

## *Attachment 7*

### **Community Containment Measures, Including Non-Hospital Isolation and Quarantine**

At the federal level, the Secretary of the U.S. Department of Health and Human Services (HHS) has statutory responsibility for preventing the introduction, transmission, and spread of communicable diseases from foreign countries into the United States. HHS will set guidelines for international travel restrictions and issue recommendations for isolation, quarantine, or other community containment measures. The only international airport in Colorado is under the quarantine jurisdiction of the City and County of Denver. At the state level, the Colorado Department of Public Health and Environment (CDPHE) has the authority to isolate or quarantine persons, groups of people, or buildings in Colorado; and at the recommendation of the Governor's Expert Emergency Epidemic Response Committee (GEEERC), limit or close public gatherings and restrict movement of people. See Attachment 2 – Public Health Powers and Attachment 3 – GEEERC Draft Executive Orders.

The initial response to the emergence of a novel influenza viral subtype that is spread between people should focus on containing the virus at its source, if feasible, and preventing a pandemic. **Simply put, the most effective way to prevent person-to-person spread would be to keep the people who are infected with the virus away from the people who are not infected.** However, it usually is not possible to completely separate these groups when influenza is involved, because people can be contagious before they know they are infected. Containment measures may only slow the spread of influenza instead of completely stopping it, but this may allow time for the development or arrival of an effective vaccine, or for antiviral prophylaxis. The less efficiently the virus is transmitted from one person to another, the more effective the containment strategies are likely to be.

Containment strategies range from those affecting individuals (e.g., isolation of patients) to measures that affect groups or entire communities (e.g., monitoring of contacts, cancellation of public gatherings). Guided by the current epidemiological data, Colorado state and local public health will implement the most appropriate of these measures to maximize impact on influenza transmission and minimize impact on individual freedom of movement. Consideration will be given to all impacts of recommended measures and to the scientific basis of such recommendations. HHS will provide assistance to the states and localities, as requested, including sharing the experiences of others and providing advice on decision-making as the situation evolves.

The following table outlines the various containment interventions that public health may recommend, a description of the intervention and what type of surveillance that would be used to monitor its effectiveness. *Guidelines for implementation are currently under development.*

## INDIVIDUAL AND COMMUNITY CONTAINMENT MEASURES

<u>Containment Intervention</u>	<u>Guidelines for Implementation</u>	<u>Description of Intervention</u> <u>Type of Surveillance</u>
<b>Preparedness Planning</b>	<p style="text-align: center;"><i><b>Under Development</b></i></p> <p><b>To be used during:</b> Inter-pandemic: Phases 1 &amp; 2 (Stage 0); Pandemic Alert: Phases 3, 4, 5 (Stages 0, 1, 2); and Pandemic Period: Phase 6, Stage 3  (Pandemic still overseas)</p>	<p>Prepare to respond when a novel influenza virus is found. Education of the public about the possibility and rationale for containment strategies at this stage will be key to the future success of containment measures. Work with potential partners to set up various procedures for containment.</p> <ol style="list-style-type: none"> <li>1. Identify and engage public health, healthcare personnel, transportation workers, and law enforcement in preparedness planning and containment exercises.</li> <li>2. Identify potential isolation and quarantine facilities.</li> <li>3. Plan for setting up influenza clinics, influenza telephone hotlines, and other community triage efforts.</li> <li>4. Establish procedures for medical evacuation and isolation of quarantined persons.</li> <li>5. Develop educational materials to prevent stigmatization and provide mental health services to persons in isolation and quarantine as well as other affected persons.</li> <li>6. Establish procedures for delivering medical care, food, and services to persons in isolation and quarantine.</li> <li>7. Develop protocols for monitoring and enforcing quarantine measures.</li> <li>8. Ensure legal authority and procedures for various levels of containment.</li> <li>9. Establish procedures for issues related to employment compensation and job security.</li> <li>10. Recommend standard infection control measures, hand washing, and cough etiquette for cases of seasonal influenza.</li> </ol>
<b>ISOLATION AND QUARANTINE OF INDIVIDUALS OR SMALL GROUPS</b>		
<b>Patient Isolation</b>	<p style="text-align: center;"><i><b>Under Development</b></i></p> <p><b>Pandemic Period; Phase 6, Stage 4:</b> First human case in North America</p>	<p>Isolation is the separation and restriction of movement or activities of person(s) known to have the novel influenza virus, for the purpose of preventing transmission to others. It also allows for focused delivery of specialized health care. Ill persons are usually isolated in a hospital, but may be isolated at home or in a designated community-based facility, depending on their medical needs.</p> <p>Anyone coming in contact with an ill person in a hospital or community-based facility setting will be required to wear personal protective equipment and to avoid bringing the virus out of the isolation area. Healthcare staff must ensure appropriate isolation procedures are followed in healthcare settings.</p> <p>Provide public information about appropriate isolation procedures in home settings.</p> <p>Surveillance would be increased with additional laboratory testing of possible cases.</p>

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<u>Containment Intervention</u>	<u>Guidelines for Implementation</u>	<u>Description of Intervention</u> <u>Type of Surveillance</u>
<b>Potentially Exposed Persons</b>	<p style="text-align: center;"><b><i>Under Development</i></b></p> <p>Same as above, plus having a history of being in some type of enclosed area with persons thought to be infected</p>	<p>Quarantine is the separation and restriction of movement or activities of persons who are not ill but may have been exposed to the novel influenza. The main goal is to keep these people from infecting others. People are usually quarantined in their home, but they may also be quarantined in community-based facilities.</p> <p>Ideally, contacts should be identified and quarantined within 48 hours (the average incubation period for human influenza). This could involve people who were at a gathering in an enclosed area with a contagious person, such as on a bus or airplane. It could also involve people who were in a laboratory when exposure to a specimen could have occurred. People are usually quarantined in their home, but they may also be quarantined in community-based facilities.</p> <p>For effective isolation or quarantine, the following essential services need to be provided:</p> <ul style="list-style-type: none"> <li>• Food and water</li> <li>• Shelter</li> <li>• Medicines and medical consultations</li> <li>• Mental health and psychological support services</li> <li>• Other supportive services (e.g., day care)</li> <li>• Transportation to medical treatment, if required.</li> </ul> <p>People who are restricted by isolation or quarantine orders will be able to call the Colorado Health Education Line for the Public (COHELP line) at 1-877-462-2911 for assistance. People at that number will be able to refer them to the appropriate groups. Callers will be referred to appropriate resources.</p> <p>Anyone coming in contact with the person(s) in quarantine would be required to wear personal protective equipment and to avoid bringing the virus out of the area of quarantine. Covering of coughs and frequent hand washing will be encouraged of everyone.</p> <p><b><u>One of three types of monitoring of quarantined persons will be performed:</u></b></p> <p><b><u>I. Passive Monitoring-</u></b> recommended when the risk of exposure and subsequent development of disease is low, and the risk to others if recognition of the disease is delayed is also low. The contact is asked to perform self-assessment for symptoms at least twice daily and to contact</p>

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		<p>2. <b>Active Monitoring without Explicit Activity Restrictions-</b> recommended when the risk of exposure to and subsequent development of disease is moderate to high, resources permit close observation of individuals, and the risk of delayed recognition of symptoms is low to moderate. A healthcare or public health worker evaluates the contact on a regular (at least daily) basis by phone and/or in person for signs and symptoms suggestive of disease.</p> <p>3. <b>Active Monitoring with Activity Restrictions</b> – recommended in situations in which the risk of exposure and subsequent development of disease is high and the risk of delayed recognition of symptoms is moderate.</p> <p>The contact remains separated from others for a specified period, during which s/he is assessed on a regular basis (in person at least once daily) for signs and symptoms of disease. Persons with early symptoms require immediate evaluation by a trained healthcare provider. Restrictions may be voluntary or legally mandated; confinement may be at home or in an appropriate facility.</p>
Same as above, but the person provides essential services such as healthcare or emergency management.	<p><b><i>Under Development</i></b></p> <p>Working Quarantine of Potentially Exposed Persons</p>	The contact is permitted to work but the worker must observe activity restrictions and appropriate monitoring while off duty. Monitoring for fever and other symptoms while at work is required along with the use of appropriate personal protective equipment.
<b>Targeted Chemoprophylaxis of Disease Clusters</b>	<p><b><i>Under Development</i></b></p> <p><b>Pandemic Period: Phase 6, Stage 3-5,</b> First human case in North America to “most to all local cases are either imported or have clear epidemiologic links to</p>	<p>This intervention includes investigation of disease clusters, administration of antiviral treatment to persons with confirmed or suspected pandemic influenza, and provision of drug prophylaxis to all likely exposed persons in the affected community. CDC will assist state health departments in these efforts, as needed.</p> <p>Targeted chemoprophylaxis also requires intensive disease surveillance to ensure coverage of the entire affected area, effective communication with the affected community, and rapid distribution and administration of antivirals because they are most effective when provided within 48 hours of symptom onset or when used as post-exposure prophylaxis before onset of illness.</p>

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	other cases” or “with increased occurrence of influenza among their close contacts.” This category can include both cases and a group or groups of people who may have been exposed to the cases.	This intervention is most effective when there is reason to think that this entire group of people has been separated from the general public, such as being geographically separated from other people in the state.

### ISOLATION AND QUARANTINE OPTIONS FOR LARGER GROUPS OR COMMUNITIES

<b>Focused Measures to Increase Social Distance</b>	<p style="text-align: center;"><i><b>Under Development</b></i></p> <p><b>Pandemic Period, Phase 6, Stage 5:</b> Sustained novel influenza transmission in the area with a large number of cases without clearly identifiable epidemiologic links to other cases or with increased occurrence of influenza among their close contacts.</p> <p>Restrictions on exposed persons are considered insufficient to prevent further spread within an entire community.</p>	<p>These interventions can be applied to large groups or to an entire community or region. They are designed to reduce personal interactions and thereby risk of disease transmission. Some options are:</p> <ul style="list-style-type: none"> <li>• Canceling of events (concerts, movie theaters, etc.)</li> <li>• Canceling school</li> <li>• Canceling church services and activities</li> <li>• Shutting down or limiting mass transit</li> <li>• Declaring “snow days” (e.g., asking everyone to stay home and closing “non-essential” businesses, schools, churches etc. “Non-essential” means those facilities that do not maintain primary functions in the community.)</li> </ul> <p>Everyone will be encouraged to be especially careful to wash their hands after any potential exposure to the novel influenza virus. Everyone in the involved area would be asked to avoid contact with other people (even supposedly well people) as much as possible. Covering coughs and frequent hand washing will be encouraged of everyone.</p>
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<b>Community-Wide Measures to Increase Social Distance</b>	<p><i>Under Development</i></p> <p><b>Pandemic Period, Phase 6, Stage 5:</b> Same as above, but a larger area is involved.</p>	Same as above, but on a larger scale to the level of whole neighborhoods, towns, or cities. May include establishment of designated fever or influenza clinics.
<b>Coordinated Community and Business Closures</b>	<p><i>Under Development</i></p> <p><b>Pandemic Period, Phase 6, Stage 5:</b> Same as above, but with a large percentage of essential personnel involved, or if influenza transmission is occurring very rapidly.</p>	Voluntary measures (possibly mandatory) that coordinate simultaneous closure of offices, schools, transportation systems and other non-essential community activities, services and businesses for a specified period of time. All non-essential service personnel and community members are urged to stay at home. The rationale is to keep people from contacting any more people than absolutely necessary, thereby reducing disease transmission. Wearing of personal protective equipment may be recommended for everyone who goes outside of the home.
<b>Widespread Community Quarantine</b>	<p><i>Under Development</i></p> <p>Same as above</p>	A legally enforceable order restricting movement into or out of the area of quarantine may be obtained. When applied to all inhabitants of an area, it is call “cordon sanitaire” (sanitary barrier).