



Colorado Department  
of Public Health  
and Environment

# PANDEMIC INFLUENZA

## DEVELOPING CONTINUITY OF OPERATIONS PLANS

### Guidelines for Residential Health Care Facilities

**Prepared by the Health Facilities and  
Emergency Medical Services Division**

**August 2006**

*This document is based on current knowledge. Given some uncertainty about the characteristics of a new pandemic virus, preparedness planning should allow for flexibility to accommodate new information as it becomes available.*

This page intentionally left blank.

**PANDEMIC FLU:  
DEVELOPING CONTINUITY OF OPERATIONS PLANS**

**Guidelines for Residential Health Care Facilities**

I. Introduction	4
II. General Assumptions About a Flu Pandemic	5
III. Planning: Getting Started	7
A. Understanding the Big Picture – Roles of Public/Private Sector	8
B. Elements of Conducting Planning	11
IV. Core Plan Elements	15
A. Emergency Staffing Plan	16
B. Mitigation	19
C. When Pan Flu is Reported in Your Community: Initial Control Measures	20
V. Policy Recommendations	22
A. Plan Activation	23
B. Communications	25
C. Vaccinations and Antivirals	28
D. Infection Control	31
E. Reducing the Need for Surge Capacity	35
F. Caring for the Deceased during a Pandemic	36
G. Reducing Staff Stress and Burnout	37
H. Temporary Emergency Closure	38
I. Recovery: Returning to Routine Operations	39
 <b>Appendices</b>	
A. Colorado Local Departments of Health and County Nursing Services	40
B. Colorado Local Offices of Emergency Management and Sheriffs' Offices	43
C. Red Cross Pandemic Influenza Response Planning Information	57
D. Cold vs. Flu Symptoms	58

# SECTION I

## INTRODUCTION

*In terms of its scope, the impact of a severe pandemic may be more comparable to that of war or a widespread economic crisis than a hurricane, earthquake, or act of terrorism.....The distributed nature of a pandemic, as well as the sheer burden of disease across the Nation over a period of months or longer, means that the Federal Government's support to any particular State, Tribal Nation, or community will be limited in comparison to the aid it mobilizes for disaster such as earthquakes or hurricanes, which strike a more confined geographic area over a shorter period of time.* Homeland Security Council, National Strategy for Pandemic Influenza: Implementation Plan, May 2006.

This document is designed to assist residential health facilities – assisted living residences, inpatient hospice, nursing homes, and residential facilities for the developmentally disabled – in developing a comprehensive plan to respond to an influenza pandemic.

Comprehensive planning for an unpredictable event is often difficult to justify and sustain given limited resources and more urgent problems. However, planning for an influenza pandemic makes sense for several reasons:

- ✓ Pandemic flu has consistently recurred throughout history at intervals of 10 to 50 years. The last pandemic flu outbreak was in 1968 making a recurrence highly likely within the next several years.
- ✓ An avian (bird) flu virus with the potential for creating a pandemic has emerged. (Scientists believe that viruses from birds played a role in each of the three pandemics that swept the globe in the last 100 years.)
- ✓ Although it is impossible to predict all of the impacts of an influenza pandemic, it is certain that it will create a burden on the economy as a whole. Such an event is expected to create gaps in essential services – such as the availability of water, food, electricity, phone service, medical supplies and care, banking, gasoline and transportation.
- ✓ Federal and state governments are currently developing plans and infrastructure so that communities can function during a pandemic. However, it is anticipated that government agencies will only be able to play a limited role during the pandemic itself since they too will be operating at limited capacity and will be responsible for assisting all sectors of the economy. This means that the primary entity for planning and executing the facility plan during a pandemic is you.

This document covers the facility's role in providing a comprehensive public health response before and during a pandemic influenza event. It requires considerable action on the part of facilities to determine certain "how to's" that are unique to the facility based on its resident population, staffing, and equipment, such as how to: access updated information on pandemic flu care, address staff shortages, and triage patients to determine if transfer to a higher level of care is appropriate and feasible. To be effective, the facility's plan must be part of a coordinated community response. Community partners can range from state/local health departments to pharmacists to rotary clubs.

## SECTION II

### GENERAL ASSUMPTIONS ABOUT A FLU PANDEMIC

*Given the constantly changing nature of influenza viruses, the occurrence of pandemics defies precise predictions concerning timing, causative strain and severity of the disease and its international impact. Conditions favoring the emergence of a pandemic virus are, however, well known, and are increasingly being met.* – World Health Organization, Strengthening Pandemic Influenza Preparedness and Response. Report by the Secretariat. April 2005

**Historical Background.** Influenza pandemics have typically occurred every 10-50 years throughout recorded history. There have been three pandemics during the 20<sup>th</sup> century:

- 1918, which caused 40 million deaths worldwide
- 1957, which caused 1-2 million deaths worldwide
- 1968, which caused 700,000 deaths worldwide<sup>1</sup>

**Pandemic Flu Viruses.** Influenza viruses that affect humans are divided into two groups: A and B. Only influenza A viruses have pandemic potential. This is because their particular method of evolution is such that human populations have no immunity to the novel (i.e., new) subtype virus and no existing vaccines can provide adequate protection. The avian flu virus - H5N1 - is the subtype currently causing worldwide concern.

Avian influenza normally only infects birds and in some instances, pigs. However, close proximity between infected animals and humans is one of the greatest risks of pathogens mutating and jumping between species.

**Conditions for a Pandemic.** Three conditions must be met before a pandemic begins:

- 1) a new influenza A subtype must emerge that has not previously circulated in humans (and therefore there is no pre-existing immunity),
- 2) this new subtype must be able to cause disease in humans, and
- 3) the virus must be easily transmissible from human to human. This last condition has yet to occur, but there is evidence that the H5N1 virus is evolving in this direction.

**Pandemic Phases.** The World Health Organization (WHO), one of the lead entities in shaping the international public health response to a pandemic flu outbreak, has identified six phases that cover a pandemic cycle, as outlined below.

---

<sup>1</sup> There could be several reasons why there was a decrease in deaths over the course of the 20<sup>th</sup> century. Some reasons have been attributed to the virulence of the virus as well as the availability of improved medical care. Typically, influenza has the highest death toll in elderly adults. The 1918 pandemic was an anomaly in that the mortality rates were also high for healthy young adults. This may have resulted from an exaggerated immune response in this population that led to inflammatory molecules clogging their airways and subsequent death. (Individuals with weaker immune systems, such as the young and the elderly would not have experienced this exaggerated response.) It has also been suggested that the apparently healthy young adults who died in 1918 may have in fact been infected with tuberculosis, explaining their unusually high mortality rates. Decreased mortality in subsequent pandemics has also been attributed to the peak occurring when children were on holiday from school and so did not infect one another and bring it home to their families.

**Period: Inter-Pandemics**

<b>Phase 1:</b> <ul style="list-style-type: none"><li>▪ No new influenza subtype detected in humans</li><li>▪ Risk of human infection considered low</li></ul>
<b>Phase 2:</b> <ul style="list-style-type: none"><li>▪ No new influenza subtype detected in humans</li><li>▪ New animal influenza subtype circulating, and risk of human infection substantial</li></ul>

**Period: Pandemic Alert**

<b>Phase 3:</b> <ul style="list-style-type: none"><li>▪ Human infection with new subtype has occurred</li><li>▪ No instances of human to human spread, or rare instances of spread to a close contact</li></ul>
<b>Phase 4:</b> <ul style="list-style-type: none"><li>▪ Small infection cluster(s), meaning less than 25 people, lasting less than 2 wks</li><li>▪ Limited human-to-human transfer (epidemiological evidence of two generations of human-to-human transmission).</li><li>▪ Spread is highly localized, suggesting that virus not well adapted to humans</li></ul>
<b>Phase 5:</b> <ul style="list-style-type: none"><li>▪ Large infection clusters, meaning 25-50 people, lasting from 2-4 wks</li><li>▪ Although spread is still localized, virus seems to be adapting to human transmission</li><li>▪ Substantial pandemic risk</li></ul>

**Current Phase:**  
as of 07/06

**Period: Pandemic**

<b>Phase 6:</b> Increased and sustained transmission in the general population
---

**Impact of a Pandemic**

- When a pandemic flu virus emerges, its global spread is considered inevitable. It is expected to encircle the world within three months.
- Epidemics will last 6-8 weeks in the impacted community.
- Most people will be susceptible to a pandemic virus, but not all will develop clinical illness. In past pandemics approximately 25% of the population (cumulative across all waves) suffered clinical illness, and about 50% (cumulative) showed evidence of infection from serology.
- It is likely that multiple pandemic waves (periods during which community outbreaks occur across the country) will occur. Each wave is expected to last 2-3 months.

## Section III

### PLANNING: GETTING STARTED

#### Section Contents

- A. Understanding the Big Picture: Role of Public and Private Sectors
  - 1. Federal Government
  - 2. State Government
  - 3. Regional/Local Government Entities
  
- B. Elements of Conducting Planning
  - 1. Selecting the Internal Planning Team
  - 2. Leadership
  - 3. Involving Local Partners
  - 4. Accessing Planning Tools

## III.A. Understanding the Big Picture: Role of Public and Private Sectors

*The local level is where the effects will be felt and where the response needs to occur.* Centers for Disease Control and Prevention, Guidance for Pandemic Influenza Supplemental Cooperative Agreement. April 2006.

**III.A.1 Federal Government.** The federal government is responsible for coordinating with the international community to contain outbreaks in order to prevent a pandemic from occurring and to provide funding to state and local entities to create an infrastructure to respond to the pandemic. If a pandemic occurs, however, the federal government has made clear that it will be unable to provide the level of assistance that it would provide during a localized event, such as a hurricane or earthquake disaster, since the pandemic would be national in scope and affect manpower across all sectors of society.

### Pandemic Alert Period

- ◆ Monitoring outbreaks overseas.
- ◆ Assisting international community to contain outbreaks so that they do not become pandemics (through culling bird populations and preventing disease spread in those areas among humans).
- ◆ Delaying introduction of pandemic to the US through travel restrictions.<sup>2</sup>
- ◆ Providing funding and guidance to local communities (through the state) to develop community responses.
- ◆ Assisting companies capable of developing a pandemic flu vaccine and stockpiling antivirals for prevention and treatment.

### Pandemic Period

- ◆ Developing a pandemic flu vaccine (the vaccine can only be developed after the actual virus strain has materialized).
- ◆ Distributing pandemic vaccine and antivirals, as they become available, to state agencies.

**III.A.2 State Government.** State government is primarily responsible for allocating federal resources to local entities responsible for preparedness and response. This role is guided by the Governor's Expert Emergency Epidemic Response Committee (GEEERC) – an advisory committee tasked with assisting in the development of a comprehensive state response plan in the event of an emergency epidemic.

The Colorado Department of Public Health and Environment (CDPHE) has responsibilities including but are not limited to:

### Pandemic Alert Period

- ◆ Distributing federal pandemic flu funding to local health departments and other entities.
- ◆ Providing public information.
- ◆ Establishing an influenza surveillance system to detect an outbreak in the state.

---

<sup>2</sup> Western Samoa and Iceland avoided the 1918 flu entirely through the use of travel restrictions.

- ◆ Developing infrastructure for monitoring an outbreak, providing guidance, and distributing pandemic flu vaccines, antivirals, and general medical supplies during the pandemic. For example, CDPHE is establishing:
  - a system to test suspected pandemic flu cases for positive confirmation.
  - a communication system that will allow facilities to communicate and coordinate with each other during emergency events.
  - process for conducting mass vaccinations when a pandemic flu vaccine becomes available.
- ◆ Coordinating public health and medical volunteers.
- ◆ Coordinating mortuary services.

#### Pandemic Period

- ◆ The Governor may implement policies through Executive Orders that prevent transmission and assist in the response efforts. Potential executive orders include but are not limited to:
  - ordering social distancing and geographic quarantining where appropriate (see *Section V.D. Infection Control* for the definitions of these two measures), and
  - suspending certain professional licensing statutes to enable more medical professionals, including physicians, nurses, physician assistants and emergency medical technicians to assist in a disaster.
- ◆ Providing information throughout the course of the pandemic regarding best practices.
- ◆ Analyzing of surveillance data for potential risk factors to prioritize or reprioritize the targeting of antivirals and/or vaccine.
- ◆ Disseminating information regarding status of the outbreak to all health care providers at regular intervals.

**III.A.3 Regional/Local Governmental Entities.** The core response to a pandemic will be at the local level, therefore it is critical for facilities to coordinate with local health departments or county nursing services (see Appendix A for listing) in developing the facility response. In addition, local offices of emergency management (see Appendix B for listing) can be of assistance.

Primary responsibilities of local health departments include, but are not limited to:

#### Pandemic Alert Period

- ◆ Developing health care coalitions within the community to create a coordinated response.
- ◆ Providing guidance and tools to the many partners in the community who will be involved in the response.
- ◆ Implementing a local surveillance system to monitor for pandemic flu in the community and disseminating surveillance guidelines to physicians, clinics, hospitals and other healthcare facilities.
- ◆ Developing plans for distributing antiviral medications.
- ◆ Guiding activities that educate and prepare the general public to provide home care for persons with pandemic flu.

#### Pandemic Period

- ◆ Distributing vaccinations or antivirals through points of dispensing (PODS).

- ◆ Assisting with surge capacity (overflow in health facilities of individuals presenting with pandemic flu symptoms) coordination. Efforts may vary by local health department and may include mobilizing health care workers and volunteers and establishing temporary infirmaries.
- ◆ Assisting in the implementation of social distancing measures (discouraging group gatherings, such as sport events) in order to delay the transmission of pandemic flu.
- ◆ Coordinating with volunteer organizations to assist people who are quarantined in their homes by providing basic supplies, such as food and water.
- ◆ Disseminating information regarding status of the outbreak to all health care providers at regular intervals.

## III.B. Elements of Conducting Planning

**III.B.1 Selecting the Internal Planning Team.** The size and composition of the internal planning group depends on available resources and the scope of the services that the facility plans to continue during the pandemic.

Size of Planning Group. If your facility has:

- ◆ ≤ 5 employees, you may choose to do the planning yourself.
- ◆ 5-10 employees, you may want to ask one or two to assist you.
- ◆ > 10 employees, you should create a team.

Membership. Develop a planning team that can address all the essential functions associated with continuing operations during a pandemic. Team members may include, but not be limited to the following, as appropriate:

- ◆ facility administrator or designee
- ◆ medical director
- ◆ director of nursing
- ◆ physician staff
- ◆ nursing staff
- ◆ other direct caregivers
- ◆ infection control
- ◆ dietary
- ◆ pharmacy services
- ◆ staff training and orientation
- ◆ engineering/maintenance personnel
- ◆ housekeeping
- ◆ financial personnel, including accounting/payroll
- ◆ corporate representative
- ◆ subcontractors

**III.B.2 Leadership.** The planning group should have a lead member who can make decisions based on and supported by the facility's budget.

**III.B.3 Involving Local Partners.** Coordinating with community partners allows you to draw upon their knowledge, expertise, and resources to identify challenges and devise solutions. These partnerships will significantly increase your ability to continue operations during an emergency situation as well as during recovery, when the disaster is over. The following table lists some potential community partners.

**COMMUNITY PARTNERS**

<b>Entity</b>	<b>Who They Are</b>	<b>Benefits of Coordination</b>
Local health departments and county nursing services	There are 15 local health departments and 39 county nursing services in the state responsible for delivering public health services (such as immunizations and food inspection) throughout the state. A list of local health departments and county nursing services is available in Appendix A.	Coordination can: <ul style="list-style-type: none"> <li>– provide an understanding of how public health resources will be allocated during the pandemic flu event as well as your role in a community response.</li> <li>– help identify resource gaps (for example, if all facilities are using one vendor in their back-up plan).</li> <li>– prior and during the pandemic allow the facility to access current data on surveillance, diagnostic testing, vaccines, infection control measures, etc.</li> </ul>
Local offices of emergency management (OEMs) <sup>3</sup>	These offices are tasked with preparedness, prevention, response and recovery from <i>all</i> emergencies and disasters, including but not limited to pandemic flu. A list of OEMS is available in Appendix B.	Coordination can: <ul style="list-style-type: none"> <li>– help you in developing or reviewing your overall emergency preparedness plan or your pan flu coordination for the facility</li> <li>– answer questions regarding how emergency preparedness resources will be allocated during a disaster.</li> <li>– make available emergency preparedness training programs.</li> <li>– during the pandemic, expected to assist in food distribution activities, transportation. It is anticipated that their services will be coordinated with local public health agencies and police.</li> </ul>
Alternative sources of physician and nursing care	These include entities such as local medical societies, individual medical practitioners, nurse registry list, home health agencies, and temporary nursing pools..	Establishing relationships prior to a crisis can increase your ability to access medical and nursing services during a pandemic.
Medical vendors	This includes pharmacies and vendors of key medical supplies, such as oxygen.	Contact these vendors to discuss their continuity of operations during a pandemic flu event.
Other similar residential facilities	This includes other facilities that provide residential as well as coordination services to vulnerable adult populations, including the elderly and disabled.	Consider developing mutual aid agreements for cooperation during an emergency event. Cooperation can include the ability to transfer between facilities when a crisis occurs or to jointly coordinate child care or elder care for essential personnel.
Local area hospitals	Providers of emergency acute care.	During a pandemic flu, emergency rooms may be overwhelmed. After September 1, 2007 hospitals will be funded to outreach to other health facilities in the region.

<sup>3</sup> Many OEM's are organized within the Sheriff's Department. Also, the Sheriff's Dispatch Center can usually locate the local emergency manager and other local officials, so they Sheriffs' offices are a good 24-hour contact.

**COMMUNITY PARTNERS**

<b>Entity</b>	<b>Who They Are</b>	<b>Benefits of Coordination</b>
		In the meantime, however, you may want to contact your local hospital to discuss and formulate patient triage protocols during a pandemic event.
National volunteer emergency assistance organizations	This includes entities such as the Red Cross, Salvation Army, and the Medical Reserve Corps.	<p>During the pandemic, the <i>Red Cross</i> may help with distribution of food, masks and other supplies such as cots and blankets. Since travel may be restricted during a pandemic, volunteers will probably only serve in their home areas. See Appendix C for further information on the support activities that they can and cannot provide.</p> <p>The <i>Medical Reserve Corps</i> are teams of local volunteer medical and public health professionals who contribute their skills and expertise, particularly during times of community need. There are currently two teams in Colorado, one in El Paso County and one in Larimer County.</p>
Community volunteer organizations	This includes organizations such as Colorado Volunteer Organization Active in Disasters (COVOAD), churches, and rotary clubs	These organizations can be effective in mobilizing volunteers during a disaster.
Law Enforcement	This includes local police departments and sheriffs' offices	During a pandemic, a health care facility may be viewed as a place to obtain assistance, if such assistance is not available elsewhere. Talk with local law enforcement in advance about securing your facility to control unruly crowds, since police officers may not be readily available during a pandemic. (Law enforcement officers may be ill or may be called upon to enforce travel restrictions and quarantines.) You may also want to consider using private security companies.

### III.B.4 Accessing Planning Tools

#### Facility Preparedness.

*General Websites.* The federal Department of Health and Human Services has developed a website to assist with planning efforts: [www.hhs.gov/pandemicflu/plan/](http://www.hhs.gov/pandemicflu/plan/). The Colorado Department of Public Health and Environment also has a website addressing pandemic flu efforts at the state level, which can be found at: [www.cdphe.state.co.us/bt/panflu.html](http://www.cdphe.state.co.us/bt/panflu.html).

*Planning Guides.* You may also want to review the following:

- ◆ Open for Business: A Disaster Planning Toolkit for the Small to Mid-Sized Business Owner, Institute for Business & Home Safety and Public Entity Risk Institute, 2005. ([www.ibhs.org/docs/openforbusiness.pdf](http://www.ibhs.org/docs/openforbusiness.pdf))
- ◆ Emergency Management Guide for Business and Industry, FEMA, Oct 1993 ([www.fema.gov/pdf/library/bizindst.pdf](http://www.fema.gov/pdf/library/bizindst.pdf))
- ◆ Long Term Care and Other Residential Facilities Pandemic Influenza Planning Checklist, U.S. Department of Health and Human Services ([www.pandemicflu.gov/plan/LongTermCareChecklist.html](http://www.pandemicflu.gov/plan/LongTermCareChecklist.html)).
- ◆ Guidelines for Business Readiness, Colorado Department of Public Health and Environment ([www.cdphe.state.co.us/bt/index.htm](http://www.cdphe.state.co.us/bt/index.htm))

Household Preparedness. Encourage your staff and the residents' families to develop household preparedness plans.

*General Websites.* There are several websites that staff and resident families may find useful in developing responses to a wide range of disasters, such as pandemics, including [ReadyColorado.org](http://ReadyColorado.org) and [PrepareColorado.org](http://PrepareColorado.org) (an American Red Cross link that lists the local Red Cross chapters and also prompts individuals to get training about first aid).

*Planning Guides.* You may want to distribute the following document to facility staff and resident families:

- ◆ Pandemic Flu Planning Checklist for Individuals and Families, U.S. Department of Health and Human Services (<http://www.pandemicflu.gov/planguide/checklist.html>)

## SECTION IV – CORE PLAN ELEMENTS

### Section Contents

- A. Emergency Staffing Plan
  - 1. Defining Essential vs. Non-Essential Functions
  - 2. Preparing for Reduced Staffing
- B. Mitigation (efforts to reduce adverse impacts of a potential disaster)
- C. When Pandemic Flu is Reported in Your Community: Initial Control Measures
  - 1. Keeping Pandemic Flu out of Your Facility
  - 2. Diagnosing Pandemic Flu
  - 3. Delivering Care to Residents with Pandemic Flu

## IV.A. Emergency Staffing Plan

*The goal of any emergency staffing plan is to reassign workers to areas of greatest need during a disaster.* Workforce Management Online, June 2006

### IV.A.1. Defining Essential vs. Non-Essential Functions

#### Assumptions

- A pandemic will result in disruption to normal operations, such as the ability to obtain prescriptions through the resident's pharmacist.
- Due to reduced staffing, facilities may only be able to conduct those functions that are most critical to continued operations.

#### Steps

- ✓ Categorize business functions. For example, functions could be defined as:
  - Essential: if not conducted poses a life safety risk (providing hydration)<sup>4</sup> or their disruption would create a significant disruption of services (payroll for staff and vendors) or
  - Important: difficult to operate without, but the organization could function for a period of time.
  - Non-essential: disruption would merely be an inconvenience.
- ✓ Specifically identify non-essential functions that will be temporarily halted during a pandemic period.
- ✓ Develop response strategies for the disruption of “essential” functions. Response strategies for “important” functions are also recommended, particularly if the disruption of such functions would negatively impact the facility's recovery time after the first pandemic wave.
- ✓ Response strategies should include:
  - Prioritization of functions. (Within the list of essential functions, determine which ones are most critical. Examples of prioritization factors include the length of time that the organization can operate without restoring the function to capacity, who is impacted by the loss of the function and the type of impact. Identify residents with special needs – such limited ambulation and medical fragility – that must be accommodated.)
  - Level of staffing, including number and qualifications needed to continue the function.
  - Tasks associated with restoring the function.
  - External sources for restoring the function, i.e., vendors. Ask vendors about their continuity of operations plans during a pandemic and establish a phone tree for contacting them.
  - Identify the employee(s) responsible for restoring the function. Include contact information.

---

<sup>4</sup> Critical functions should include but not be limited to: adequate water and food supply, minimum level of caregiver staff, preventing bedsores, supply of life-saving prescriptions, provision of physician and nursing care need for acute conditions if they arise.

- ✓ Remember the “Rule of Three.” Incorporate in your strategy three alternative personnel – the initial designee and two back-ups for staff, pharmacists and other vendors since absenteeism may reach 40 percent at the peak of the pandemic.

#### **IV.A.2 Preparing for Reduced Staffing**

##### Assumptions

- Assume that up to 40 percent of your staff may be absent for a period of 2 weeks or longer at the height of a pandemic wave, with lower levels of staff absent for a few weeks on either side of the peak.
- Reasons for employee absenteeism may include:
  - personal illness, or caring for ill family members.
  - under home quarantine due to an ill household member.
  - caring for children dismissed from school<sup>5</sup> or for other relatives.
  - public transportation closures.
  - community containment measures and quarantines.
  - staying home due to safety concerns.

##### Steps

###### *Pandemic Alert Period*

- ✓ Estimate number and qualifications of staff needed to provide critical functions.
- ✓ Conduct an assessment of the factors, other than illness, that may affect your staffing level during a pandemic. Factors may include, but not be limited to, who:
  - Works well under pressure.
  - Has viable transportation to and from work. (If there are mass transit restrictions, consider establishing alternative transportation arrangements.)
  - Has children who need day care or other obligations that may require them to stay at home. (Consider assisting employees with their child care or elder care needs.<sup>6</sup>)
- ✓ Explore methods of obtaining additional skilled and unskilled staffing. Determine the extent to which the facility can utilize volunteers.
- ✓ Address human resources issues:
  - Check medical and disability insurance policies to ensure coverage for pandemic influenza, including employee time if ordered into quarantine.
  - Develop and distribute a policy about what will happen if employees do not report to work during the pandemic flu crisis.

###### *Pandemic Period*

- ✓ Consider providing separate sleeping accommodations and necessary provisions to the essential staff to prevent them from contracting the disease.

---

<sup>5</sup> Clinical attack rates for seasonal and pandemic influenza are highest among children; it has been shown that closing schools and vaccinating children has reduced community influenza rates. “National Strategy for Pandemic Influenza: Implementation Plan.” Homeland Security Council, May 2006. p. 108.

<sup>6</sup> Child care and elder care may make sense for essential personnel only if it can be conducted in a way that prevents influenza transmission.

- ✓ Show your staff that you appreciate their personal sacrifices during this time.  
Consider:
  - giving recognition to employees for continued attendance.
  - delivering food boxes for the families of the caregivers.
  - providing wellness checks for the family members of the staff.

## IV.B. Mitigation

*All long-term strategic planning should include identification of mitigation opportunities.* Critical Incident Protocol – A Public Private Partnership, Michigan University, 2000.

Mitigation is efforts taken prior to any disaster – such as a pandemic – to reduce its adverse impacts on the facility.

### Assumptions

- Facilities typically maintain limited inventories of supplies on-site and depend on just-in-time restocking.
- Pandemics have the potential of crippling a facility's ability to restock quickly, since it can impact critical infrastructure – such as food and power supply, transportation, communications, and health care.

Steps. Consider on-going mitigations efforts that the facility can realistically commit to in order to reduce the impact of a flu pandemic. Below is a list of on-going mitigation efforts that facilities should consider.

- ✓ Vaccinations. (For the rationale for obtaining the vaccinations listed below, see Section V.C. Vaccinations and Antivirals)
  - Obtain the following vaccinations for residents, staff, and (where feasible) vendors who come into contact with residents:
    - ⇒ seasonal influenza
    - ⇒ appropriate pneumococcal vaccines, particularly for those over the age of 65.
  - Track vaccinations obtained by staff and residents.
- ✓ Supplies. Establish a system for enhancing storage capabilities and allowing for rotation of stock. Develop the system for and consider obtaining extra supplies of:
  - Water and food
  - Prescription medications
  - General medical supplies
  - Hygiene supplies
  - Personal protective equipment (See *Section V.D. Infection Control* for definition and more information)
- ✓ Physical Plant
  - Conduct routine maintenance
  - Ensure backup generator is in working order and that sufficient fuel is available. If the generator is powered by gasoline, extra supplies of gasoline should be stored outside of the building and away from ignition sources.

## IV.C. When Pandemic Flu is Reported in Your Community - Initial Control Measures

*...limiting exposure and delaying transmission can change the shape of the epidemic curve and mitigate the social and economic impact of a pandemic by reducing the number of people who become ill at any given time.* Homeland Security Council. National Strategy for Pandemic Influenza: Implementation Plan, 2006.

### IV.C.1 Keeping Pandemic Flu Out of Your Facility

#### Assumptions

- It is anticipated that most individuals with pandemic influenza will experience typical influenza symptoms – which commonly include fever, headache, cough, body aches, and weakness. (For differences between cold and seasonal flu symptoms, please see Appendix D.)
- Some people, who are sick with influenza, and therefore contagious to others, show few or no symptoms throughout their illness.
- Transmission of pandemic flu will be similar to that of seasonal flu – occurring when an infected person coughs or sneezes within 3 feet of a susceptible person.
- Minimizing contacts will reduce or delay the chance for pandemic flu to enter into your facility.

#### Steps

- ✓ When there are suspected or confirmed case(s) of pandemic flu in your community, implement policies designed to reduce the spread of infection, such as:
  - o measures to reduce contact between residents and infected persons to include:
    - limiting visitors to resident family members.
    - requiring individuals who enter the facility to have fever checks (to determine if there is a chance of infection).
    - requiring hand hygiene (see *Section V.D. Infection Control* for definition) before and after entering the facility.
  - o instituting unpunitive leave for employees who have or are suspected to have pandemic flu or who have members in their household who likewise are ill. The policy should address when staff may return to work after recovery.
  - o other infection control measures (see *Section V.D. Infection Control* for more information).

### IV.C.2 Diagnosing Pandemic Flu

#### Assumptions

- Reliable rapid testing to diagnose a pandemic flu virus may not become available for some time after the specific pandemic virus is identified.
- The state laboratory will likely have the capability and capacity to perform polymerase chain reaction (PCR) testing for a pandemic flu virus. Several regional public health laboratories may also have this capability.

- PCR testing is highly reliable but will be limited in its availability. Due to limited laboratory testing capacity, testing will be prioritized. The state health department will issue guidance on the prioritization.
- Testing will be most important during the early stages of a pandemic.

#### Steps

- ✓ Obtain and follow most recent guidance from local/state health department regarding symptoms of pandemic flu and testing.
- ✓ Look for signs and symptoms pandemic flu in staff and residents.
- ✓ Conduct testing as appropriate.

### **IV.C.3 Delivering Care to Residents with Pandemic Flu**

#### Assumptions

- If the pandemic flu has been reported in your community, hospitals and other acute care centers may be overwhelmed and unable to deliver care to additional patients.
- Delaying the spread of pandemic flu within your facility will increase your ability to continue operations effectively.

#### Steps

For more detailed information, including definitions, regarding the steps outlined below regarding:

- antiviral medications, see *Section V.C. Vaccinations and Antivirals*.
- infection control measures, such as, cough/sneezing etiquette, hand hygiene, personal protective equipment, isolation and quarantine, and, see *Section V.D. Infection Control*.
- ✓ Isolate residents with flu-like symptoms and treat with antiviral medication to reduce severity of disease, if antivirals are available.
- ✓ Identify close contacts to these residents who do not yet have symptoms and recommend:
  - o quarantine and daily monitoring for symptom onset.
  - o antiviral prophylaxis, if available.
- ✓ Require staff caring for residents suspected/diagnosed of having pandemic flu to use personal protective equipment. If possible, cohort these staff (i.e., dedicate staff to serve only pandemic flu patients).
- ✓ Implement the following infection control procedures for the entire facility:
  - o hand hygiene,
  - o cough/sneezing etiquette, and
  - o housekeeping requirements.

## SECTION V

### POLICY RECOMMENDATIONS

#### Section Contents

- A. Plan Activation
  - 1. Leadership Responsible for Activation
  - 2. When to Activate Plan Components
- B. Communications
  - 1. With Internal Staff
  - 2. With Your Local Health Department
  - 3. With Residents and their Families
  - 4. With the Media
- C. Vaccinations and Antivirals
  - 1. Definitions
  - 2. Vaccinations
  - 3. Antivirals
- D. Infection Control
  - 1. Definitions
  - 2. Community Infection Control Measures
  - 3. Facility Infection Control Measures
- E. Reducing the Need for Surge Capacity
- F. Caring for the Deceased during a Pandemic
- G. Reducing Staff Stress and Burnout
- H. Emergency Facility Closure
- I. Recovery: Returning to Routine Operations

## **V.A. Plan Activation**

### **V.A.1 Leadership Responsible for Activation**

The plan should identify who will provide coordination and direction for the various elements of the plan. Of particular importance is the identification of who will serve as the lead during a pandemic flu event. This individual must be able to authorize expenditures, as needed to respond to the pandemic. Further, the plan should delineate a team who will support the crisis manager, along with their specific responsibilities. Each of these positions should have one or two back-ups, in case the initial designee is unable to fulfill his/her duties.

### **V.A.2 When to Activate Plan Components**

Unlike many other crises that are located in specific isolated sites (such as tornadoes or floods) and mostly strike at infrastructure, pandemic flu is expected to affect the entire nation and mainly impact people. This means that there may not be intact communities that can reach out and assist other communities in crisis. To ensure continuing operations, facilities cannot wait until the pandemic flu hits, but instead must initiate incremental responses during the various pandemic phases (interpandemic period, pandemic alert period, during the pandemic itself).

For the purpose of planning, the federal government has developed response stages that correspond to the pandemic phases – as shown in the following table.

You may find these response stages useful for the purposes of determining when to activate various components of your plan. The table below, shows recommendations for when some activities should be implemented.

***Preliminary Template for Activation***

Federal Response Stages <sup>7</sup>	WHO Pandemic Phases	Facility Actions
<p><b>Stage 0:</b> New domestic animal outbreak in at-risk country</p>	<p>Phases 1-2 <i>Inter Pandemic</i></p> <p>Phase 3 <i>Pandemic Alert</i></p>	<ul style="list-style-type: none"> <li>- Develop pandemic flu response plan in coordination with your community partners, including but not limited to: the local health department, local Office of Emergency Management, and vendors.</li> <li>- Review guidelines for seasonal flu.</li> <li>- Train staff regarding the plan and specifically their role during the activation of the plan. Review infection control techniques, particularly hand hygiene.</li> <li>- Ensure that all staff, residents (and if possible contractors who come into the facility) are appropriately vaccinated with pneumococcal and seasonal flu vaccinations.</li> <li>- Conduct quarterly drills of the plan or portion of the plan.</li> </ul>
<p><b>Stage 1:</b> Suspected human outbreak overseas</p>	<p>Phase 3 <i>Pandemic Alert</i></p>	<ul style="list-style-type: none"> <li>- Update contact information for all employees and residents.</li> <li>- Conduct monthly drills of the plan or portion of the plan.</li> <li>- Ensure staff have received training regarding infection control procedures.</li> </ul>
<p><b>Stage 2:</b> Confirmed human outbreak overseas</p>	<p>Phases 4 &amp; 5 <i>Pandemic Alert</i></p>	<ul style="list-style-type: none"> <li>- Monitor federal/state public health advisories. Access state health department website for outbreak information and obtain information through the media.</li> <li>- Contact local health department for any special instructions.</li> <li>- Conduct availability assessment of direct caregivers.</li> <li>- Communicate to residents and their families about the implications of pandemic flu for the facility.</li> </ul>
<p><b>Stage 3:</b> Widespread human outbreaks in multiple locations overseas</p>	<p>Phase 6 <i>Pandemic</i></p>	<ul style="list-style-type: none"> <li>- Monitor federal/state public health advisories. Access state health department website for outbreak information and obtain information through the media.</li> <li>- Contact local health department for any special instructions.</li> </ul>
<p><b>Stage 4:</b> First human case in North America</p>	<p>Phase 6 <i>Pandemic</i></p>	<ul style="list-style-type: none"> <li>- Monitor federal/state public health advisories. Access state health department website for outbreak information and obtain information through the media.</li> <li>- Contact local health department for any special instructions.</li> <li>- Access pandemic flu vaccine, if available, for staff and residents. Plan for an inadequate supply.</li> <li>- Restrict access to the facility to individuals who have not been exposed to the virus.</li> <li>- Require hand hygiene upon entering and leaving the facility.</li> <li>- Post signs for coughing/sneezing etiquette. (See <i>Section V.D. Infection Control</i> for definitions and further information.)</li> </ul>
<p><b>Stage 5:</b> Spread throughout United States</p>	<p>Phase 6 <i>Pandemic</i></p>	<ul style="list-style-type: none"> <li>- Obtain new guidance on epidemiology (i.e., actions to reduce likelihood of exposure, limit transmission, likelihood of contracting the disease and likelihood of severe illness).</li> </ul>

**Current Stage:**  
07/06

<sup>7</sup> Adapted from National Strategy for Pandemic Influenza: Implementation Plan. Homeland Security Council, May 2006, p.32

## V.B. Communications

*When health risks are uncertain, as likely will be the case during an influenza pandemic, people need information about what is known and unknown, as well as interim guidance to formulate decisions to help protect their health and the health of others.* U.S. Department of Health and Human Services. Pandemic Influenza Plan, 2005.

### V.B.1 Communicating with Internal Staff

#### Assumptions

- Employees will have anxiety and fear about the impact of pandemic flu on themselves and their families. Rumors will be generated if information is not made clearly available.

#### Steps

##### *Pandemic Alert Period*

- ✓ Obtain updated phone numbers and addresses of employees. Include how each person in the chain is to be notified during an emergency, such as home phone, cell, or beeper.
- ✓ Develop and test a phone tree system for communication with staff.
- ✓ Encourage staff to develop a personal household preparedness plan. Provide each employee with brochures and/or information links to web sites (see *Section III.B.4 Accessing Planning Tools*).
- ✓ Facilitate the provision of information to staff who are non-English speaking.
- ✓ Keep key supervisors informed and have them brief their departmental staff continually.
- ✓ Review all privacy of medical information policies and laws. (See new HIPAA Privacy Rule: Disclosures for Emergency Preparedness – A Decision Tool at [www.hhs.gov/ocr/hipaa/decisiontool/](http://www.hhs.gov/ocr/hipaa/decisiontool/).)

##### *Pandemic Period*

- ✓ Respond to employee anxiety about pandemic flu by providing them with credible information (e.g., received from your local health department). Keep employees informed on the number of internal cases and deaths, and how workers can protect themselves and their families. Be direct with employees, even if the information may be frightening.
- ✓ Advise staff to be alert for symptoms of pandemic flu exhibited by themselves, co-workers and residents.
- ✓ Address rumors and misperceptions promptly.
- ✓ Maintain high visibility with staff members to avoid confusion or panic.

### V.B.2 Communicating with your Local Health Department

#### Assumptions

- ✓ It is anticipated that your local health department will be a primary source of information regarding care for pandemic flu and distribution of local resources.

## Steps

### *Pandemic Alert Period*

- ✓ Contact your local health department to:
  - get the name of a 24/7 emergency contact for the local health department and provide them with a name a 24/7 emergency contact for your facility.
  - add your facility to Colorado’s Health Alert Network (HAN) to automatically obtain public health updates.
  - advise them of your interest in joining the health care coalition that is planning the community’s response to pandemic flu.
- ✓ Be alert for signs that might indicate that a staff member or a resident has had contact with someone with the pandemic flu virus. (For example, contact with someone who has traveled to a location where there has been a human outbreak.) If you notice any unusual clusters of illness, notify your local health department officials immediately.

### *Pandemic Period*

- ✓ Maintain contact with the local health department in order to receive bulletins and updates about best practices on issues such as infection control and treatment.

## **V.B.3 Communicating with Residents and their Families**

### Assumptions

- ✓ Residents and their families will be concerned about the implications of pandemic flu. Communicating information in an organized manner will reduce anxieties.
- ✓ During a pandemic flu event, there will be an increased demand for information from families and residents and less manpower available to respond to their needs.

## Steps

### *Pandemic Alert Period*

- ✓ Identify one staff person as the “go-to person” when families have questions. (Designate two back-ups, if possible.) Provide a 24/7 telephone number for this person to receive calls.
- ✓ Ensure contact information for family members or guardians is up-to-date, and includes the preferred way that the family member would like to be reached.
- ✓ Develop and test a phone tree system for communication with families of residents.
- ✓ Distribute your facility’s pandemic flu plan to residents and family members. Document this distribution.
- ✓ Respond to anxiety about pandemic flu by providing residents and families with credible information.
- ✓ Notify families that if a pandemic overwhelms the staff at the facility, it may be necessary for non-clinical personnel and family members to assist with administrative and environmental tasks.
- ✓ Understand the federal HIPAA privacy laws.

### *Pandemic Period*

- ✓ Notify residents and families of any changes that have been made in activity scheduling, transportation, etc.
- ✓ Phone calls could overwhelm your phone lines. Provide 24-hour switchboard operation, if possible or provide additional information via a recorded phone message or web site.

Remind families that all hands will be needed to provide resident assistance and protection so telephone inquiries should be short, but that you will keep them advised.

- ✓ Address rumors and misperceptions promptly.

### **V.B.3 Communicating with the Media**

#### Assumptions

- During a pandemic, you may receive questions about the status of the facility from the media.

#### Steps

##### *Pandemic Alert Period*

- ✓ Designate one spokesperson (and two backups) to handle media inquiries and provide contact information for that individual. If possible, use trained spokespersons to do media interviews, especially for television.
- ✓ Under no circumstances, when communicating with the media, can staff provide any names or identifying information to the media on who is infected. It is imperative to observe resident confidentiality and comply with patient privacy laws, such as HIPPA.
- ✓ Be honest and accurate when responding to calls, do not speculate.
- ✓ Never say "no comment." It looks like you are hiding something.

##### *Pandemic Period*

- ✓ Connect to your audience by showing your human side. If there is a tragedy, express your sadness and your sympathy.
- ✓ Use the media to send messages requesting donations and trained volunteers from the public, as needed.

## V.C. Vaccinations and Antivirals

*As a pandemic vaccine needs to be a close match to the actual pandemic virus, commercial production cannot begin prior to the emergency and characterization of the pandemic virus....Once the pandemic strain is identified, it would likely take at least six months to produce any significant quantities of the vaccine. – World Health Organization, 2005*

### V.C.1. Definitions

<i>Antiviral medications</i>	Medications used for the treatment of individuals with clinical symptoms of pandemic influenza to reduce the severity of the disease and for prophylaxis.
<i>Prophylaxis</i>	Use of the medication to prevent the onset of disease.
<i>Vaccine, Pandemic</i>	Vaccine developed against strains of the virus capable of sustained and efficient human-to-human transmission.
<i>Vaccine, Pneumococcal</i>	Vaccine that helps prevent pneumococcal disease. This bacterial disease can lead to serious infections of the lungs (pneumonia), the blood (bacteremia) and the covering of the brain (meningitis). Persons at the greatest risk for pneumococcal disease are: people age 65 or older; the very young; and people with special health problems such as alcoholism, heart or lung disease, kidney failure, diabetes, HIV infection, or certain types of cancer. <sup>8</sup>
<i>Vaccine, Pre-Pandemic</i>	Vaccine developed against strains of animal influenza viruses that have caused isolated infections in humans. The effectiveness against a pandemic virus may be limited (since the virus may have mutated significantly). It is anticipated that the use of the pre-pandemic vaccine will be used as a primary vaccination if the match between the pre-pandemic vaccine and the circulating virus is close, or to prime the immune system to respond more quickly to the pandemic vaccine if the match is not close.
<i>Vaccine, Seasonal Flu</i>	Vaccine developed against the three strains expected to circulate in the United States during the following season. This is the typical annual flu shot that is widely available.

---

<sup>8</sup> To learn more, contact the Centers for Disease Control and Prevention (CDC) by visiting the National Immunization Program website at [www.cdc.gov/nip](http://www.cdc.gov/nip), or calling 1-800-232-4636 (1-800-CDC-INFO).

## V.C.2 Vaccinations

One of the best ways to control the spread of a pandemic is through the use of vaccines. Since influenza viruses continually evolve and mutate, however, it is impossible to develop a vaccine that matches the pandemic strain until the strain emerges.

In the meantime, however, vaccination with seasonal flu vaccine can prevent secondary infections. CDC estimates that only about 36 percent of health care workers (which includes any residential health care facility employee who has contact with residents) are vaccinated annually.<sup>9</sup>

Further, a major threat in past influenza pandemics has been the tendency for the viral infection to exhaust the body's immune capacity. This opens the door for other diseases, such as pneumonia, a bacterial infection that causes the build-up of fluid in the lungs and bronchial passages. Even if treated with appropriate medications, complications from a viral infection can result in prolonged illness or death. It is for this reason that the pneumococcal vaccine is recommended. (In fact, many of the deaths in previous pandemic are attributable to pneumonia caused by secondary bacterial infections.)

### Assumptions

- It will take an estimated six to nine months after a pandemic emerges to develop a pandemic vaccine.
- Upon initial development, the pandemic vaccine may be in short supply and therefore will be prioritized and targeted narrowly.
- There may be a limited amount of pre-pandemic vaccines.

### Steps

- ✓ Track that the following have obtained seasonal flu vaccine:
  - Residents, and
  - Staff (including contract and pool staff)
  - Vendors who come into the facility
- ✓ Track that residents who are at the greatest risk for pneumococcal disease receive the appropriate pneumococcal vaccine.
- ✓ Understand the state priority for pre-pandemic flu vaccine (which is anticipated to become available when there is an outbreak) and direct staff and residents accordingly.
- ✓ Work with you local health department to obtain pandemic flu vaccine for staff and residents as soon as it becomes available.

## V.C.3. Antivirals

The use of antivirals is seen as a stopgap measure until a vaccine becomes available. There are currently only two antiviral medications shown to have some efficacy against the current strains

---

<sup>9</sup> Improving Influenza in Health Care Workers: Strategies to Increase Protection for Workers and Patients. National Foundation for Infectious Diseases, p. 8.

of the H5N1 virus: oseltamivir (also known as Tamiflu) and zanamivir (also known as Relenza.) Relenza is inhaled orally and can cause bronchial spasms.

Antivirals can be used as prophylaxis (preventing infection) or as a treatment. For adults and adolescents ages 13 and above, the dosages are as follows:

*Tamiflu*

- ◆ as prophylaxis: one 75 mg capsule taken once daily for at least 10 days, but it can be used safely for up to 6 weeks. (Antivirals only reduce risk during the period the medication is taken.)
- ◆ as a treatment: one capsule taken twice daily for 5 days (for a total of 10 capsules).

*Relenza*

- ◆ as prophylaxis: not currently used for prophylaxis.
- ◆ as a treatment: two inhalations twice daily.

Although various countries – such as Canada – are stockpiling antivirals so that they are available to all citizens, the World Health Organization is advising against mass administration of antiviral drugs to the general population since this could accelerate the development of drug-resistant strains.

- ◆ Antivirals decrease virus excretion and severity of illness of seasonal influenza. **It is unknown how effective it will be against a novel pandemic virus strain.**

Assumptions

- Upon the onset of the pandemic effective antivirals are anticipated to be in short supply. (Tamiflu is only being produced by Roche and Relenza is only being produced by GlaxoSmithKline.) As a result, antivirals may be prioritized to front-line health care workers, such as hospital personnel and first responders.
- Because using it as a prophylaxis requires more medication and may result in administering dosages to people who might not become sick anyway, it is assumed that antivirals will only be used as a prophylaxis during initial containment efforts (i.e., within the first communities that it appears on the continent to delay the spread.) For the most part, antiviral medication stockpiles will be used for treatment once a pandemic is underway.

Steps

- ✓ During a pandemic, contact the local health department for vaccination and antiviral dispensing sites.
- ✓ Ensure that vaccinations and antivirals stored at the facility are secured against diversion.

## V.D. Infection Control

*...when a pandemic begins, a vaccine may not be widely available and the supply of antiviral drugs may be limited. The ability to limit transmission and delay the spread of the pandemic will therefore rely primarily on the appropriate and thorough application of infection control measures.* Pandemic Influenza Plan, Supplement 4, Infection Control, Department of Health and Human Services

*Clean hands are the single most important factor in preventing the spread of dangerous germs and antibiotic resistance in health care settings.* Dr. Julie Gerberding, Director, Centers for Disease Control.

Infection control can occur at two levels:

- ◆ Community level. For example: geographic quarantining and social distancing measures.
- ◆ Facility level. For example: standard precautions, cough etiquette, use of personal protective equipment (PPE), isolation, implementing of liberal leave policies for persons with sick family members, and substituting teleconferences for face-to-face meetings.

### V.D.1. Definitions

<i>Cohorting</i>	Placing residents in a room with other residents who have pandemic influenza. Staff can be cohorted as well by dedicating them solely to the care of persons with pandemic flu.
<i>Coughing/Sneezing Etiquette</i>	Persons who are potentially infectious should 1) cover their nose and mouth when coughing or sneezing; 2) use facial tissues to contain respiratory secretion and dispose of them in a waste container; and 3) wash their hands with soap and water, an alcohol based rub, or antiseptic handwash. This etiquette applies to spitting as well.
<i>Hand Hygiene</i>	Includes both 1) handwashing with plain or antimicrobial soap and water, and 2) use of alcohol-based products (gels, rinses, and foams) that do not require the use of water.
<i>Isolation</i>	Separating ill persons from those who have not yet been exposed to prevent transmission.
<i>Personal Protective Equipment (PPE)</i>	Equipment used by staff to prevent infection and transmission. It includes: gloves, gowns, and face/eye protection (i.e., surgical or procedure mask and goggles or a face shield.)
<i>Quarantine</i>	Separation of individuals who have been exposed to infection from those who have not been exposed to the transmissible infection.
<i>Quarantine, geographic</i>	Geographic quarantine is the isolation of localities with documented disease transmission from areas still free of infection. (Geographic quarantine is also called “cordon sanitaire.”)
<i>Social Distancing</i>	Preventing transmission of the pandemic virus by limiting or prohibiting group gatherings, such as closing schools and deferring sporting events.

<i>Standard precautions</i>	Set of precautions established by the Centers for Disease Control and Prevention (CDC) to minimize the risk of catching an infection from a resident. Also see the following website: <a href="http://www.cdc.gov/ncidod/hip/ISOLAT/std_prec_excert.htm">www.cdc.gov/ncidod/hip/ISOLAT/std_prec_excert.htm</a>
<i>Transmission, Droplet</i>	Droplet transmission occurs when droplets generated by an infected person come into contact with the mucous membranes of the eye, nose or mouth of a susceptible person. Droplets are created by the infected person when they cough, sneeze or speak. Typically, a susceptible person becomes infected when they inhale these droplets.
<i>Transmission, Contact</i>	Contact transmission involves the transfer of microorganisms to a susceptible person through skin-to-skin contact. This can occur when staff performs patient care activities that require physical contact, such as turning or bathing the patient.
<i>Transmission, Indirect Contact</i>	Indirect-contact transmission can occur when a susceptible person comes into contact with an object in the patient's environment that is contaminated – such as a hard surface.

## **V.D.2. Community Infection Control Measures**

### Assumptions

- While community infection control measures are not expected to prevent a pandemic after person-to-person transmission becomes well established, they can delay the spread of the disease. In turn, distributing the number of pandemic flu cases that occur over a longer interval will minimize burden of the pandemic on the health care system and the community at large.
- A pandemic is anticipated to come in multiple waves lasting approximately 6-8 weeks each. Individuals not infected by the first wave, may be able to receive a pandemic vaccine prior to subsequent waves.
- Like normal influenza, pandemic flu will probably spread by coughing and sneezing and be transmitted before as well as during the onset of clinical symptoms. Transmission may also occur through direct and indirect contact with infectious respiratory secretions.
- Infected individuals can be contagious even if they show few or no symptoms throughout their illness.
- An infected individual can transmit the disease to persons who are within 3 feet of him/her.

### Steps

- ✓ Comply with community infection control measures issued by the federal or state government. Look on state and federal websites for reliable information. It is anticipated that the media will publicize these measures during Pandemic Alert and Pandemic periods.

### V.D.3. Facility Infection Control Measures

#### *General Hygienic Practices*

##### Assumptions

- Hand hygiene will be one of the most important measures to reduce the risks of transmitting infections.
- Typically, the incubation period (interval between infection and onset of symptoms) for influenza is approximately 2 days.
- Some people, who are infected with influenza, and therefore contagious to others, show few or no symptoms throughout their illness.
- Like normal influenza, pandemic flu will probably spread by inhalation of droplets (usually from an infected person's cough or sneeze) or when a person touches infected material with their hands and then touches a mucous membrane, such as their mouth, nose, or eyes..

##### Steps

- ✓ Establish policies for excusing employees when they become ill at work and when an employee who has become ill can return to work.
- ✓ Provide training on coughing/sneezing etiquette to staff, residents and families. During a pandemic, have readily available: tissues and waste receptacles, and environmental cleaning supplies.
- ✓ Establish policies on hand hygiene. During a pandemic, have readily available: soap and water, hand disinfection (i.e., alcohol-based products), and disposable towels
- ✓ During a pandemic, require handwashing upon entering and leaving the facility.

#### **Hand Hygiene**

- If hands are visibly soiled or contaminated with respiratory secretions, wash hands with soap (plain or antimicrobial) and water.
- Unless hands are visibly soiled, approved alcohol-based products for hand disinfection are preferred over antimicrobial or plain soap and water because of their superior microbiocidal activity, reduced drying of the skin, and convenience.
- Hand hygiene should be performed:
  - After blowing/wiping nose
  - After removing gloves
  - Before and after patient contact or contact with potentially infected material
  - After contact with blood and body fluids
  - After taking blood pressure or vital signs from patient
  - When leaving the isolation unit.

*For additional guidance on hand hygiene see <http://www.cdc.gov/handhygiene/>.*

#### *Housekeeping*

##### Assumptions

- Although the rate of transmission from contaminated hard surfaces is unknown, influenza viruses may live up to 2 days on such surfaces.

### Steps

- ✓ During a pandemic, clean surfaces that are frequently touched with hands at least daily. Develop policies and procedures for employees to keep their work areas clean (such as phones and keyboards.)

### *Isolation and Quarantining*

#### Assumptions

- Isolation and quarantine may be used during the early stages of pandemic flu in your community. However, as the pandemic progresses and the number of cases mount, these measures may cease to be effective.
- Isolation and quarantining may be particularly effective in containing further transmission if antiviral prophylaxis is available for persons who may have been exposed to the virus.
- It is unclear the extent to which the influenza virus can spread through ventilation systems.

### Steps

- ✓ Confine symptomatic residents and their exposed roommates to their room or place symptomatic residents in one area of the facility.
- ✓ Limit contact for residents with pandemic flu to as few personnel as possible.
- ✓ Limit the movement and transport of the resident from the room for essential purposes only. If transport or movement is necessary, limit droplet dispersal by masking the resident, if possible.
- ✓ Consider limiting entry to the facility (including, as appropriate, family members, suppliers and service technicians).
- ✓ Consider restricting new admissions.
- ✓ Consider placing residents who need to be isolated in negative pressure rooms, if such accommodations are available.

### *Protecting Caregivers from Contact with the Pandemic Flu Virus*

#### Assumptions

- The main route of infection is the inhalation of infected droplets. However, infection can also occur through contact and indirect contact transmission.

### Steps

- ✓ Develop policies for staff who must come into contact with residents who have pandemic flu that includes:
  - o Wearing a surgical or procedure mask for close contact with resident.
  - o Wearing gloves (gown if necessary) for contact with respiratory secretions.
  - o Wearing protective eye gear if there is a chance for spray.
  - o Performing hand hygiene after contact with infectious residents.

### **Additional Resources**

- ▶ Department of Health and Human Services, Pandemic Influenza Plan, Supplement 4, Infection Control (at: <http://www.hhs.gov/pandemicflu/plan/sup4.html>.) Section IV of this supplement may be of particular interest. This section contains basic infection control

principles, the management of infectious patients, and practices for health care personnel (regarding issues ranging from the use of PPE to the handling of linen and laundry.)

## V.E. Reducing the Need for Surge Capacity

*CDC models estimate increases in hospitalization and intensive care unit demand of more than 25 percent even in a moderate pandemic.* Department of Health and Human Services. Pandemic Influenza Plan. (Appendix D), 2005.

### Assumptions

- There will not be sufficient staff, facilities, equipment and hospital beds needed to serve the large numbers of people who will become ill.
- Ambulance services and other medical responders may be overwhelmed.
- Overflow of patients in need of acute care services as well as care for pandemic flu illness will be provided by temporary infirmaries – if there is sufficient manpower and medical material to operate such facilities. It is anticipated that local offices of emergency management will be involved in establishing these temporary sites.

### Steps

- ✓ Develop a plan that can be activated during a pandemic to respond to acute health care conditions that would typically be cared for in an emergency room but cannot be done due to lack of adequate transport or hospital overcrowding. Elements of the plan may include:
  - alternate ways of transporting patients to acute care centers, between facilities, or to temporary infirmaries if ambulance and medical responders are not be available.
  - coordination with local hospital regarding the triaging of various acute care conditions that typically would result in an emergency room visit. In some cases, hospitals may be able to send teams to facility.
  - responding to some acute health care conditions onsite. Explore methods of obtaining physician and nursing support during a pandemic, such as through county medical society, local physician practices, certified home health services, and telehealth.
  - discharging residents with less acute care needs to their families, where feasible.
- ✓ Develop policy for return of residents after transfer to other facilities.

## V.F. Caring for the Deceased during a Pandemic

*Management of the dead is one of the most difficult aspects of disaster response and yet, care of the deceased is often overlooked in disaster planning.* Preparedness and Mitigation in the Americas. World Health Organization. April 2006.

### Assumptions

- During a pandemic wave, facilities may need to store the dead temporarily in their facilities if local mortuaries are overwhelmed.
- Rate of decomposition is dependent on temperature. The cooler the storage area, the lower the rate of decomposition.
- During a pandemic, federal and state government authorities may issue public health orders temporarily suspending legal requirements regarding the signatures required by families and physicians authorizing the disposition of the bodies.
- It will be important to respect the right of the next of kin to know the location of a loved one who is deceased.

### Steps

#### *Pandemic Alert Period*

- ✓ Develop a plan for creating temporary morgue. Consult with the local coroner, health department and/or funeral director(s) used by the facility.

*Pandemic Period.* This applies if there are mass fatalities that create disruption in the current burial process.

- ✓ Create temporary morgue facilities in the coolest location of your facility.
- ✓ Require staff to use personal protective equipment when moving a deceased individual – including:
  - o a mask (this is particularly important if the person is recently deceased, since the surrounding environment may contain infectious droplets.)
  - o a fluid resistant long-sleeved gown.
  - o non-sterile gloves which cover the cuffs of the gown.
  - o eye protection (face shield or goggles) if splashing/spraying of body fluids is anticipated.
- ✓ Seal the body in an impermeable body bag prior to moving. The outside of the bag should be kept clean. Ensure that the bag is labeled with the individual's name and date of death.
- ✓ Perform hand hygiene after removing PPE.
- ✓ If family members wish to view the body, the family should wear gloves and gowns. If family members want to touch or kiss the body, the body parts should be disinfected using a common antiseptic (e.g., 70% alcohol). If the family has contact with the resident immediately after his/her death, masks should be worn to avoid inhalation of any suspended infectious droplets. After removing the PPE, family members should perform hand hygiene.
- ✓ Handle and store the bodies of the deceased with dignity and cultural sensitivity to the extent practicable.
- ✓ Store bodies in a manner that minimizes the distress of the other residents and of the staff.
- ✓ If bodies are released from the facility without signatures from the family, track specifics on when and where the body was transported.

## V.G. Reducing Staff Stress and Burnout

*Many people survive disasters without developing significant psychological symptoms. Others, however, may have a difficult time "getting over it." Survivors of trauma have reported a wide range of psychiatric problems, including depression, alcohol and drug abuse, lingering symptoms of fear and anxiety that make it hard to work or go to school, family stress, and marital conflicts.* American Psychiatric Association. Disaster Psychiatry. Plan of Action.

### Assumptions

- During a pandemic, staff may experience psychological trauma due to exposure to the personal tragedy of others, long hours of work, and decreased sleep.

### Steps

- ✓ Develop a stress management plan. Elements of the plan may include<sup>10</sup>:

#### *Pandemic Alert Period*

- Providing pandemic flu orientation to employees, including the conditions that they might expect during a pandemic flu event and a review of the facility plan, and their roles during an event.
- Educating staff about signs and symptoms of disaster event stress and coping strategies.
- Cross-training staff, particularly regarding critical business functions.
- Practicing various sections of the facility plan.

#### *Pandemic Period*

- Promoting an atmosphere of tolerance and support. Compliments can moderate stress and serve as powerful motivators.
  - Rotating people between low-, mid- and high-stress tasks.
  - Encouraging caregivers to:
    - o Focus on the people they are helping, rather than on what is not being done.
    - o Monitor themselves and each other with regard to their basic needs such as food, drink and sleep. Becoming biologically deprived puts them at risk and may also compromise their ability to care for the residents.
    - o Know their own personal signs of stress and when they need to take action to prevent becoming overwhelmed.
    - o Limit overexposure to the disaster and to media coverage when off shift. This allows for a mental break when not working.
  - Ensuring breaks from tending to residents. When on break allow and encourage caregivers to do something unrelated to the traumatic event and which they find comforting.
  - Establishing a place for providers to talk to their colleagues and receive support from one another. Telling one's own story and listening to other's can alleviate this isolation. Remember that not all people are the same. Some need to talk while others need to be alone. Recognize and respect these differences.
- ✓ Facilitating sources of comfort for staff – such as talking to clergy or mental health professionals.

---

<sup>10</sup> Many of these elements were excerpted from the Stress Management for Health Providers, Center for the Study of Traumatic Stress, Uniformed Services University School of Medicine.

## V. H. Temporary Emergency Closure

*The health threat to personnel is the primary threat to continuity of operations during a pandemic.* Homeland Security Council, National Strategy for Pandemic Influenza: Implementation Plan, 2006.

### Assumptions

- Inadequate finances, staffing, or supplies may require the facility to temporarily close and evacuate residents.
- Some residents may be discharged to their families while others may be transferred to other facilities.

### Steps

#### *Pandemic Alert Period*

- ✓ Establish triggers for determining when a temporary shut down of operations is necessary, such as level of available staffing and level of supplies needed to carry out essential functions. Determine who can issue and carry out the order for temporary closure and the level of staffing needed to implement it..
- ✓ Determine where your residents will go be discharged to, which may include but not be limited to: other facilities or to their families. Develop mutual aid agreements with other facilities and educate resident families about these options.
- ✓ Consider how the residents will be transported.
- ✓ Develop policies concerning:
  - o Alerting families of the impending closure.
  - o Ensuring residents have appropriate identification (such as wrist bands) on their person if they are being transferred to other facilities. Wristbands should contain relevant medical history.
  - o Tracking where residents were discharged.
  - o Packing the residents' essentials, such as: several changes of clothing, medical records, and prescription medications..

#### *Pandemic Period*

- ✓ If discharging the resident to his/her family, provide resources to enable the family to provide care at home, such as:
  - the resident's medications.
  - sending home with the patient written or videotaped instructions regarding caregiving skills.
  - the American Red Cross has home care training that will teach families who need to provide care to the family members who are being discharged. It covers basic medical care, such as insulin injections.

## V.I. Recovery: Returning to Routine Operations

*Accurate projections of recovery times should be provided and public support and understanding should be solicited during the recovery process.* Critical Incident Protocol – A Public Private Partnership. Michigan University, 2000.

### Assumptions

- A given community can expect to be affected by a pandemic for 6-8 weeks. Subsequent waves are the norm in previous communities, but it will be important for communities to begin the process of reconstruction after the first wave to reduce adverse economic impacts.
- Recovery will be a tiered process that will involve working with community partners to prioritize and begin restoring essential services.

### Steps

- ✓ Contact staff and develop a recovery team to coordinate re-opening and to establish priorities for resuming operations.
- ✓ Since employees who will rely on you for support after an emergency are your most valuable asset, consider the range of services that you could provide or arrange for, including:
  - cash advances/salary continuation
  - flexible/reduced work hours
  - crisis counseling
  - care packages
  - child/elder care
- ✓ Notify families and vendors of timing of re-opening.
- ✓ Acknowledge anxiety, grief and distress associated with pandemic. Hold incident stress debriefing for staff (helps people deal with normal reactions to abnormal stress).
- ✓ Provide clear, consistent information to residents, their families and any other interested parties regarding the facility's limitations upon reopening.
- ✓ Advise employees, families and residents that additional waves of pandemic may occur and that must prepare accordingly. Vaccinate staff and residents with pandemic vaccine, as it becomes available.
- ✓ Maintain continuity of operations in subsequent waves with support employees who are immunized or who have developed immunity.
- ✓ Obtain lessons learned from first wave and, if needed change your continuity plan to be better prepared for subsequent waves.

## Appendix A

### Colorado Local Health Departments and County Nursing Services

Adams

Tri-County Health Department  
7000 East Belleview, Suite 301  
Greenwood Village, CO 80111-1628  
Phone: 303-220-9200; Fax: 303-220-9208

Alamosa

Alamosa County Nursing Service  
P.O. Box 178  
Alamosa, CO 81101-0178  
Phone: 719-589-6639; Fax: 719-589-1103

Arapahoe

Tri-County Health Department  
7000 East Belleview, Suite 301  
Greenwood Village, CO 80111-1628  
Phone: 303-220-9200; Fax: 303-220-9208

Archuleta

San Juan Basin Health Department  
P.O. Box 140  
Durango, CO 81302  
Phone: 970-247-5702; Fax: 970-247-9126

Baca

Baca County Nursing Service  
700 Colorado Street  
Springfield, CO 81073-1425  
Phone: 719-523-6621; Fax: 719-523-6537

Bent

Bent County Nursing Service Authority  
701 Park Avenue  
Las Animas, CO 81054-1109  
Phone: 719-456-0517; Fax: 719-456-0518

Boulder

Boulder County Public Health  
3450 Broadway  
Boulder, CO 80304-1824  
Phone: 303-441-1100; Fax: 303-441-1452

Broomfield

Broomfield Health and Human Services  
Department  
6 Garden Center  
Broomfield, CO 80020-1730  
Phone: 720-887-2200; Fax: 720-887-2229

Chaffee

Chaffee County Public Health and Human  
Services  
209 East 3rd Street

Salida, CO 81201-2614  
Phone: 719-539-4510; Fax: 719-539-7197

Cheyenne

Cheyenne County Public Health  
P.O. Box 38  
Cheyenne Wells, CO 80810-0038  
Phone: 719-767-5616; Fax: 719-767-8747

Clear Creek

Clear Creek County Nursing Service  
P.O. Box 3669  
Idaho Springs, CO 80452  
Phone: 303-567-3147; Fax: 303-567-3132

Conejos

Conejos County Nursing Service  
P.O. Box 78  
La Jara, CO 81140  
Phone: 719-274-4307; Fax: 719-274-4309

Costilla

Costilla County Nursing Service  
P.O. Box 99  
San Luis, CO 81152  
Phone: 719-672-3332; Fax: 719-672-3856

Crowley

Crowley County Public Health Nursing Service  
13 West 3rd Street  
La Junta, CO 81050  
Phone: 719-267-4750; Fax: 719-267-3114

Custer

Custer County Public Health Nursing Service  
P.O. Box 120  
Westcliffe, CO 81252  
Phone: 719-783-3369; Fax: 719-783-0959

Delta

Delta County Health and Human Services  
Department  
255 West 6th Street  
Delta, CO 81416-1626  
Phone: 970-874-2165; Fax: 970-874-2175

Denver

Denver Health and Hospital Authority  
605 Bannock Street, MC 1914  
Denver, CO 80204-4507  
Phone: 303-436-6000; Fax: 303-436-7211

Dolores

Dolores County Nursing Service

P.O. Box 368  
Dove Creek, CO 81324  
Phone: 970-677-2387; Fax: 970-677-2948

Douglas

Tri-County Health Department  
7000 East Belleview, Suite 301  
Greenwood Village, CO 80111-1628  
Phone: 303-220-9200; Fax: 303-220-9208

Eagle

Eagle County Health & Human Services  
P.O. Box 660  
Eagle, CO 81631  
Phone: 970-328-8840; Fax: 970-328-8829

Elbert

Elbert County Public Health  
P.O. Box 201  
Kiowa, CO 80117  
Phone: 303-621-3144; Fax: 303-621-3167

El Paso

El Paso County Department of Health and Environment  
301 South Union Boulevard  
Colorado Springs, CO 80910-3123  
Phone: 719-578-3199; Fax: 719-578-3192

Fremont

Fremont County Public Health Nursing Service  
172 Justice Center Road  
Canon City, CO 81212-9354  
Phone: 719-275-1626; Fax: 719-275-4328

Garfield

Garfield County Public Health Nursing Service  
195 W. 14th St.  
Rifle, CO 81650  
Phone: 970-625-5200; Fax: 970-625-4804

Gilpin

Gilpin County Public Health & Environmental Services  
2960 Dory Hill Road, Suite 120  
Black Hawk, CO 80403  
Phone: 303-582-5803; Fax: 303-582-5798

Grand

Grand County Public Health Nursing Service  
P.O. Box 264  
Hot Sulphur Springs, CO 80451-0264  
Phone: 970-725-3288; Fax: 970-725-3438

Gunnison

Gunnison County Public Health  
225 North Pine Street, Suite E  
Gunnison, CO 81230-2333  
Phone: 970-641-0209; Fax: 970-641-8346

Hinsdale

Hinsdale County Public Health and Community Services  
P.O. Box 277  
Lake City, CO 81235  
Phone: 970-944-0321; Fax: 970-944-1122

Huerfano

Las Animas-Huerfano Counties District Health Department  
412 Benedicta Avenue  
Trinidad, CO 81082  
Phone: 719-846-2213; Fax: 719-846-4472

Jefferson

Jefferson County Department of Health and Environment  
1801 19th Street  
Golden, CO 80401-1798  
Phone: 303-271-5700; Fax: 303-271-5702

Kiowa

Kiowa County Nursing Service  
P.O. Box 414  
Eads, CO 81036-0414  
Phone: 719-438-5782; Fax: 719-438-2208

Kit Carson

Kit Carson County Health and Human Services  
P.O. Box 70  
Burlington, CO 80807-0070  
Phone: 719-346-7158; Fax: 719-346-8066

Lake

Lake County Public Health Nursing Service  
P.O. Box 626  
Leadville, CO 80461  
Phone: 719-486-0118; Fax: 719-486-4168

La Plata

San Juan Basin Health Department  
PO Box 140  
Durango, CO 81302  
Phone: 970-247-5702; Fax: 970-247-9126

Larimer

Larimer County Department of Health and Environment  
1525 Blue Spruce Drive  
Fort Collins, CO 80524-2004  
Phone: 970-498-6700; Fax: 970-498-6772

Las Animas

Las Animas-Huerfano Counties District Health Department  
412 Benedicta Avenue  
Trinidad, CO 81082  
Phone: 719-846-2213; Fax: 719-846-4472

Lincoln

Lincoln County Public Health Nursing Services  
P.O. Box 125  
Hugo, CO 80821-0125; Phone: 719-743-2526  
Fax: 719-743-2482

Logan

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

Mesa

Mesa County Health Department  
P.O. Box 20000-5033  
Grand Junction, CO 81502-5033  
Phone: 970-248-6900; Fax: 970-248-6972

Mineral

Mineral County Public Health  
P.O. Box 425  
Creede, CO 81130-0425  
Phone: 719-658-2416; Fax: 719-658-3001

Montezuma

Montezuma County Health Department  
106 West North Street  
Cortez, CO 81321-3189  
Phone: 970-565-3056; Fax: 970-565-0647

Montrose

Montrose Health and Human Services  
1845 S. Townsend  
Montrose, CO 81401  
Phone: 970-252-5000; Fax: 970-252-5060

Morgan

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

Otero

Otero County Department of Health  
13 West 3rd Street  
La Junta, CO 81050  
Phone: 719-383-3040; Fax: 719-383-3060

Ouray

Ouray County Public Health Department  
P.O. Box 670  
Ouray, CO 81427  
Phone: 970-325-4670; Fax: 970-325-7314

Park

Park County Public Health Nursing Service  
P.O. Box 1194  
Bailey, CO 80421  
Phone: 303-816-5970; Fax: 303-838-5578

Phillips

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

Pitkin

Community Health Services, Inc.  
0405 Castle Creek Road, Suite 6  
Aspen, CO 81611  
Phone: 970-920-5420; Fax: 970-920-5419

Prowers

Prowers County Public Health Nursing Service  
1001 South Main Street  
Lamar, CO 81052-3838  
Phone: 719-336-8721; Fax: 719-336-9763

Pueblo

Pueblo City-County Health Department  
151 Central Main  
Pueblo, CO 81003-4297  
Phone: 719-583-4300; Fax: 719-583-4554

Rio Blanco

Rio Blanco County Nursing Service  
209 East Main, #103  
Rangely, CO 81648  
Phone: 970-878-9525; Fax: 970-675-8250

Rio Grande

Rio Grande County Public Health  
925 6th Street, Room 101  
Del Norte, CO 81132  
Phone: 719-657-3352; Fax: 719-657-2286

Routt

Northwest CO Visiting Nurse Association, Inc.  
940 Central Park Drive, Suite 101  
Steamboat Springs, CO 80487-8816  
Phone: 970-879-1632; Fax: 970-870-1326

Saguache

Saguache County Public Health Nursing Service  
P.O. Box 68  
Saguache, CO 81149  
Phone: 719-655-2533; Fax: 719-655-0105

San Juan

San Juan County Nursing Service  
P.O. Box 619  
Silverton, CO 81433  
Phone: 970-387-0242; Fax: 970-387-5036

San Miguel

San Miguel County Public Health Nursing Serv  
P.O. Box 949  
Telluride, CO 81435  
Phone: 970-728-4289; Fax: 970-728-9276

Sedgwick

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

Summit

Summit County Public Health Nursing Service  
P.O.Box 2280  
Frisco, CO 80443  
Phone: 970-668-5230; Fax: 970-668-4115

Teller

Teller County Public Health  
P.O. Box 928  
Divide, CO 80814  
Phone: 719-687-6416; Fax: 719-687-6501

Washington

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

Weld

Weld County Dept of Public Health &  
Environment  
1555 North 17th Avenue  
Greeley, CO 80631  
Phone: 970-304-6410; Fax: 970-304-6412

Yuma

Northeast Colorado Health Department  
700 Columbine Street  
Sterling, CO 80751-3728  
Phone: 970-522-3741; Fax: 970-522-1412

**Appendix B**  
**Colorado Local Offices of Emergency Management**  
**& Sheriffs' Offices**

Adams

Adams County Office of Emergency  
Management  
4201 E. 72nd Ave.  
Commerce City, CO 80022  
Office: 303-289-5441; Fax: 303-322-1404  
24 Hr Contact: 303-288-1535

Sheriff  
1901 E. Bridge St.  
Brighton, CO 80601  
303-655-3216

Alamosa

Alamosa Sheriffs Office  
1315 17th St., Box 2  
Alamosa, CO 81101-3555  
Office: 719-589-6608; Fax: 719-589-6134  
24 Hr Contact: 719-589-5787

Sheriff  
1315 17th St., #2  
Alamosa, CO 81101-3555  
719-589-6608

Arapahoe

Arapahoe County Emergency Preparedness  
13101 East Broncos Parkway  
Centennial, CO 80112  
Office: 720-874-4186; FAX: 720-874-4158  
24 Hr Contact: 303-795-4711

Sheriff  
13101 East Broncos Parkway  
Centennial, CO 80112  
720-874-4165

Archuleta

Archuleta County Dept. of Emergency Services  
P.O. Box 1507 / 1122 Hwy 84  
Pagosa Springs, CO 81147  
Office: 970-264-4440; FAX: 970-264-8306  
24 Hr Contact: 970-264-2131

Sheriff  
P.O. Box 638 / 949 San Juan St.  
Pagosa Springs, CO 81147  
970-264-2131

Baca

Office of Emergency Services  
741 Main St.  
Springfield, CO 81073-0116  
Office: 719-523-6532 / 719-529-9059; FAX:  
719-523-6584  
24 Hr Contact: 719-523-4511

Sheriff Terry Mullins  
265 E. Second  
Springfield, CO 81073  
719-523-4511

Bent

Bent County Emergency Management  
Coordinator  
11100 County Rd GG .5  
Las Animas, CO 81054  
Office: 719-456-0796; FAX: 719-456-0476  
24 Hr: 719-456-1363

Sheriff Gerry Oyen  
11100 County Road GG 5  
Las Animas, CO 81054  
719-456-0795

Boulder

Boulder County/City Off of Emerg Management  
1805 33rd St.  
Boulder, CO 80301  
Off:303-441-4351/ 303-441-3637/303-441-3390  
FAX: 303-441-3884 / 303-441-4350  
24 Hr Contact: 303-441-4444

Sheriff Joseph Pelle  
1777 6th St.  
Boulder, CO 80302-5814  
303-441-4605

Broomfield

Emergency Management Unit  
11600 Ridge Parkway  
Broomfield, CO 80021  
Office: 720-887-2078; FAX: 720-887-2001  
24 Hr Contact: 303-438-6400

Chaffee

Chaffee County Office of Emergency Services  
P.O. Box 699 /128 Crestone  
Salida, CO 81201  
Office: 719-539-7459; FAX: 719-539-7442  
24 Hr Contact: 719-539-2596

Sheriff Timothy Walker  
P.O. Box 699  
Salida, CO 81201  
719-539-2596

Cheyenne

Office of Emergency Management  
23200 Hwy, 385  
Burlington, CO 80807  
Office: 719-346-8538; FAX: 719-346-8542  
24 Hr Contact: 719-346-9325

Sheriff Virgil Drescher  
Box 363  
Cheyenne Wells, CO 80810  
719-767-5633

Clear Creek

Emergency Management Coordinator  
P.O. Box 2000  
Georgetown, CO 80444  
303-679-2320 (office); 303-679-2440 (fax)

Sheriff Don Krueger  
P.O. Box 2000  
Georgetown, CO 80444  
303-679-2447

Conejos

6683 County Road 13  
Box 1586  
Conejos, CO 81101  
Office: 719-376-5654; FAX: 719-376-5661  
24 Hr Contact: 719-376-5921

Sheriff Joe Taylor  
P.O. Box 37  
Conejos, CO 81129  
719-376-2196

Costilla

Costilla Co Emergency Management  
P.O. Box 130  
San Luis, CO 81152  
Office: 719-672-9109; FAX: 719-672-3003  
24 Hr Contact: 719-672-3302

Sheriff Roger Benton  
P.O. Box 6  
San Luis, CO 81152  
719-672-3302

Crowley

Crowley Co Emergency Management  
311 Main St.  
Ordway, CO 81063  
Office: 719-262-5555 x230; FAX: 719-267-3192  
24 Hr Contact: 719-267-5555 x1

Sheriff Jeffrey Keyes  
601 Main St.  
Ordway, CO 81063  
719-267-5555

Custer

EM Director/Undersheriff  
702 Rosita Ave / P.O. Box 1489  
Westcliff, Co. 81252  
Office: 719-783-2270; Fax: 719-783-9085  
24 Hr Contact: 719-783-2270

Sheriff Fred Jobe  
P.O. Box 92 / 205 S. 6th  
Westcliffe, CO 81252  
719-783-2270

Delta

Director/Coordinator Delta Co Emergency Preparedness  
P.O. Box 172  
Delta, CO 81416-0172  
Office: 970-874-2004; FAX: 970-874-2027  
24 Hr Contact: 970-874-2000

Sheriff Fred McKee  
P.O. Box 172  
Delta, CO 81416  
970-874-2000

Denver

Office of Emergency Management  
1437 Bannock St., Rm. 3  
Denver, CO 80202  
Office: 720-865-7600; FAX: 720-865-7691  
24 Hr Contact: 303-640-9999

Director of Corrections/Undersheriff  
1437 Bannock St. Room 508  
Denver CO 80202  
720-865-9567

Dolores

Dolores County Sheriff's Dept.  
P.O. Box 505  
Dove Creek, CO 81324  
Office: 970-677-2257; FAX: 970-677-2880  
24 Hr Contact: 970-677-2500

Sheriff Jerry Martin  
P.O. Box 505  
Dove Creek, CO 81324  
970-677-2257

Douglas

Douglas County Emergency Management  
4000 Justice Way  
Castle Rock, CO 80109  
Office: 303-660-7589; Fax: 303-814-3319  
24 hour contact: 303-660-7500

Sheriff David A. Weaver  
4000 Justice Way, Ste. 3625  
Castle Rock, CO 80104  
303-660-7541

Eagle

Eagle County Emergency Management  
P.O. Box 850  
Eagle, CO 81631  
Office: 970-328-8603; Fax: 970-328-8629  
24 Hr Contact: 970-328-6611

Sheriff Joseph D. Hoy  
P.O. Box 359 / 0885 E. Chambers  
Eagle, CO 81631  
970-328-6611

Elbert

Office of Emergency Management  
P.O. Box 295  
Kiowa, CO 80117  
Office: 303-805-6131; FAX: 303-621-2055

Sheriff William Frangis  
P.O. Box 486  
Kiowa, CO 80117  
303-621-2027

El Paso

El Paso Co Emergency Mgmt.  
305 S. Union Blvd.  
Colorado Springs, CO 80910  
Office: 719-575-8401; FAX: 719-575-8591  
24 Hr Contact: 719-390-5555

Sheriff Terry Maketa  
205 S. Cascade Ave.  
Colorado Springs, CO 80903  
719-520-7204

Fremont

Fremont County Emergency Mgmt.  
100 Justice Center Road  
Canon City, CO 81212  
Office: 719-276-7420; FAX: 719-276-5593

24 Hr Contact: 719-276-5600

Bill Johnson  
EM Assistant  
Office: 719-276-7421

Sheriff

100 Justice Center Rd.  
Canon City, CO 81212-9354  
719-276-5555

Garfield

Emergency Operations Commander  
107 Eighth Street  
Glenwood Springs CO 81601  
Office: 970-945-0453; Fax: 970-945-6430  
Emergency: 970-625-8095

Sheriff Lou Vallario  
P.O. Box 249 / 701 Colorado  
Glenwood Springs, CO 81601  
970-945-0453

Gilpin

Gilpin Co Sheriff's Office  
P.O. Box 366  
Central City, CO 80427  
Off:303-579-1199;24 Hr Contact:303-582-5511

Sheriff  
2960 Dory Hill Rd., #300  
Golden, CO 80403  
303-582-1060

Grand

P.O. Box 264  
Hot Sulphur Springs, CO 80451  
Office: 970-887-2737; Fax: 970-887-1698

Sheriff P.O. Box 48  
Hot Sulphur Springs, CO 80451  
970-725-3344

Gunnison

200 E Virginia Av.  
Gunnison CO 81230  
Office: 970-641-2481; Fax: 970-641-7693  
24 hour contact: via Gunnison Communications  
970-641-8000

Sheriff  
200 N. Iowa  
Gunnison, CO 81230  
970-641-1113

Hinsdale

Hinsdale Emergency Management  
P.O. Box 277  
Lake City, CO 81235  
Office: 970-944-2806; FAX: 970-944-2630  
24 Hr Contact: 970-944-2291

Sheriff P.O. Box 127  
Lake City, CO 81235  
970-944-2291

Huerfano

Emergency Management  
500 S. Albert  
Walsenburg, CO 81089  
Office: 719-738-1919; FAX: 719-738-1717

24 Hr Contact: 719-738-1044

500 S. Albert Ave.

Walsenburg, CO 81089

719-738-1600

Jackson

Jackson Co Administrator  
P.O. Box 1019  
Walden, CO 80480  
Office: 970-723-4660; FAX: 970-723-4706  
24 Hr Contact: 970-723-4242

Sheriff  
P.O. Box 565  
Walden, CO 80480  
970-723-4242

Jefferson

Jefferson Co Dept. of Emergency Management  
800 Jefferson Parkway  
Golden, CO 80419  
Office: 303-271-4900; FAX: 303-271-4905  
24 Hr Contact: 303-277-0211

Sheriff  
200 Jefferson County Pkwy.  
Golden CO 80401-2697  
303-271-5305

Kiowa

Kiowa Co Office of Emergency Services  
P.O. Box 172/ 1305 Goff Street  
Eads, CO. 81036  
Office 719-438-2288; Fax 719-438-5327  
24 hr. Contact 719-438-5411

Sheriff P.O. Box 427  
Eads, CO 81036  
719-438-5306

Kit Carson

Kit Carson Emergency Management  
23200 Hwy 385  
Burlington, CO 80807  
Office: 719-346-8538; FAX: 719-349-8542

Sheriff 251 16th St., Room 302  
Burlington, CO 80807  
719-346-8934

Lake

Lake County Office of Emergency Management  
P.O. Box 255  
Leadville, Colorado 80461  
Office: 719-486-4191; Home Off: 719-486-0246  
Fax: 719-486-0139; 24 Hour: 719-486-1249

Sheriff  
P.O. Box 255/505 Harrison Ave.  
Leadville, CO 80461  
719-486-1249

La Plata

La Plata Co Office of Emergency Management  
1060 E. Second Ave.  
Durango, CO 81301  
Office: 970-382-6270; FAX: 970-382-6298  
24 Hr Contact: 970-385-2900

Sheriff  
742 Turner Dr.  
Durango, CO 81301  
970-247-1157

Larimer

Emergency Management Specialist  
Larimer Co Emergency Management  
2501 Midpoint Dr.  
Ft. Collins, Co. 80525  
Office: 970-498-5310; FAX: 970-498-9203  
24 Hr Contact: 970-498-5141

Sheriff  
25012 Midpoint Drive  
Fort Collins, CO 80525  
970-498-5100

Las Animas

Las Animas Co Emergency Management  
Las Animas County Courthouse  
200 East First Street Rm. 103  
Trinidad, CO 81082

Office: 719-845-2568; Fax: 719-845-2598  
24 Hr Contact: 719-846-2211  
Sheriff

2309 E. Main St.  
Trinidad, CO 81082-2059

Lincoln

Lincoln Co Emergency Preparedness  
P.O. Box 39  
Hugo, CO 80821  
Office: 719-743-2810; FAX: 719-743-2815  
25 Hr. Contact: 719-743-2426

719-846-2211

Sheriff  
Box 10 / 103 3rd Ave.  
Hugo, CO 80821  
719-743-2426 or 866-5375

Logan

Logan County Emergency Management  
421 N. 4th  
Sterling, CO 80751  
Office: (970) 522-9700 FAX: (970) 521-0632

Sheriff P.O. Box 749  
Sterling, CO 80751  
970-522-2578

Mesa

Mesa Co Office of Emergency Mgmt.  
544 Rood Ave.  
Grand Junction, CO 81502  
Office: 970-244-1763; FAX: 970-255-7178  
24 Hr Contact: 970-241-3475

Sheriff Stan Hilkey  
P.O. Box 20000  
Grand Junction, CO 81502-5016  
970-244-3500

Mineral

Mineral Co Emergency Management  
P.O. Box 454  
Creede, CO 81130  
Office: 719-658-2600; FAX: 719-658-2764  
24 Hr Contact: 719-658-2600

Sheriff  
1201 N. Main  
Creede, CO 81130  
719-658-2600

Moffat

Moffat Co Office of Emergency Mgmt.  
800 W. First St., Suite 100  
Craig, CO 81625  
Office: 970-826-2303; FAX: 970-824-9780  
24 Hr Contact: 970-824-6501

Sheriff  
800 W. First St., Suite 100  
Craig, CO 81625  
970-824-4495

Montezuma

Montezuma County SO  
730 East Driscoll  
Cortez, CO 81321  
Office: 970-565-8452 x320; FAX: 970-565-3731  
970-565-8452 x303

24 Hr Contact: 970-565-8441  
Sheriff 730 East Driscoll  
Cortez, Co 81321

Montrose

Montrose County Manager  
161 S. Townsend Avenue  
Montrose, CO 81401  
Office: 970-252-4510; FAX: 970-252-4060

Sheriff  
1200 N Grand Ave.  
Montrose, CO 81401-3146  
970-249-6606

Morgan

Morgan Office of Emergency Mgmt.  
P.O. Box 1130/212 S. West Street  
Fort Morgan, CO 80701  
Office: 970-867-8506; FAX: 970-867-7344  
24 Hr Contact: 970-867-8531

Sheriff  
801 E. Beaver Ave.  
Fort Morgan, CO 80701  
970-867-2461

Otero

Otero Co Office of Emergency Services  
P.O. Box 511  
La Junta, CO 81050  
Office: 719-384-5941; FAX: 719-384-2272  
24 Hr Contact: 719-384-5941

Sheriff  
222 East Second Street  
La Junta, CO 81050  
719-384-5941

Ouray

Ouray County Emergency Manager  
P.O. Box 585  
Ouray, CO 81427  
Phone: 970-325-7272; Fax: 970-325-0225  
24 Hour Phone: 970-325-7272

Sheriff  
P.O. Box 585  
Ouray, CO 81427  
970-325-7272

Park

P.O. Box 1373  
Fairplay, Co 80440  
Phone: 719-836-4372; Fax: 719-836-4113  
Alternate Phone: 719-839-1441; 24 Hour Phone:  
719-839-4121

Sheriff  
Sheriff P.O. Box 27  
Fairplay, CO 80440  
719-836-2494

Phillips

Phillips Co Office of Emergency Services  
221 S. Inter Ocean  
Holyoke, CO 80734  
Office: 970-854-3778; FAX: 970-854-3811  
24 Hr Contact: 970-854-3144

Sheriff  
221 S. Inter Ocean  
Holyoke, CO 80734  
970-854-3644

Pitkin

Pitkin County Disaster Coordinator  
506 E. Main St., Suite 101  
Aspen, CO 81611  
Office: 970-920-5234; FAX: 970-920-5307  
24 Hr Contact: 970-920-5300

Sheriff 506 E. Main  
Aspen, CO 81611  
970-920-5300

Prowers

Civil Defense Agency  
2500 S. Main St./Box 829  
Lamar, CO 81052  
Office: 719-336-2674; FAX: 719-336-4883  
24 Hr Contact: 719-336-3977

Sheriff P.O. Box 391  
Lamar, CO 81052  
719-336-8050  
719-336-7724

Pueblo

Pueblo Co Office of Emergency Preparedness  
320 West 10th St., B-1  
Pueblo, CO 81003-2995  
Office: 719-583-6202; FAX: 719-583-6218  
24 Hr Contact: 719-583-6250  
<http://dem.co.pueblo.co.us>

Dept. of Emergency Management  
320 West 10th St., B-1  
Pueblo, CO 81003-2995  
Office: 719-583-6201; FAX: 719-583-6218  
24 Hr. Contact: 719-583-6250  
<http://dem.co.pueblo.co.us>

Sheriff  
909 Court St.  
Pueblo, CO 81003  
719-583-6125

Rio Blanco

Rio Blanco Office of Emergency Services  
P.O. Box 1460  
Meeker, CO 81641  
Office: 970-878-5023; FAX: 970-878-3127  
24 Hr Contact: 970-878-5023

Sheriff P.O. Box 647  
Meeker, CO 81641  
Office: 970-878-5023; FAX: 970-878-5796  
24 Hr Contact: 970-878-5023

Rio Grande

Rio Grande Emergency Management  
640 Cherry St.  
Del Norte, CO 81132  
Office: 719-657-4000; FAX: 719-657-0917  
24 Hr Contact: 719-657-4000

Sheriff  
640 Cherry St.  
Del Norte, CO 81132-3214  
719-657-4000

Routt

Routt Co Emergency Management  
P.O. Box 773598  
Steamboat Springs, CO 80477-3598  
Office: 970-870-5551; FAX: 970-879-3992  
24 Hr Contact: 970-879-1090

Sheriff  
P.O. Box 773087  
Steamboat Springs, CO 80477  
970-879-1090

Saguache

Saguache Co Office of Emergency Management  
P.O. Box 655/ 501 4th Street  
Saguache, CO 81149  
Office: 719-655-2537; FAX: 719-655-2766  
24 Hr Contact: 719-655-2544

Sheriff  
P.O. Box 265 / 530 5th Street  
Saguache, CO 81149  
719-655-2544

San Juan

Office of Emergency Services  
PO Box 178  
Silverton, CO 81433  
Phone: 970.387-5531; Fax: 970-387-0251  
24 hour phone: 970.387.5531  
Email: [sjcepm@netscape.net](mailto:sjcepm@netscape.net)

Sheriff  
P.O. Box 178 / 1557 Green Street  
Silverton, CO 81433  
970-387-5531

San Miguel

San Miguel Co Sheriff's Office  
851 63 L Road Telluride, CO 81435  
Office: 970-728-9546; FAX: 970-728-9206  
24 Hr Contact: 970-728-3081  
<http://www.co.san-miguel.co.us/emergenc.htm>

Sheriff  
851 63 L Road  
Telluride, CO 81435  
970-728-4442

Sedgwick

Sedgwick Co Emergency Services  
419 Maple St.  
Julesburg, CO 80737  
Office: 970-474-2806; FAX: 970-474-2749  
24 Hr Contact: 970-474-3355

Sedgwick Co Courthouse  
Julesburg, CO 80737  
970-474-3355

Southern Ute Indian Tribe

P.O. Box 737  
Ignacio, CO 81137  
Office: 970-563-0100 x2449; Fax: 970-563-0302  
24 Hr Contact: 970-563-4401

Summit

Summit County Sheriff's Office  
P.O. Box 210  
Breckenridge, CO 80424  
Office: 970-453-2232 ext 336 or 303-573-7598  
Fax: 970-453-7329  
[www.co.summit.co.us/publicsafety/public1.htm](http://www.co.summit.co.us/publicsafety/public1.htm)

Sheriff  
P.O. Box 210 / 501 N. Park  
Breckenridge, CO 80424  
970-453-2232; 970-573-7598

Teller

Teller County OEM  
11400 West Highway 24  
Divide, CO 80814  
Office: 719-687-8648; FAX: 719-687-8648  
24 Hr Contact: 719-687-9652  
[www.co.teller.co.us/emergency%Preparedness/emerprep\\_main.htm](http://www.co.teller.co.us/emergency%Preparedness/emerprep_main.htm)

Sheriff  
P.O. Box 27  
Divide, CO 80814  
719-687-9652

Ute Mountain Ute Indian Tribe  
P.O. Box 169  
Towaoc, CO 81334  
Office: 970-564-5441; Fax: 970-564-5443  
24 Hr Contact: 970-564-5441 or 970-565-3706

Washington

Washington Co Emergency Mgmt.  
150 Ash Ave.  
Akron, CO 80720  
Office: 970-345-2701  
FAX: 970-345-2419 or 970-345-6607  
24 Hr Contact: 970-345-2244

Sheriff P.O. Box 235/150 Ash Street  
Akron, CO 80720  
970-345-2244

Weld

Weld County Sheriff's Office  
Director Office of Emergency Management  
1950 O Street Greeley Co. 80631  
Office: 970-304-6544; FAX: 970-304-6543  
24 Hr Contact: 970-304-6540  
<http://www.co.weld.co.us/sheriff/oem.html>

Sheriff  
1950 O Street  
Greeley, CO 80631  
970-356-4015 x2801 or 800-436-9276 ext 2801

Yuma

Yuma Co Emergency Mgmt.  
P.O. Box 512  
Yuma, CO 80759  
Office: 970-848-3799; FAX: 970-848-3224  
24 Hr. Contact: 970-848-0464

Sheriff  
310 Ash St.  
Wray, CO 80758  
970-332-4805

**City Emergency Managers**

Arvada  
Jim Lancy  
Arvada Off of Emer Prepared;City of Arvada  
CMO  
8101 Ralston Rd.

Arvada, CO 80001  
Office: 720-898-7510;FAX: 720-898-7515  
24 Hr Contact: 303-540-9949  
Email: [jlancy@ci.arvada.co.us](mailto:jlancy@ci.arvada.co.us)

Aurora

Deanne Criswell, Coordinator  
Office of Emergency Mgmt.  
12250 East Iliff Ave. #300  
Aurora, CO 80114

Office: 303-326-8963; FAX: 303-326-8986  
24 Hr Contact: 303-627-3130  
Email: [dcriswell@auroragov.org](mailto:dcriswell@auroragov.org)

Brighton

Stacy Davis  
Brighton, CO 80601  
Office: 303-655-2043; FAX: 303-655-2047

24 Hr Contact: 303-659-3322  
Email: [sdavis@ci.brighton.co.us](mailto:sdavis@ci.brighton.co.us)

Brush

Brush Emergency Management  
118 Carson St.

Brush, CO 80723  
Office: 970-842-5074; FAX: 970-842-5909  
24 Hr Contact: 970-842-5021

Canon City

Chief Dave Boden  
Canon City Fire Dept.  
1475 N. 15th St.

Canon City, CO 81212  
Office: 719-275-8666; 24 Hr Contact: 719-275-8666

Colorado Springs

Bret Waters, Director  
Colorado Springs Fire Department  
Office of Emergency Management  
375 Printers Parkway

Colorado Springs, CO 80910  
Office: 719-385-5957; FAX: 719-385-7387  
24 Hr Contact : 719-444-7623  
Email: [bwaters@springsgov.com](mailto:bwaters@springsgov.com)

Colorado State University

Chief of Police/EM Coordinator  
Colorado State University Police Dept.  
600 South Dr.  
Fort Collins, CO 80523

Office: 970-491-1159; FAX: 970-491-2294  
24 Hr Contact: 970-491-6425

Commerce City

Chuck Baker  
Commerce City Police Dept.  
5291 E. 60th Ave.  
Commerce City, CO 80222

Office: 303-289-3656; FAX: 303-289-3732  
24 Hr Contact: 303-287-2844

Delta

Chief of Police  
P.O. Box 19 / 4th & Main  
Delta, CO 81416

Office: 970-874-7566; FAX: 970-874-8776  
24 Hr Contact: 970-874-7676  
970-874-2015

Durango

Chief Al Bell  
Emergency Operations Coordinator  
990 East Second Avenue.  
Durango, CO 81301

Office: 970-375-4701; FAX: 970-375-4718  
24 Hr Contact: 970-385-2900  
Email: [BellAW@ci.durango.co.us](mailto:BellAW@ci.durango.co.us)

Englewood

Don Schoenbein  
Englewood Fire Department  
3615 S. Elati  
Englewood, CO 80110

Office: 303-762-2477; FAX: 303-781-8163  
24 Hr Contact: 303-761-7410  
303-761-7490

Erie

Chief Stephen P. Hasler

City of Erie Police Dept.

P.O. Box 510  
Erie, CO 80516  
Office: 303-926-2800; FAX: 303-926-2805  
Estes Park

Lieutenant Gregg Filsinger  
Estes Park Police Dept.  
P.O. Box 1287

Federal Heights

Chief Andrew Marsh  
Federal Heights Fire Dept.  
2400 W. 90th Ave  
Federal Heights, CO 80260

Fort Collins

Mike Gavin  
Director, Office of Emergency Management  
City of Fort Collins  
3400 W. Vine, Bldg B.

Fort Lupton

Sgt. David Dunkle  
Director of Public Safety  
Fort Lupton Police Dept.  
130 S. McKinley, Box 213

Glendale

Fire Chief Arthur Johansen  
Emergency Prep. Coordinator  
Glendale Fire Dept.  
950 S. Birch St.

Golden

Chief John Bales  
Golden Fire Dept.  
911 Tenth St.  
Golden, CO 80401

Greeley

Dale Lyman  
Emergency Management Battalion Chief  
Union Colony Fire Rescue  
919 7th Street

Greenwood Village

Dave Fisher  
Emergency Preparedness Manager  
6060 S. Quebec St.

Lakewood

Brian Nielsen  
Environment Manager  
City of Lakewood  
480 S. Allison Pkwy.

24 Hr Contact: 303-926-2800

Estes Park, CO 80517  
Office: 970-586-4465; FAX: 970-586-4496  
24 Hr Contact: 970-586-4000

Office: 303-428-3526 x260; FAX: 303-428-0494  
24 Hr Contact: 303-428-8833

Fort Collins, CO 80521  
Office 970-416-2878; FAX: 970-221-0854  
24 Hr Contact: 970-221-6545  
Email: [migavin@fcgov.com](mailto:migavin@fcgov.com)

Fort Lupton, CO 80621  
Office: 303-857-4011; FAX: 303-857-2703  
24 Hr Contact: 303-857-4011

Glendale, CO 80222  
Office: 303-639-4400; FAX: 303-639-4419  
24 Hr Contact: 303-759-1512

Office: 303-384-8090; FAX: 303-384-8098  
24 Hr Contact: 303-384-8045  
Email: [jbales@ci.golden.co.us](mailto:jbales@ci.golden.co.us)

Greeley, Colorado 80631  
Office: 970-350-9501; FAX: 970-350-9525  
Email: [Dale.Lyman@greeleygov.com](mailto:Dale.Lyman@greeleygov.com)

Greenwood Village, CO 80110-4591  
Office: 303-773-2525; FAX: 303-486-1599  
24 Hr Contact: 303-773-2525

Lakewood, CO 80226-3127  
Office: 303-987-7192; FAX: 303-987-7667  
24 Hr Contact: 303-987-7111  
Email: [brinie@lakewood.org](mailto:brinie@lakewood.org)

Littleton

Stanley G. Bush, Director  
Littleton Emergency Planning Dept.  
2415 E. Maplewood Ave.  
Littleton, CO 80121-2817

Office: 303-794-2304; FAX: 303-794-0342  
24 Hr Contact: 303-794-1551  
Email: [sbsbush@aol.com](mailto:sbsbush@aol.com)

Longmont

Stephen P. Trunck, Manager  
Longmont Emergency Services  
225 Kimbark St.  
Longmont, CO 80501

Office: 303-651-8422; FAX: 303-651-8651  
24 Hr Contact: 303-651-8501  
Email: [steve.trunck@ci.longmont.co.us](mailto:steve.trunck@ci.longmont.co.us)

Louisville

Thomas N. Bock, Director  
Louisville Police Dept.  
749 Main St.  
Louisville, CO 80027

Office: 303-666-6565 x203; FAX: 303-666-8476  
24 Hr Contact: 303-441-4444  
Email: [bockt@ci.louisville.co.us](mailto:bockt@ci.louisville.co.us)

Loveland

Chief Mark Miller  
Loveland Fire Dept.  
410 E. 5th St.

Loveland, CO 80537  
Office: 970-962-2470; FAX: 970-962-2912  
24 Hr Contact: 970-962-2481

Northglenn

Russ VanHouten  
11701 Community Center Dr.  
Northglenn, CO 80233-1099

Office: 303-450-8878; FAX: 303-450-8896  
24 Hr Contact: 303-450-8892  
Email: [rvanhouten@northglenn.org](mailto:rvanhouten@northglenn.org)

Sheridan

Chief Ray Sample  
Sheridan Police Dept.  
4101 S. Federal Blvd.  
Sheridan, CO 80110-5399

Off: 303-762-2234 x240; FAX: 303-762-2238  
24 Hr Contact: 303-762-2211  
Email: [rsample@ci.sheridan.co.us](mailto:rsample@ci.sheridan.co.us)

Thornton

Gene Putman, P.E., P.T.O.E.  
Thornton Emergency Management  
9500 Civic Center Drive  
Thornton, Co 80229

Office: 303-538-7333; Fax: 303-538-7562  
24 Hr Contact 303-266-9963  
Email: [gene.putman@cityofthornton.net](mailto:gene.putman@cityofthornton.net)

University of Colorado - Boulder

Tom Carney  
Emergency Management Coordinator  
Campus Box 375  
Boulder, CO 80309-0375

Office: 303-492-5162; FAX: 303-492-2854  
Email: [Thomas.Carney@Colorado.EDU](mailto:Thomas.Carney@Colorado.EDU)  
\*See City of Boulder for more info.

Westminster

Mike Reddy  
Westminster Emergency Management  
4800 W. 92nd Ave.  
Westminster, CO 80031

Office: 303-430-2400 x4550; FAX: 303-429-6433  
24 Hr Contact: 303-430-4400  
Email: [mreddy@ci.westminster.co.us](mailto:mreddy@ci.westminster.co.us)

Wheat Ridge

Judy Sullivan / Michelle Stodden  
Wheat Ridge Police Dept.  
7500 W. 29th Ave.  
Wheat Ridge, CO 80215-6797  
Off: 303-235-2400 x 2359; FAX: 303-235-2949  
24 Hr Contact: 303-237-2220

## Appendix C

# Red Cross Pandemic Influenza Response Planning Information\*

*\*Based on current guidance from the National Red Cross and Local Chapter FAQ's*

### **Planning assumptions for the Red Cross Pan flu response:**

1. The number one priority for the Red Cross is volunteer safety.
2. There will be limited or no assistance from other chapters.
3. Travel may be restricted and local Red Cross Chapters will need their volunteers to serve in their home areas.
4. There may be a limited response from spontaneous volunteers due to the far-reaching nature of the illness.

### **In response to pandemic influenza, the Red Cross will not:**

1. Establish congregate care (shelter) facilities where such facilities would enhance the chance of disease transmission.
2. Manage or assume responsibility for medical facilities, special needs shelters and temporary infirmaries or overflow facilities for hospitals.
3. Purchase vaccines or medical supplies for use by public authorities.
4. Violate worker safety guidelines as established by OSHA.
5. Replace lost wages or assume responsibilities for needs arising from economic disruption.
6. Assume responsibilities for patient tracking.
7. Perform death notifications.

### **In response to pandemic influenza, the Red Cross will:**

- Be involved with planning and exercises with local partners, including municipal state, federal and local health departments, the Strategic National Stockpile, the Federal Emergency Management Agency, the Governor's Expert Emergency Epidemic Response Committee (GEEERC), etc.
- Assist with consistent public education messaging by activating their call center and using 1-800 GET INFO.
- Provide technical advice to agencies setting up temporary infirmaries for mass care.
- Provide a limited supply of cots and blankets in support of mass care.
- Assist with the distribution of needed bulk items, e.g. masks, food boxes, and other items.
- Assist with training and education by making available preparedness information, brochures on food and water and family emergency plans, assist ReadyColorado with training, providing training on family care giving.
- Work with partners, e.g., food banks, VOAD, to assist with providing food supplies to people in isolation or quarantine.

## Appendix D Cold vs. Flu Symptoms

The flu and the common cold are both respiratory illnesses but they are caused by different viruses.

**Onset of Symptoms.** A cold typically develops gradually. Initial symptoms of runny nose, sneezing, and chills are followed by coughing, headache, sore throat, loss of appetite, and nasal discharge. The flu most often hits abruptly, with a sudden high fever, dry cough, and headache.

**Symptoms.** The flu tends to make the whole body ache, whereas the common cold usually affects the nose and throat only. The following table compares the symptoms of a cold vs. flu.

<i>Symptoms</i>	<i>Cold</i>	<i>Flu</i>
fever	rare, low (less than 101F)	characteristic, high (102-104F); lasts 3-4 days
headache	rare	prominent
general aches, pains	slight	usual; often severe
fatigue, weakness	quite mild	can last up to 2-3 weeks
extreme exhaustion	never	early and prominent
stuffy nose	common	sometimes
sneezing	usual	sometimes
sore throat	common	sometimes
chest discomfort, hacking cough	mild to moderate hacking cough	common; can become severe cough

*Adapted from the FDA Consumer magazine (October 1996), Food and Drug Administration*