period

1. Phases 1 and 2 of the Inter-pandemic Period

- **WHO Phase 1:** No new influenza virus subtypes have been detected in humans. An influenza virus subtype that has caused human infection may be present in animals. If present in animals, the risk of human infection is considered to be low.
- **WHO Phase 2:** No new influenza virus subtypes have been detected in humans. However, a circulating animal influenza virus subtype poses a substantial risk of human disease.
- **HHS Stage 0:** New domestic animal outbreak in this country

Overarching Colorado Public Health Goals for Phases 1 & 2:

For Phase 1: Standard influenza pandemic planning and surveillance at the state, regional and local levels.

For Phase 2: Standard influenza pandemic planning and surveillance. Monitor the risk of transmission to humans. Report pandemic-related information to public and partners, as appropriate.

a. Planning and Coordination, WHO Phases 1 & 2, HHS Stage 0

- 1) CDPHE Chief Medical Officer (CMO) is the lead decision-maker of the state's public health and healthcare-related response to pandemic influenza. In the absence of the CDPHE CMO, the DCEED Director will fulfill this role.
- 2) CDPHE Emergency Coordination Group (ECG) establishes policy and strategic direction in a pandemic response. The ECG membership includes:
 - i. Executive Director
 - ii. Chief Medical Officer
 - iii. Director of Environmental Programs
 - iv. Emergency Response Coordinator
 - v. Director of Communication
 - vi. Incident Manager (when appointed)

- 3) CDPHE Emergency Preparedness and Response Section (EPRS) staff oversees development and maintenance of the Pandemic Influenza annex and coordinates the pandemic response.
 - 4) Governor's Expert Emergency Epidemic Response Committee (GEEERC) provides expert health advice to the Governor related to a pandemic response. This committee will review all available information about the potential influenza pandemic, including the directives from CDC and HHS. Draft Executive Orders addressing many legal issues related to an influenza pandemic have been prepared and made available for activation in Colorado. See Attachment 3 - GEEERC Draft Executive Orders.
- b. Surveillance, Investigation, and Protective Public Health Measures, WHO Phases 1 & 2, HHS Stage 0**
- 1) CDPHE, Communicable Disease Program coordinates surveillance and epidemiological investigation activities, including seasonal influenza surveillance.
 - 2) There are four main components of statewide surveillance program:
 - i. Virologic surveillance: Sentinel providers and clinical laboratories submit specimens from patients with compatible clinical illness to the state laboratory for confirmatory testing and subtyping.
 - ii. Surveillance for influenza-like illness (ILI): Approximately 24 sentinel healthcare providers and/or clinics located in 17 counties report weekly the number of patient visits for ILI and the total number of patient visits each week. In addition, a large health maintenance organization in the Denver metropolitan area reports similar information electronically from its medical record database for approximately 350 primary care providers.
 - iii. Surveillance for influenza-associated hospitalizations: This is a reportable condition in Colorado (since October 2004), which is a population-based measure of the more severe morbidity, caused by influenza
 - iv. Surveillance for facility-based outbreaks of influenza: This primarily represents reporting of long-term care facility outbreaks, but may also include other types of facilities.
 - 3) Colorado Department of Agriculture (CDA), Colorado State University – Veterinary Diagnostic Laboratory (CSU-VDL) and Colorado Division of Wildlife (DOW) advise CDPHE of outbreaks of animal illness that can potentially infect humans, including avian influenza.

- 4) CDPHE, Laboratory Services Division tests human and animal specimens and has the capacity to test approximately 100 samples per day for the presence of influenza viruses, including most influenza A subtypes.
- 5) CDPHE, Laboratory Services Division provides confirmation of positive influenza tests via real-time polymerase chain reaction (RT-PCR).
- 6) CDPHE, Laboratory Services Division provides guidance on routine laboratory biosafety and safe specimen handling.

c. Vaccines and Antiviral Drugs, WHO Phases 1 & 2, HHS Stage 0

- 1) CDPHE, Immunization Program promotes pneumococcal and seasonal influenza vaccination coverage in traditional high-priority groups, particularly subgroups in which vaccination levels have been particularly low
- 2) CDPHE, SNS program plans for the coordination of receipt, storage, staging, security, apportionment, transport and distribution of vaccines, antiviral medication, and other medical equipment to local public health agencies throughout Colorado.
- 3) CDPHE utilizes COpharm, a database of pharmacies and pharmacy groups, to inventory, map locations, and determine accessibility of antivirals and other medications in Colorado. CDC supplies weekly information about influenza vaccine distribution in Colorado to the CDPHE Immunization Program.
- 4) CDPHE and the Attorney General's Office resolve liability and other legal issues linked to use of the pandemic vaccine for mass or targeted emergency vaccination campaigns.
- 5) CDPHE, per the Colorado Immunization Manual, develops guidelines for shipping and storage of vaccines to ensure vaccine viability. See Attachment 8 - Guidelines for Shipping and Storage of Vaccines.

d. Healthcare and Emergency Response, WHO Phases 1& 2, HHS Stage 0

- 1) CDPHE continues to assist healthcare entities in identifying priorities and response strategies, developing or enhancing pandemic influenza plans, surge capacity, and human and material resource management and guidance on linking those plans with local public health and emergency management.

- 2) CDPHE follows infection control guidelines for healthcare settings and triaging and respiratory protection guidelines set forth by HHS. Standard respiratory precautions are recommended for home and non-medical facilities. See Attachment 9 - Infection Control Guidelines and Respiratory Protection.
 - 3) CDPHE utilizes EMSsystem to provide real time communications between hospitals, the state health department, and emergency medical services agencies and dispatch. EMSsystem provides emergency department status tracking, patient tracking, mass casualty, event communication, incident support and hospital inpatient bed tracking.
- e. Communications and Outreach, WHO Phases 1 & 2, HHS Stage 0**
- 1) CDPHE, Office of Communications coordinates communication activities across the state with national activities and continues to participate in notification and information exchange with many federal, state, local, and private partners.
 - 2) CDPHE, Office of Communications identifies media spokespersons responsible for addressing pandemic-related issues
 - 3) CDPHE, Office of Communications develops educational materials for healthcare service providers, the media, and the public. Information covered includes possible isolation and quarantine, and shortages of vaccines and antiviral drugs.
 - 4) CDPHE, in partnership with the Rocky Mountain Poison and Drug Center, maintains the Colorado Health Emergency Line for the Public to receive a higher volume of calls before and during to emergencies.
 - 5) CDPHE, in partnership with the Colorado Department of Human Services, Division of Mental Health (CDHS – DMH), develops press releases that address fear and other psychological reactions to an influenza pandemic.
 - 6) Response activity for CDPHE is coordinated through the CDPHE DOC. It is equipped with advanced telecommunications and data networking capabilities, including teleconferencing and video feeds. The existing Novell GroupWise system is used as the information management system for an emergency. CDPHE utilizes WebEOC to coordinate information with CDEM.
 - 7) CDPHE uses a statewide 800 MHz Digital Trunked Radio System as a backup method of communication. An 800 MHz base station has recently been installed in the CDPHE DOC with 20 hand-held portable units available.

- 8) CDPHE uses Colorado Health Alert Network (COHAN), a secure web portal, for sharing and posting files and the Dialogics system to disseminate Health Alert Network (HAN) messages to over 14,000 public health stakeholders.

E. Pandemic Alert Period (Phases 3, 4, & 5)

1. Phase 3 of the Pandemic Alert Period

- **WHO Phase 3:** Human infection(s) with a new subtype, but no human-to human spread, or at most rare instances of spread to a close contact.
- **HHS Stage 1:** Suspected human outbreak overseas

Overarching Colorado Public Health Goals for Phase 3:

Ensure rapid detection, notification and response for the first travel-related case of novel influenza in Colorado. Educate and train health professionals and the public regarding pandemic preparedness activities, realistic expectations of public health and actions they can take as the pandemic progresses.

a. Planning and Coordination for Phase 3, HHS Stages 0 or 1

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) The Interagency Influenza Coordinating Committee will coordinate planning, outreach, information sharing, training and exercises for avian and pandemic influenza in Colorado. All 15 emergency support functions of the SEOP are represented plus members from medical, private business and other non-governmental entities.
- 3) CDPHE will develop a continuity of operations plan to ensure maintenance of essential public health services and suspension of non-essential services during pandemic response activities.
- 4) CDPHE will provide guidance to businesses, particularly private essential services, for the development, activation and implementation of pandemic response contingency plans and continuity of operations plans.
- 5) CDPHE Human Resources will develop policies for deploying CDPHE employees to assist inter- and intra-state volunteer requests during emergencies.

- 6) GEEERC will continue to review, revise and develop new draft executive orders to use during a pandemic or other public health emergency.

b. Surveillance, Investigation, & Protective Public Health Measures, WHO Phase 3, HHS Stages 0 or 1

- 1) CDPHE will continue response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE will work to ensure that all influenza surveillance activities are underway regardless of the time of year and that participating laboratories and sentinel providers are reporting data to CDPHE each week.
- 3) CDPHE will enhance surveillance as the likelihood of an influenza pandemic becomes more imminent. See Attachment 6a - Influenza Surveillance: Pandemic Alert and Pandemic Phases.
- 4) CDPHE will perform the following if notified that a novel influenza virus has been identified, but efficient viral transmission from person-to-person is not yet established:
 - i. Notify healthcare providers of pandemic alert status and need to screen patients presenting with fever and (severe) respiratory symptoms and travel history to the affected area and report all suspect cases to CDPHE or local health department
 - ii. Provide guidance regarding detection and management of suspect cases including: clinical symptoms, epidemiology, guidance for obtaining travel histories, reporting, specimen collection and infection control measures.
 - iii. Request autopsies for fatal cases of influenza, unexplained pneumonia or severe respiratory diseases occurring among travelers to affected areas. See Attachment 6b – Surveillance for Pandemic Influenza Hospitalizations and Hospital Deaths.
- 5) Cases that are more highly suspect will be hospitalized for clinical evaluation and management, including specimen collection for testing at the state laboratory. Patients will be isolated and infection control precautions implemented during evaluation and/or treatment. Management of contacts will depend on likelihood of infection with a novel influenza strain, potential for human-to-human transmission and feasibility of contact tracing and monitoring See Attachment 6a – Influenza Surveillance: Pandemic Alert and Pandemic Phases.

- 6) CDPHE will coordinate with Denver Public Health, Denver International Airport (DIA) Operations, Tri-County Health Department, Centennial Airport and the CDC Seattle Quarantine Station (there is no quarantine station at DIA) in the event that a passenger arriving directly or indirectly from an area affected by the pandemic alert presents with ILI or fever/respiratory illness.
- 7) CDPHE will institute recommendations from CDC for any additional surveillance activities that should be undertaken, given the specific circumstances.
- 8) CDPHE will continue to work with CDA, CSU-VDL and CDOW to enhance surveillance for avian influenza and link data from veterinary surveillance of influenza virus to human surveillance data.

c. Vaccines and Antiviral Drugs, WHO Phase 3, HHS Stages 0 or 1

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE, with concurrence of the GEEERC, will develop guidance for vaccine and anti-viral prioritization rationale in Colorado based on exposure to risk and reduction of morbidity and mortality. See Attachments 5a and 5b: Vaccine and Antiviral Prioritization.
- 3) CDPHE, SNS Program will continue to regularly exercise deployment of SNS stockpiles to ensure that vaccine and antiviral medications could be deployed rapidly to any affected area in the state, and that appropriate staff is familiar with guidance for deployment and use.
- 4) CDPHE, Immunization Program will reassess inventories of seasonal vaccines and other material resources needed to carry out mass vaccinations.
- 5) CDPHE, Immunization Program will review strategies for the use of seasonal vaccines to prevent dual infection with human and animal viruses, and promote their use in defined risk groups.
- 6) CDPHE, Immunization Program will develop contingency plans for procuring vaccine and antivirals once available.
- 7) CDPHE will use CDC's Countermeasure and Response Administration Immunization software to track those who have received vaccine. Adverse reactions to vaccine will also be tracked.

- 8) CDPHE, Immunization Program will review evidence for effectiveness and safety of antivirals and if necessary reassess and review strategies, guidelines and priorities for use with local and Tribal Nations.
- 9) Prophylaxis may or may not be a viable strategy depending on availability of supplies and on resistance patterns. Currently, neither amantadine nor rimantadine should be used for the treatment or chemoprophylaxis of influenza A in the United States until susceptibility to these antiviral medications has been re-established among circulating influenza A viruses. Oseltamivir or zanamivir can be prescribed if antiviral treatment of influenza is indicated. Oseltamivir is approved for treatment of persons aged ≥ 1 year, and zanamivir is approved for treatment of persons aged ≥ 7 years. Oseltamivir and zanamivir can be used for chemoprophylaxis of influenza; oseltamivir is licensed for use in persons aged ≥ 1 year, and zanamivir is licensed for use in persons aged ≥ 5 years¹.
- 10) Attorney General's Office will review worker compensation laws as they apply to healthcare workers and other essential workers who have taken antiviral medication for prophylaxis.
- 11) CDPHE will continue to expand participation in COpharm, and test its ability to inventory supplies of antiviral medication statewide.

d. Healthcare and Emergency Response, WHO Phase 3, HHS Stages 0 or 1

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE will continue to establish the CPHMVS to manage medical and public health volunteers for surge capacity in a pandemic.
- 3) CDPHE will continue to provide guidance on infection control procedures for ill patients and implementation that is consistent with existing CDC and WHO guidance.
- 4) CDPHE will provide support to regional/local Healthcare Coalitions made up of public and private healthcare, emergency medical services, public health and emergency management throughout Colorado. These coalitions will provide the network for inpatient and outpatient care, transport, triage and prophylaxis/vaccinations to well persons within their jurisdiction.

¹Centers for Disease Control and Prevention. Prevention and Control of Influenza. Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2006; Vol 55 [No. RR10]: 1-42.

- 5) CDPHE will continue to assist medical and emergency response systems in assessing their ability to meet expected increased needs during a pandemic and enhance surge capacity if those systems are inadequate.
- 6) CDPHE will continue to enhance healthcare provider awareness of the potential for a pandemic and the importance of diagnosis and viral identification for persons with influenza-like illness, especially from potentially affected areas and recognize the need for immediate reporting to state authorities.
- 7) CDPHE will continue to engage medical societies and private physicians into pandemic planning statewide.
- 8) GEEERC Mortuary Services Subcommittee will continue to work on mass fatality planning including: retrieval, storage and disposition of bodies, death certificates, next of kin notification, etc.
- 9) CDPHE will seek memorandums of understanding (MOUs) with emergency management, volunteer organizations, food distributions centers, etc to provide necessary supplies and food to those persons affected by community containment measures that CDPHE may potentially implement.

e. Communications and Outreach, WHO Phase 3, HHS Stages 0 or 1

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE, Office of Communications will update all local health departments, partners, stakeholders, government officials and the media on the status of the pandemic and response activities.
- 3) CDPHE, Office of Communications will coordinate with partners to ensure that consistent, timely and accurate messages are delivered.
- 4) CDPHE, Office of Communications will continue to identify target groups for delivery of key messages as well as appropriate materials, formats and language options from the materials already assembled, and develop others as the need is identified.
- 5) CDPHE, Office of Communications will update risk and prevention information materials (risk of infection, safe food, animal handling) based on CDC and WHO recommendations for media, general public, health workers and government officials.

- 6) CDPHE, EPRS will exercise communications systems and facilities to ensure that they are functioning optimally and contact lists are up to date.
- 7) CDPHE, in partnership with the Rocky Mountain Poison and Drug Center, will enhance the Colorado Health Emergency Line for the Public to allow for receipt of a 1,000 calls per hour during an emergency.

2. Phase 4 of the Pandemic Alert Period

- **WHO Phase 4:** Small cluster(s) with limited human-to-human transmission but spread is highly localized, suggesting that the virus is not well adapted to humans.
- **HHS Stage 2:** Confirmed human outbreak overseas

Overarching Public Health Goals for Phase 4:

Continue to ensure rapid detection, notification and response for the first travel-related case of novel influenza in Colorado. Continue to educate and train health professionals and the public regarding pandemic preparedness activities, realistic expectations of public health and actions they can take if the pandemic progresses.

a. Planning and Coordination, WHO Phase 4, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE may be activated at Level III (low level, monitoring), depending upon the details of the situation. This does not automatically require activation of the CDPHE DOC itself.
- 3) CDPHE ECG will appoint an Incident Manager (IM) and IM will assign an Operations Section Chief, Logistics Officer, Public Information Officer, Finance Officer and Liaison Officer, at a minimum.
- 4) CDPHE ECG will re-ensure highest level of political commitment for ongoing and potential interventions or countermeasures.
- 5) GEEERC will reassess the potential need for new draft executive orders to be used if the pandemic progresses and create new ones that are needed.

- 6) CDPHE will review procedures to respond to requests from affected areas for assistance and modify as necessary. Changes will be made available to local public health.
- 7) CDPHE ECG and Command Staff may initiate regular conference calls with local and neighboring state partners.
- 8) CDPHE will continue to coordinate response activities with national, state and local levels.

b. Surveillance, Investigation, and Protective Public Health Measures, WHO Phase 4, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE may activate an Epidemiology and Surveillance Branch and/or a Laboratory Services Branch under incident command, if needed. Otherwise the Communicable Disease Program and Laboratory Services Division will continue activities.
- 3) CDPHE, Communicable Disease Program will work to ensure that influenza surveillance activities are underway regardless of the time of year and that participating laboratories and sentinel providers are reporting data to CDPHE each week.
- 4) CDPHE, Communicable Disease Program will institute recommendations from CDC for any additional surveillance activities that should be undertaken, given the specific circumstances.
- 5) CDPHE, Communicable Disease Program will provide public and private healthcare providers with updated case definitions, protocols and algorithms to assist with case finding, management, infection control, surveillance and reporting.
- 6) CDPHE, Laboratory Services Division will subtype all influenza A viruses identified in clinical specimens and report any influenza A viruses that cannot be subtyped to CDC immediately.
- 7) CDPHE, Laboratory Services Division will ensure availability of diagnostic reagents for the novel influenza strain at key state laboratories as soon as possible.

- 8) CDPHE, Laboratory Services Division will provide reference laboratory support for other laboratories in the state to test suspected clinical specimens for influenza and identify novel strain.
- 9) CDPHE, CDA and DOW will recommend measures to reduce human contact with potentially infected animals.

c. Vaccines and Antiviral Drugs, WHO Phase 4, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE may activate an Immunization Branch and/or an SNS Branch under incident command, if needed. Otherwise, the Immunization Program and the SNS Program will continue activities.
- 3) CDPHE, Immunization Program will continue promoting vaccination with seasonal influenza vaccine to limit risk of dual infection in those most likely to be exposed to the animal virus (i.e., travelers).
- 4) CDPHE, Immunization Program will consider results and lessons learned from use in countries with cases and modify strategies for use of vaccines and antivirals, if applicable.
- 5) CDPHE, SNS Program and LPHAs will review and exercise SNS plans to identify gaps.
- 6) CDPHE, SNS Program and LPHAs will place hospitals, SNS-related clinics and warehouses on standby to be prepared to receive vaccines, antivirals and medical supplies, if available.

d. Healthcare and Emergency Response, WHO Phase 4, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE may activate a Medical Branch under incident command, if needed.
- 3) CDPHE will assess availability of personnel, supplies, and materials for infection control and clinical care of infected patients.

- 4) CDPHE will assist with developing contingency plans for response to an overload of health facilities with influenza patients; and identify alternative strategies for case isolation and management.
- 5) GEEERC Mortuary Services Subcommittee will continue to work on mass fatality planning including: retrieval, storage and disposition of bodies, death certificates, next of kin notification, etc.
- 6) CDPHE will explore ways to provide drugs and medical care free-of-charge (or covered by insurance) to the patient and healthcare delivery system, in order to encourage prompt reporting of new cases.
- 7) CDPHE will continue to seek MOUs with emergency management, volunteer organizations, food distributions centers, etc to provide necessary supplies and food to those persons affected by community containment measures that CDPHE may potentially implement.

e. Communications and Outreach, WHO Phase 4, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE may coordinate public information efforts under incident command, if needed.
- 3) CDPHE Public Information Officers (PIO) will find or prepare materials for distribution to the public immediately and ongoing as needed.
- 4) CDPHE PIOs will notify local and tribal public health authorities, healthcare providers, other partner organizations/ stakeholders, and the public of change in pandemic alert status and known disease characteristics.
- 5) CDPHE PIOs will activate a JIS/JIC for public health messages to ensure that consistent, timely and accurate messages are delivered. Will participate in a state-level JIS/JIC if activated by CDEM.
- 6) CDPHE PIOs will remind institutions and organizations to implement continuity plans and measures to limit infection transmission in the workplace. Reassure that efforts will be made to limit adverse impact on movement of goods, services and people.

- 7) CDPHE PIOs, in conjunction with partner organizations, will review and update information materials for policy-makers, news media, healthcare workers and partners.
- 8) CDPHE PIOs will provide education to travelers and issue travel advisories, precautions, or restrictions, if warranted by disease epidemiology.
- 9) CDPHE PIOs will explain rationale and update public on all aspects of response and likely next steps, including possible containment efforts.
- 10) CDPHE PIOs, in conjunction with the CDHS - DMH will address the issue of stigmatization of individuals/families/communities affected by human infection or those stigmatized by association with potentially infected animals.

3. Phase 5 of the Pandemic Alert Period

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

Overarching Public Health Goals for Phase 5: Maximize efforts to detect first travel-related case of novel influenza virus. Exercise preparedness plan to ensure readiness. Emphasize education about measures to contain or delay spread, to possibly avert a pandemic, and to possibly gain time to implement pandemic response measures.

a. Planning and Coordination, WHO Phase 5, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous Phases.
- 2) CDPHE DOC may be activated at Level II.
- 3) CDPHE ECG will notify government officials and legislators of pandemic alert status and reconfirm commitments of support.
- 4) Incident Manager and Command Staff will assign other positions and branches, as needed, within NIMS/ICS structure.

- 5) CDPHE ECG and Command Staff will initiate, if not already ongoing, state agencies, bordering states, state/local/tribal public health and partners to coordinate and provide guidance on response actions and messaging.
- 6) CDPHE Command Staff will coordinate with CDEM, to implement the Pandemic Influenza annex of the SEOP.
- 7) CDPHE ECG will work with the Governor's Office to prepare GEEERC-recommended Executive Orders that will support pandemic response activities.

b. Surveillance, Investigation, and Protective Public Health Measures, WHO Phase 5, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous Phases.
- 2) CDPHE, Epidemiology and Surveillance Branch will provide public and private healthcare providers directly or through local health departments with updated case definition, protocols, and algorithms for case finding, management, infection control and surveillance.
- 3) CDPHE, Epidemiology and Surveillance Branch will review data from the affected area regarding effectiveness of treatment protocols and infection control measures. If necessary, will revise and distribute guidelines to appropriate healthcare entities.
- 4) CDPHE, Epidemiology and Surveillance Branch will continue to enhance surveillance efforts through:
 - i. Increased frequency and comprehensiveness of HAN alerts and other electronic communications to ensure that Colorado providers and healthcare facilities are actively screening all patients with fever and respiratory illness for risk factors associated with the pandemic strain.
 - ii. Testing of suspect cases to the extent possible based on availability of PCR testing and an accurate rapid diagnostic test.
 - iii. Enhanced efforts, based on CDC guidance, to identify incoming ill airline passengers at DIA.
 - iv. Investigate influenza outbreaks and increases in ILIs; taking into account the status of seasonal influenza activity.

- 3) CDPHE, Laboratory Services Branch will implement surge capacity plans for testing substantially more specimens than usual and encourage regional labs to do the same.
- 4) CDPHE, Laboratory Services Branch will follow CDC specimen triaging guidelines for testing and choosing which isolates to send to CDC.
- 5) CDPHE, Laboratory Services Branch will ensure compliance with standards for bio-safety in laboratories, and for safe specimen handling and shipment.

c. Vaccines and Antiviral Drugs, WHO Phase 5, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE, Immunization Branch will consider results and lessons learned from use in countries with cases and modify antiviral and vaccination strategy and priority lists, if applicable.
- 3) CDPHE, Immunization Branch will continue to promote vaccination with seasonal influenza vaccine to limit risk of dual infection in people most likely to be exposed to the animal virus, and potentially decrease concurrent circulation of human strains.
- 4) CDPHE, Immunization Branch will assess effectiveness and feasibility of antiviral prophylaxis for the purpose of attempting to contain outbreaks.
- 5) CDPHE, SNS Branch will confirm plans for vaccine/antiviral distribution and accelerate preparations for point of dispensing activation, if vaccine/antivirals become available.

d. Healthcare and Emergency Response, WHO Phase 5, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE and GEEERC will work with the Governor's Office to review and prepare final guidance for implementation of community containment measures. Guidance will be modified, as appropriate.

- 3) CDPHE, Medical Branch will use situational awareness and lessons learned from previously affected areas to provide guidance for changes in healthcare delivery and community support.
- 4) CDPHE, Medical Branch will continue to support Healthcare Coalitions and provide assistance, as needed, with finalizing triage and transport mechanisms.
- 5) CDPHE, Medical Branch will work with CDEM to coordinate and place local emergency managers on stand-by to activate surge trailers and locate medical equipment and supplies for surge capacity.
- 6) CDPHE, Medical Branch will coordinate available bed capacity through EMSsystem for patients with new influenza subtype infection requiring isolation and clinical care.
- 7) CDPHE, Medical Branch, in conjunction with the Local Public Health Agencies or other appropriate local/regional designee, will confirm chains of command and procedures for inpatient and outpatient care, triage and transport.
- 8) CDPHE Volunteer Coordinator will place volunteers within the CPHMVS on stand-by for surge-capacity at healthcare facilities and points of dispensing.
- 9) CDPHE, Mortuary Services Branch will be put on stand-by for mass fatality coordination.
- 10) CDPHE will finalize MOUs with emergency management, volunteer organizations, food distributions centers, etc. to provide necessary supplies and food to those persons affected by community containment measures that CDPHE may potentially implement.

e. Communications and Outreach, WHO Phase 5, HHS Stage 2

- 1) CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- 2) CDPHE PIOs will notify the public, partners and media that a high likelihood of a pandemic exists. Explain response actions and potential containment strategies. Prepare audiences for imminent onset of pandemic activity.
- 3) CDPHE PIOs will review and update information materials for news media, public, health workers, partners and policy-makers.

- 4) CDPHE PIOs will prepare the public for the possibility of a pandemic while providing information about containment efforts. Reassure that no domestic cases have been seen. Review actions that reduce likelihood of influenza exposure and limit influenza transmission.
- 5) CDPHE PIOs will remind institutions and organizations to implement continuity plans and measures to limit infection transmission in the workplace. Reassure that efforts will be made to limit adverse impact on movement of goods, services and people.
- 6) CDPHE PIOs will activate a JIS/JIC for public health messages to ensure that consistent, timely and accurate messages are delivered. Will participate in a state-level JIS/JIC if activated by CDEM.
- 7) CDPHE PIOs, in conjunction with CDHS-DMH, will continue to address the issue of stigmatization of individuals/families/ communities affected by human infection or those stigmatized by association with potentially infected animals.

F. Pandemic Period

1. Phase 6 of the Pandemic Period

- **WHO Phase 6:** Pandemic increased and sustained transmission in general population.
- **HHS Stage 3:** Widespread human outbreaks in multiple locations overseas
- **HHS Stage 4:** First human case in North America
- **HHS Stage 5:** Spread throughout the United States

Overarching Public Health Goal for Phase 6, Stages 3, 4 and 5:
Minimize the impact of the pandemic.

a. WHO Phase 6, HHS Stage 3

Continue Phase 5 activities.

b. WHO Phase 6, HHS Stages 4 and 5

1) Planning and Coordination, WHO Phase 6, HHS Stages 4 and 5

- i. CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases
- ii. CDPHE will send a HAN message regarding the status of the pandemic alert, the potential need for additional resources, interventions and the use of emergency power to all relevant government departments at state, county and municipal level. All emergency groups must be ready to escalate their response at a moment's notice.
- iii. CDPHE ECG will re-ensure highest levels of political commitment for ongoing and potential intervention/countermeasures.
- iv. CDPHE ECG, based on information learned by affected areas, will finalize adjustment of official guidelines and recommendations.
- v. IM will convene the ECG and Command Staff regularly and meet with partners and stakeholders to review and be prepared to fully activate the CDPHE Internal Emergency Operations Plan.
- vi. CDPHE DOC will be fully activated at Level I and will coordinate with CDEM for full activation of the MACC and Pandemic Influenza annex of the SEOP.
- vii. CDPHE ECG will work with Governor's Office and CDEM to prepare GEEERC-recommended Executive Order for potential state declaration of emergency and any additional Executive Orders that will support pandemic response activities.

2) Surveillance, Investigation, and Protective Public Health Measures, WHO Phase 6, HHS Stages 4 and 5

- i. CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- ii. CDPHE, Epidemiology and Surveillance Branch will track the progression of the influenza pandemic in the state. Initially, case-based surveillance will be conducted in hospitals along with limited contact tracing and

monitoring. However, once evidence of ongoing person-to-person transmission in the state is confirmed, this activity will cease.

- iii. CDPHE, Epidemiology and Surveillance Branch will conduct surveillance for morbidity and mortality in Colorado and identify population groups at increased risk for more severe disease, complications or death. After the initial start of the pandemic, individual cases of influenza-associated hospitalization will shift to reporting of aggregate numbers of influenza-associated hospitalizations and deaths. See Attachment 6b: Surveillance for Pandemic Influenza Hospitalizations and Hospital Deaths.
- iv. CDPHE, Epidemiology and Surveillance Branch will monitor for emergence of the second pandemic wave and/or shifts in the pandemic strain.
- v. CDPHE, Epidemiology and Surveillance Branch will prepare regular reports of numbers and rates of new and cumulative influenza-related hospitalizations and deaths.
- vi. CDPHE, Epidemiology and Surveillance Branch will continue to evaluate the effectiveness of the measures to contain the new influenza virus elsewhere and consider any new guidance from CDC/WHO.
- vii. CDPHE, Laboratory Services Division will continue testing many suspected influenza specimens as possible via RT-PCR. Once confirmed that the pandemic has reached Colorado, RT-PCR testing will be prioritized based on recommendations from CDC and availability of laboratory resources.

3) Vaccines and Antiviral Drugs, WHO Phase 6, HHS Stages 4 and 5

- i. CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- ii. CDPHE, Immunization Program will continue ongoing assessment of the impact of vaccination and antiviral programs used elsewhere (safety, efficacy and antiviral resistance).
- iii. CDPHE ECG and GEEERC will review and revise, as needed, priority groups and strategies for vaccine and antiviral distribution.

- iv. CDPHE, SNS Branch and LPHAs will fully implement SNS plan for distribution and dispensing as soon as vaccine is available.
- v. CDPHE will recommend usage of antivirals, if effective and available, for either early treatment of cases or antiviral prophylaxis for close contacts of cases based on risk assessment and severity of illness.

4) Healthcare and Emergency Response, WHO Phase 6, HHS Stages 4 and 5

- i. CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- ii. CDPHE Outpatient Clinic Unit will activate and reconfirm arrangements with the Colorado Community Health Network and Colorado Rural Health Centers to provide surge capacity as outpatient treatment centers.
- iii. CDPHE and GEEERC will work with the Governor's Office to review and issue final guidance for implementation of community containment measures. Guidance will be modified, as appropriate.
- iv. CDPHE will continue to seek ways to provide support to those persons affected by social distancing or quarantine measures in response to a pandemic.
- v. CDPHE will work with volunteer organizations, food distribution centers, etc to ensure that people restricted by isolation and quarantine procedures, as well as people who are normally homebound, are being provided with necessary supplies and food.
- vi. CDPHE Volunteer Coordinator, in conjunction with CDEM, LPHAs and local emergency managers will activate the CPHMVS and coordinate/ manage volunteers to provide public health and medical surge capacity statewide.
- vii. CDPHE, Mortuary Services Branch will reconfirm and activate planning arrangements for mass fatality management procedures.
- viii. CDPHE, in conjunction with CDEM, will place organizations with MOUs on stand-by for distribution of emergency supplies and food to persons affected by CDPHE-recommended community containment measures.

5) Communications and Outreach, WHO Phase 6, HHS Stages 4 and 5

- i. CDPHE will continue all response activities, assess preparedness status and identify actions needed to fill gaps for goals listed under previous phases.
- ii. CDPHE PIOs will hold regularly schedule media briefings regarding response activities, status of the pandemic, potential interventions and actions the public can take to protect themselves.
- iii. CDPHE PIOs will review key messages and emphasize need to comply with public health measures despite their possible limitations.
- iv. CDPHE PIOs will reinforce education on how to provide home healthcare to sick family members and where to receive outpatient care for influenza-related symptoms.
- v. CDPHE PIOs will inform public about interventions that may be modified or implemented during a pandemic, e.g., prioritization of healthcare services and supplies, travel restrictions, gathering restrictions, shortages of basic commodities, etc.

c. WHO Phase 6, HHS Stage 6

- **HHS Stage 6:** Recovery and preparation for subsequent waves

Overarching Public Health Goals for Phase 6, Stage 6:
Recover and prepare to contain the next wave.

1) Planning and Coordination, WHO Phase 6, HHS Stage 6

CDPHE ECG and Command Staff will:

- i. Assess coordination during period of pandemic disease and revise response plans, as needed.
- ii. Implement after-action review of pandemic response activities.
- iii. Assess resources and authorities that may be needed for subsequent pandemic waves.
- iv. Declare end of emergency command and control operations, states of emergency, etc.

- v. Support rebuilding of essential services, including rotating rest and recuperation for staff.
- vi. Review Basic Plan and Pandemic Influenza Annex and its attachments based on experiences for modification and revisions.
- vii. Address psychological impacts on workforce and the public.
- viii. Acknowledge contributions of all stakeholders (including the public) and essential staff towards fighting the disease.

2) Surveillance, Investigation, and Protective Public Health Measures, WHO Phase 6, HHS Stage 6

CDPHE, Communicable Disease Program will:

- i. Estimate overall pandemic health impacts including mortality and severe morbidity.
- ii. Continue enhanced domestic surveillance to detect further pandemic waves.
- iii. Evaluate resource needs for subsequent waves if they occur.
- iv. Assess the effectiveness of surveillance and control activities used up to this point and decide what measures to employ for subsequent pandemic waves.
- v. Report current status to the CDC and HHS, as appropriate.
- vi. Adjust case definitions, protocols and algorithms.
- vii. Review lessons learned, and share with CDC and HHS.

3) Vaccines and Antiviral Drugs, WHO Phase 6, HHS Stage 6

CDPHE, Immunization Program will:

- i. Assess vaccine coverage, effectiveness of targeting priority groups, and efficiency of distribution and administration; determine number of persons who remain unprotected.
- ii. Review effectiveness of treatments and countermeasures; update guidelines protocols and algorithms.
- iii. Evaluate antiviral efficacy, safety and resistance data; review/update guidelines as necessary; assess supply for subsequent waves(s).
- iv. Assess vaccine coverage to date in Colorado
- v. Determine vaccine efficacy and safety and review/update guidelines as necessary.
- vi. Begin vaccination of persons not yet immunized in line with vaccine prioritization plans.

CDPHE, SNS Program, in conjunction with LPHAs, will:

- vii. Continue with any vaccination or antiviral distribution, as needed, in line with plans, prioritization and availability.
- viii. Conduct after action planning to identify gaps, bottlenecks and areas for improvement.
- ix. Revise SNS distribution plans.

4) Healthcare and Emergency Response, WHO Phase 6, HHS Stage 6

- i. CDPHE will assess effectiveness of healthcare and “service delivery” during prior pandemic phases and revise plans, as needed.
- ii. CDPHE will ensure that overworked staff has opportunities for rest and recuperation.
- iii. CDPHE will work with Colorado State Employee Assistance Program to ensure mental health services and counseling is available to CDPHE staff.
- iv. CDPHE will restock internal stores of medications and supplies; service and renew essential equipment.

5) Communications and Outreach, WHO Phase 6, HHS Stage 6

CDPHE, Office of Communications will:

- i. Announce the end of the current pandemic wave.
- ii. Assess effectiveness of communications during prior pandemic phases and revise plans, as needed.
- iii. Communicate with healthcare providers, the media, and the public about the likely next pandemic wave.
- iv. Publicly address community emotions after the pandemic.
- v. Ensure awareness of uncertainties associated with subsequent waves.

G. Administration and Finance

As soon as CDPHE activates response activities, fiscal staff will commence the following according to CDEM and Federal Emergency Management Agency (FEMA):

- 1) Track CDPHE personnel time and funding sources in Kronos.

- 2) Track costs of all pandemic-related supplies, material, equipment (purchased or rented), space rented, etc and their funding sources using approved FEMA Forms.
- 3) Assess need for additional funding of costs associated with pandemic response.

VI. Annex Maintenance

CDPHE's Internal Pandemic Influenza Program Managers group will review this annex and the EPRS Planning Unit will make revisions. The annex will be updated at least annually or after exercises, an emergency or relevant HHS/WHO guidance.

Trainings on this annex are available upon request for any agency or organization. At a minimum, refresher training or an exercise will be conducted for CDPHE staff annually.