Section 7. Non-Pharmaceutical Interventions

Introduction
According to the CDC, it is highly unlikely that the most effective tool for mitigating a pandemic (i.e., a well-matched pandemic strain vaccine) will be available when a pandemic begins. This means that we must be prepared to face the first wave of the pandemic without vaccine and potentially without sufficient quantities of influenza antiviral medications. In addition, it is not known if current influenza antiviral medications will be effective against a future pandemic strain.1

With that caution as a planning assumption, it is clear that a combination of pharmaceutical and non-pharmaceutical interventions (NPIs) during the duration of the pandemic must be used to reduce the number of persons infected.

NPIs may help reduce the number of infected persons by reducing contact between infected and uninfected persons. Reducing the number of persons infected will, in turn, lessen the need for healthcare services and minimize the impact of a pandemic on the economy and society.

The major goals of promoting the use of non-pharmaceutical interventions are to:

1) Delay the increase of cases in order to “buy time” for production and distribution of a well-matched pandemic strain vaccine, and

2) Decrease the epidemic peak (the highest number of cases at a given time), and

3) Reduce the total number of cases, thus reducing illness and death, and

4) Decrease demand for medical services at the peak of the epidemic and throughout the epidemic wave

5) Protect health workers and first responders to ensure the well-being of the Contra Costa community.

Pandemic Severity – The driver of local response
To better predict the impact of a pandemic and to provide local decision-makers with recommendations that are matched to the severity of an influenza pandemic, the Centers for Disease Control and Prevention (CDC), has developed a Pandemic Severity Index. This index uses the case fatality ratio (the proportion of deaths among critically ill persons) as the critical driver for determining the severity of a pandemic. The categories range from a 1 to a 5, with 1 being the least severe and 5 being the most. A severe pandemic may indicate the need for

1 Interim Pre-pandemic Planning Guidance: Community Strategy for Pandemic Influenza Mitigation in the United States
more extreme measures to help prevent the spread of disease and loss of life. Therefore, the primary driver for response in Contra Costa County will be the severity of the pandemic as defined by the CDC Pandemic Severity Index below.

**CDC Pandemic Severity Index**

![Pandemic Severity Index Diagram]

*Assumes 30% illness rate and unmitigated pandemic without interventions*

CCHS will make decisions about which of non-pharmaceutical interventions should be used carefully, recognizing that there will be consequences of the interventions, such as increased workplace absenteeism related to child-minding responsibilities if schools dismiss students and childcare programs close.

In addition, because Contra Costa is an integral part of the San Francisco Bay Area and residents of Contra Costa commute to work and school in other counties, decisions regarding the use of NPIs and other pandemic flu responses must be coordinated with other Bay Area Counties.

**Non Pharmaceutical Interventions Definition**

Non-pharmaceutical interventions (NPIs) refer to measures that attempt to slow introduction of disease and subsequent transmission until more definitive public health measures (anti-virals and vaccine) are available.
No intervention short of mass vaccination of the public will dramatically reduce transmission when used alone. Mathematical modeling of pandemic influenza scenarios in the United States, however, suggests that pandemic mitigation strategies utilizing multiple NPIs may decrease transmission substantially and that even greater reductions may be achieved when such measures are combined with the targeted use of antiviral medications for treatment and prophylaxis. Recent preliminary analyses of cities affected by the 1918 pandemic show a highly significant association between the early use of multiple NPIs and reductions in peak cases.

These measures are to be initiated early before explosive growth of the epidemic and, in the case of severe pandemics, that they be maintained consistently during an epidemic wave in a community.

Contra Costa Health Services will consider the following NPIs, depending on the phase and severity of the pandemic.

1. **Isolation and treatment** (as appropriate) with influenza antiviral medications of all persons with confirmed or probable pandemic influenza. Isolation may occur in the home, healthcare setting, or alternate care site, depending on the severity of an individual’s illness and/or the current capacity of the healthcare infrastructure.

2. **Voluntary home quarantine** of members of households with confirmed or probable influenza case(s). Consider combining this intervention with the prophylactic use of antiviral medications, providing sufficient quantities of effective medications exist and that a feasible means of distributing them is in place.

3. **Social distancing for children/students** such as dismissal of students from school (including public and private schools as well as colleges and universities) and school-based activities and closure of childcare programs, coupled with protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing.

4. **Use of social distancing measures to reduce contact between adults** in the community and workplace, including, for example, cancellation of large public gatherings and alteration of workplace environments and schedules to decrease social density and preserve a healthy workplace to the greatest extent possible without disrupting essential services.

5. **Travel Restrictions** to reduce contact between Contra Costa residents and travelers arriving at Buchanan airport and at local marinas from outside the area, state or country.
6. **Promotion of individual infection control measures**, such as hand hygiene and cough etiquette and use of personal protective equipment (PPE) such as masks or respirators by first responders and health workers to limit the spread of the disease.

7. **Public education that will reduce the demand** for medical services throughout the epidemic.

8. **Measures to assist essential services** to continue operating.

**Enforcement of Isolation, Quarantine, Social Distancing and Travel Restrictions**

The County Health Officer has broad authority to act to protect the health and welfare of the community. (See Sect. 8 Health Officer Authority)

Based on the SARS experience, which showed that most people would comply, it is anticipated that individuals will comply with social distancing orders such as isolation or quarantine. In rare instances it may be necessary to enforce isolation or quarantine orders.

To prepare law enforcement to respond to a pandemic, Contra Costa Health Services will:

1. Inform law enforcement about health officer authority to order isolation, quarantine and social distancing measures.

2. Establish mechanisms of communication between Health Officer and law enforcement.

3. Instruct law enforcement on PPE should they be called upon to enforce isolation, quarantine, or social distancing measures.

4. Request law enforcement assistance with any of the following:

   a. Enforce isolation and quarantine orders.
   b. Assist to provide security at private and public hospitals.
   c. Provide perimeter security at isolation/quarantine alternate care sites.
   d. Detain individuals not in compliance with a Health Officer Order (misdemeanor).
   e. Provide security (escort) for physicians, EMS personnel, ambulance personnel, other care providers or support personnel, as required.
   f. Conduct area evacuations and secure evacuated areas.
g. Evacuate and secure public assembly venues when social distancing is required by Health Officer Order or other declaration.

Criteria for Determining Community Control Measures
Actual decisions about how to protect the public before an effective vaccine is available and/or when limited pharmaceuticals are available will be based on a complex number of factors present at the time of the pandemic. In addition to the severity and phase of a pandemic, the following factors will help guide health officials on which NPIs should be used. These include:

- Ethical considerations
- Impact of the NPIs on society as a whole, on specific subpopulations, the health care delivery system and the critical infrastructure
- Benefits of the interventions
- Available resources
- Feasibility of success based on such things as the community’s ability and likelihood to comply
- Direct and indirect costs
- Common sense
- The public’s perspective of the protective measures

A Regional Approach
Because Contra Costa is one of 10 Counties comprising the Bay Area, CCHS is committed to a regional approach to implementing NPIs for the following reasons:

- According to the U.S. Census, 40% of Contra Costa’s workforce - more than 500,000 workers - commutes to jobs in other parts of the Bay Area. (51% to Alameda; 26.5% to San Francisco; 10.4% to the Silicon Valley)
- The Bay area shares a common media market, so residents get information, messages and instructions from all surrounding counties.
- Compliance with NPIs requires the public trust and confidence and a coordinated message from local health agencies is critical for accomplishing that objective.
Bay Area Health Officers have agreed that the following NPIs will be utilized in a coordinated manner*. (*Where there is not consensus Health Officers will confer by conference call prior to releasing any NPI guidance).  

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<tr>
<th>WHO PHASE 4</th>
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Non-Pharmaceutical Intervention Strategies

This section describes a number of NPIs that may be used by Contra Costa Health Services to limit community transmission during a pandemic. These planning strategies are likely to evolve as more information about their effectiveness and feasibility becomes available.

To minimize economic and social costs to the Contra Costa community, it will be important to carefully select interventions appropriate to the pandemic severity level – not to early and not too late. Unfortunately, during an emerging pandemic, there may be little information about the number of cases and deaths resulting from infection with the virus.

A. Isolation and Quarantine

Isolation is defined as separation of infected persons from other persons for the period of communicability in such places and under such conditions as will prevent the transmission of the infectious agent. Isolation will slow, but not stop the spread of influenza, as transmission can occur prior to the onset of symptoms, and in persons who have mild or asymptomatic infection. Isolation may occur in the home or healthcare setting, depending on the severity of an individual’s illness and/or the current capacity of the healthcare infrastructure.

Quarantine is defined as the limitation of freedom of movement of persons or animals that have been exposed to a communicable disease for a period of time equal to the longest usual incubation period of the disease, in such manner as to present effective contact with those not so exposed. Quarantine measures will be limited in use and may only be used early on or very late in the pandemic when cases are limited, or in unique situations such as potential exposure during flight travel.

Home quarantine of members of households with confirmed or probable influenza case(s) and consideration of combining this intervention with the prophylactic use of antiviral medications, providing sufficient quantities of effective medications exist and that a feasible means of distributing them is in place.

During a pandemic, isolation and quarantine measures may be implemented to decrease the spread of disease. Isolation and quarantine as NPIs are expected to be most effective during the very early on in the pandemic and then in later
phases. As the pandemic widens, it may no longer be feasible to monitor all individuals who are isolated in their homes, requiring a greater reliance on individual responsibility and neighborhood-based support systems. In addition, once the pandemic is underway, these two strategies are anticipated to have limited effectiveness in preventing the transmission of pandemic influenza because of the following:

- Short incubation period of the illness
- The early peak infectivity of the illness (peak shedding of virus occurs in the first 24 – 72 hours of illness)
- Ability of persons with asymptomatic infection to transmit the virus
- Possibility that early symptoms among persons infected with a novel virus strain may be non-specific, delaying recognition and implementation of containment

The County Health Officer(s) is responsible for ordering home isolation. Public Health Division staff is responsible for monitoring. Division staff may:

- Monitor home isolation orders and check for signs and symptoms of influenza in household contacts
- Identify alternative care sites for isolation of individuals who have no substantial healthcare requirements and/or persons for whom home isolation is indicated but who do not have access to an appropriate home setting, such as travelers and homeless populations.
- Promote the use of Community Emergency Response Teams (CERT) and/or other neighborhood-based methods for providing support to individuals who are in home isolation.
- Implement procedures for identification and quarantine of close contacts.
- Issue quarantine orders to identify contacts for home or community-based quarantine.
- Institute quarantine for exposed healthcare and other essential workers in their work locations.
- Lift the quarantine orders

**Social Distancing**

Social distancing measures are designed to reduce interactions among groups most likely to spread the virus and thus slow or limit transmission of the virus. These NPIs may occur at two levels:

- Measures that affect groups of exposed at-risk individuals. The intervention is applied to specific groups or persons identified in specific sites or buildings, most but not necessarily all of whom are risk of exposure to
influenza. Examples include quarantine of groups of exposed persons in a defined setting (e.g., school, workplace, airplane, etc.); cancellation of public events; closure of office buildings, schools, and/or shopping malls; and closure of public transportation such as bus lines.

- Measures that affect communities. When community-wide measures are used, the measures affect the entire community, including both exposed and non-exposed persons. Examples include snow days, self-shielding, and widespread community quarantine (*cordon sanitaire*).

The County Health Officer will confer with partners in the State Department of Public Health, the Association of Bay Area Health Officers, the Contra Costa College District and the County Office of Education to determine which NPIs are appropriate before issuing an order affecting schools or communities.

1. **Child Social Distancing**

The goal of NPIs in this category is to protect children and to decrease transmission among children in dense classroom and non-school settings and, thus to decrease introduction into households and the community at large. However, maintaining the strict confinement of children during a pandemic would raise significant problems for many families and may cause psychosocial stress to children and adolescents. These considerations must be weighed against the severity of a given pandemic virus to the community at large and to children in particular.

Social distancing interventions for children include:

- Children and staff stay home if they have symptoms
- Respiratory and hand hygiene measures increased
- Disinfection of physical premises heightened
- Dismissal of students from classrooms and closure of childcare programs,
- Protecting children and teenagers through social distancing in the community to achieve reductions of out-of-school social contacts and community mixing.
- Although the available evidence currently does not permit the specification of a “safe” group size, activities that recreate the typical density and numbers of children in school classrooms are clearly to be avoided. Gatherings
of children that are comparable to family-size units may be acceptable and could be important in facilitating social interaction and play behaviors for children and promoting emotional and psychosocial stability.
- Mixing between such groups be minimized (e.g., children should not move from group to group or have extended social contacts outside the designated group).

Currently a three-tiered strategy for triggering these interventions will be recommended:
- No dismissal of students from schools or closure of childcare facilities in a Category 1 pandemic
- Short-term (up to 4 weeks) cancellation of classes and closure of childcare facilities during a Category 2 or Category 3 pandemic
- Prolonged (up to 12 weeks) dismissal of students and closure of childcare facilities during a severe influenza pandemic during a Category 4 or Category 5

Requirements for success of these interventions include:
- Consistent implementation among all schools in a region being affected by an outbreak of pandemic influenza,
- Community and parental commitment to keeping children from congregating out of school,
- Alternative options for the education and social interaction of the children
- Clear legal authorities for decisions to dismiss students from classes and identification of the decision-makers, and support for parents and adolescents who need to stay home from work.

2. Social Distancing at Colleges and Universities

Addressing this population is complex. Contra Costa has three community colleges and a number of other private colleges including J.F.K University and St. Mary’s. These institutions are primarily commuter colleges but they present unique challenges in terms of pre-pandemic planning because many aspects of student life and activity encompass factors that are common to both the child school environment (e.g., classroom/dormitory density) and the adult sphere (e.g., commuting longer distances for university attendance and participating in activities and behaviors associated with an older student population).

At the onset of a pandemic, many parents may want their children who are attending college or university to return home from school. Immediately following the announcement of an outbreak, colleges and universities should prepare to manage or assist large numbers of students departing school and returning home within a short time span.
Pre-pandemic planning to identify those students likely to return home and those who may require assistance for imminent travel may allow more effective management of the situation. In addition, planning should be considered for those students who may be unable to return home during a pandemic and who will need to be housed and fed.

The following actions should be considered:

- Students, faculty and staff stay home if they have symptoms
- Respiratory and hand hygiene measures increased
- Disinfection of physical premises increased
- Group social activities such as dances, parties and sporting events are canceled.
- In-person instruction is suspended.

3. Adult Social Distancing

**Workplaces** - Social distancing measures for adults include provisions for both workplaces and the community and may play an important role in slowing or limiting community transmission. The goals of workplace measures are to reduce transmission within the workplace and thus into the community at large; to ensure a safe working environment and promote confidence in the workplace; and to maintain business continuity, especially for critical infrastructure. The commitment of employers to providing options and making changes in work environments to reduce contacts while maintaining operations is critical to reducing transmission.

The following are measures to reduce transmission:

- Implementation of infection control measures such as sneeze guards, hand hygiene stations, no touch trash cans, automatic door openers
- Reduce density of the workplace through telework/telecommuting and modified work schedules such as staggered shifts
- Alternatives to in-person meetings
- Decrease sharing work equipment and supplies
- Increased cleaning of high touch areas
Modify sick leave policies to cover both persons who are isolated or quarantined in their homes even if they are not diagnosed as a case and also caretakers of ill cases and children who are dismissed from school.

**Social Gatherings** Public gatherings can provide a target-rich environment for transmission. Large gatherings (such as sporting events, concerts at locales such as the Concord Pavilion, holiday celebrations, and festivals such as the Pittsburg Seafood Festival), as well as smaller social activities (such as weddings, funerals, and religious services), may need to be curtailed, postponed, or cancelled altogether.

By placing such limitations, social interactions and transmission of disease can be reduced. Closing public facilities or facilities where large groups congregate also can reduce opportunities for disease transmission through social interactions.

Public facilities—schools, government offices, transportation hubs, museums, libraries, and convention centers—would be the first considered for closing.

Within communities, the support of political and business leaders as well as public support is critical to limiting transmission through social gatherings.

**C. Travel Restrictions**

Travel restrictions have been shown to reduce geographic spread, as well as total and local incidence during a disease outbreak. Restrictions may be placed on some or all modes of transportation—air, rail, boats and bus—and may include a range of increasingly stringent limitations, from issuing travel warnings to closing high-risk stops, limiting schedules, or canceling travel routes altogether.²

1. **Screening Travelers**

   If an influenza pandemic begins outside the United States, public health authorities might screen inbound travelers from affected areas to decrease disease importation into the United States. If a pandemic begins in or spreads to the United States, health authorities might screen outbound passengers to decrease exportation of disease. Early in a pandemic,

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² Preparing for a Pandemic Influenza: A Primer for Governors and Senior State Officials. 2006
state and local health departments, including Contra Costa, may also implement domestic travel-related measures to slow disease spread within the United States. Because some persons infected with influenza will still be in the incubation period and might have no or only mild symptoms but could spread the virus, it will not be possible to identify and isolate all arriving infected or ill passengers and quarantine fellow passengers.

Once a pandemic is underway, exit screening of travelers from affected areas (“source control”) is likely to be more efficient than entry screening to identify ill travelers. Early in a pandemic, this intervention may decrease disease introductions into the U.S. Later, however, as pandemic disease spreads in communities, ongoing transmission among local residents will likely exceed new introductions and, therefore, federal authorities might modify or discontinue exit screening.

2. Mass transit
Modifications to mass transit policies/ridership to decrease passenger density may also reduce transmission risk, but such changes may require running additional trains and buses, which may be challenging due to transit employee absenteeism, equipment availability, and the transit authority’s financial ability to operate nearly empty train cars or buses. CCHS would support regional mass transit carriers polices and would direct local carriers such as County Connections and Tri-Delta to follow decisions being implemented regionally.

3. Voluntary actions
Voluntary limitations on travel during a pandemic alert and pandemic will also decrease the amount of disease spread. Limiting or canceling travel of U.S. residents and others from affected countries will depend on the properties of the pandemic virus that emerges, and will be informed by the facts on the ground at the time of the emergence.  

4. Traffic at Local Airports

Airports are another location where transmission may occur as travelers from other parts of California, the U.S. and elsewhere arrive in private planes. To prevent transmission from cases identified at this County-owned facility, CCHS may do any of the following activities at Buchanan and Byron Airports:

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- Meet the airplane to assess ill passengers symptoms
- Notify the Quarantine station, DHS and CCHS
- Provide crew with guidance
- Coordinate with AMR to provide safe ambulance transport to an appropriate hospital
- Follow-up to manage travel contacts/quarantine passengers
- Develop and/or issue travel health alert notices, travel contact notices, and close contact notices
- Recommend the cancellation of nonessential travel
- Implement pre-departure screening (e.g., temperature screening or visual screening) of outbound travelers.

5. **Working with local Marinas**

Access to Contra Costa is also available through 57 boating marinas in the County. There are 174,000 registered boats in the County. In addition, there are docking facilities are local businesses including C & H Sugar in Crockett, Chevron in Richmond and others.

During a pandemic, CCHS will:

- Alert local marina managers about the pandemic
- Distribute travel alerts to marina managers
- Encourage them to assist in educating marina customers about NPIs
- Provide information that will enable marina managers to notify CCHS of possible cases during the early stages of a pandemic

D. **Promotion of individual infection control measures**

1. **Handwashing and Cough Etiquette**

During a period of pandemic influenza, the public health community will stress the importance of universal hygiene and wellness behavior including hand washing, cough etiquette, receiving adequate sleep, exercising, and eating a balanced diet. Hand washing, in particular, is one of the most important things one can do to protect oneself from illness and prevent the spread of infection. Officials also will be concerned that those who present with influenza symptoms seek
proper care at the appropriate time and those without symptoms, particularly those individuals comprising the critical workforce infrastructure (i.e., medical personnel, teachers, etc.), continue their daily routine as directed.⁴

CCHS public education efforts will focusing on encouraging the public that, as basic as they appear, these measures represent concrete actions that can reduce transmission of the virus and, if used appropriately, will save lives. Communications may include:

- public signage (e.g., on billboards; along major thoroughfares; in grocery stores, offices, buildings, and restrooms; and throughout public transportation systems
- Written handouts or flyers distributed by postal mail or at public gatherings (such as transit stations); and
- Public service announcements in print media as well as on radio, television, and the Internet.

2. Personal Protective Equipment

During an influenza pandemic, masks and respirators — called Personal Protective Equipment (PPE) — used in combination with other NPIs when close contact is expected with someone who has pandemic influenza — may help prevent some spread of influenza.

In suggesting the use of these PPEs, CCHS will follow the Department of Health and Human Services’ (HHS) Centers for Disease Control and Prevention (CDC) interim advice to the public, released in Spring 2007, about the use of Personal Protective Equipment (PPE) in certain public (non-occupational) settings during an influenza pandemic. There is very little research about the value of masks to protect people in public settings. These interim recommendations are based on the best judgment of public health experts who relied in part on information about the protective value of masks in healthcare facilities.

Facemasks and respirators have different qualities and offer different types and levels of protection. Neither a facemask nor a respirator will provide complete protection from a virus and if used, must be used in combination with other NPIs.

**Facemask Use**

⁴ Preparing for a Pandemic Influenza: A Primer for Governors and Senior State Officials. 2006
Facemasks are loose fitting, disposable masks that cover the nose and mouth. These include products labeled as surgical, dental, medical procedure, isolation, and laser masks. Facemasks help stop droplets from being spread by the person wearing them. They also keep splashes or sprays from reaching the mouth and nose of the person wearing the facemask. They are not designed to protect the person wearing it against breathing in very small particles. Facemasks should be used once and then thrown away in the trash.

People should consider wearing a facemask during an influenza pandemic if they:

- Are sick with the flu and think they might have unavoidable close contact with other people (within about 3 feet). People who are sick with the flu should stay home and avoid contact with others.

- Live with someone who has the flu symptoms (and therefore might be in the early stages of infection) or will be spending time in a crowded public place and thus may be in close contact with infected people. During a pandemic, people should limit the amount of time they spend in crowded places and consider wearing a facemask while they are there.

- Are well and do not expect to be in close contact with a sick person but need to be in a crowded place. Again, people should limit the amount of time they spend in crowded places and wear a facemask while they are there.

**Respirator Use**

A respirator (e.g., an N95 or higher filtering facepiece respirator approved by the National Institute for Occupational Safety and Health) is designed to protect people from breathing in very small particles, which might contain viruses. N95 respirators are generally used in construction and other jobs that involve dust and small particles. Healthcare workers, such as nurses and doctors, also use respirators when taking care of patients with diseases that can be spread through the air.

“N95” means the filter on the respirator screens out 95 percent of the particles (0.3 microns and larger) that could pass through. To be most effective, these types of respirators need to fit tightly to the face so that the air is breathed through the filter material. “Fit testing” is the usual method for assuring proper fit in workplaces where respirators are used. Respirators are not designed to form a tight fit on people with small faces (e.g., children) or facial hair. Men who have beards need to shave before using. N95 and higher respirators are less comfortable to wear than facemasks because...
they are more difficult to breathe through. If people have a heart or lung disease or other health condition, they may have trouble breathing through respirators and should talk with their doctor before using a respirator.

Like surgical masks, most N95 respirators should be worn only once and then thrown away in the trash.

People should consider using a respirator if they:

- Are taking care of a sick person at home (and if a respirator is unavailable, use of a mask should be considered).

E. Reducing the Demand for Medical Services

Use of NPIs can reduce the demand for medical services by reducing the number of pandemic flu cases. Public education can also reduce the demand for medical services, especially hospital care, or spread it out over a longer time, reducing the stress on the health care system.

Contra Costa Health Services will provide guidance to the public during a pandemic on self-care, proper use of medical services, availability of vaccination and will encourage the use of NPIs.

F. Measures to Insure Continued Operations of Essential Services

To prevent severe disruption of society, a number of essential services must continue. (See Sect. 1 Continuity of Operations for a complete description of those services).

NPIs can play a major role in ensuring that those services continue to operate, even if they are reduced in scope.

1. Public transport

Modifying mass transit policies and ridership to decrease passenger density may reduce risk transmission. The following measures should be considered:
- Increase the frequency and number of buses to decrease rider density
- Decrease the number of buses to reflect rider and passenger absenteeism
- Increase frequency of disinfecting vehicles
- Implement infection control equipment such as hand hygiene stations and sneeze guards
- Encourage passengers to wear masks
- Redirect employees to essential services

2. Food Markets

Grocery stores and supermarkets are important food resources during a pandemic and communities should implement strategies to ensure that they remain open. The following measures should be considered:

- CCHS should educate “mom and pop” providers through the California Grocers Association, the Yemini Grocers Association and similar organizations.
- Markets should encourage low shopper density by limited the number of customers in the market at one time.
- Use of masks should be encouraged
- Shoppers should be encouraged to maintain a distance of at least six feet.

Vulnerable Population considerations
The following issues will be taken into consideration as preparedness and response actions are implemented:

- Infection control for individuals who are medically compromised and are at home or in the Alternate Care Site.
- Infection control for very young children (<2 years of age) and frail elderly who are at home or in the Alternate Care Site.
- Isolation for people who have pandemic influenza and are homeless; consider placement in an Alternate Care Site.
- Multilingual information on home isolation procedures.
- Alternative communication modes about infection control, home isolation, and social distancing measures to people who are illiterate or blind.
- Support for people who are homebound or geographically isolated individuals.
Support for people with limited economic means who require isolation.