EMERGENCY SHELTERS AND MASS FEEDING CENTERS

This is intended to provide environmental health guidance at mass feeding centers and emergency shelters to assure safe food handling. The following is a listing of information and precautions for mass feeding centers:

FOOD SAFETY GUIDELINES

1. **DO NOT ACCEPT** food or water from unapproved or unknown sources.
2. If the water system is contaminated, use bottled water.
3. Provide handwashing soap and paper towels at toilet facilities.
4. Prepare only the quantity of food sufficient for immediate use. Leftovers must be avoided if refrigeration is inadequate.
5. Cool all perishable foods rapidly. Use shallow pots and pans to divide hot foods.
6. Observe temperature controls for potentially hazardous foods—keep it hot 135°F or above and cold, 41°F or below.
7. Keep hand contact to a minimum when preparing foods.
8. Use single-service eating and drinking utensils.

FOOD SANITATION ACTIVITIES AT MASS FEEDING FACILITIES SHOULD INCLUDE THE FOLLOWING:

1. Four separate sinks should be set up –
   - one for handwashing
   - one for washing food preparation utensils and dishes
   - one for sanitizing utensils
   - one for preparing foods
   To prepare a sanitizing solution, use 2 teaspoons of household bleach (without additives) per gallon of water to obtain a sanitizing solution of 100 parts per million (ppm).
2. Food handlers must practice good hygiene and be without boils, sores, cuts or carriers of any communicable disease. Food handlers should attend a brief training session, which emphasizes personal cleanliness, washing of hands, and the wearing of clean garments for food service and preparation.
3. All foods should be stored off the ground in rodent and insect-proof containers if not served the same day.
4. When refrigeration is not available, perishable food should be delivered on a daily basis and should be used as soon as possible.

5. Establish quality control inspection of incoming foods to detect spoilage or contamination (e.g. damaged containers, dented cans, water-damaged food items, etc.).

6. Monitor the quality of water supplies of food preparation areas.

7. All food preparation and serving areas should be cleaned prior to use and food contact surfaces should be sanitized. Two (2) teaspoons of household bleach (5.25% sodium hypo chlorite) in 1 gallon of water is equivalent to 100 ppm available chlorine and meets U.S. Public Health Service recommended levels for hard surface sanitation.

8. Supervise food preparation and serving:
   - Avoid self-service whenever possible
   - Use single-use utensils when possible
   - Maintain proper temperature control of potentially hazardous foods (41°F to 135 °F)

9. Properly wash, rinse, and sanitize utensils:
   - Pre-scrape
   - Detergent wash
   - Rinse
   - Sanitizing rinse containing at least 100 ppm residual chlorine


11. Control insects and rodents in food areas using only approved pesticides.

12. To prevent cross contamination, provide an area separate from any food areas for personal hygiene and changing or storing clothing. Provide adequate supplies of dishwashing detergent, handwashing soap, paper towels, and liquid household bleach for sanitizing at all sites.

<table>
<thead>
<tr>
<th>Food Item</th>
<th>Cooking Temperature</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef (Hamburger)</td>
<td>155°F</td>
<td>15 seconds</td>
</tr>
<tr>
<td>Chicken/poultry</td>
<td>165°F</td>
<td>15 seconds</td>
</tr>
<tr>
<td>Eggs</td>
<td>145°F</td>
<td>15 seconds</td>
</tr>
<tr>
<td>Pork</td>
<td>145°F</td>
<td>15 seconds</td>
</tr>
<tr>
<td>Microwave (Raw animal foods)</td>
<td>165°F</td>
<td>Let stand for 2 minutes</td>
</tr>
<tr>
<td>Microwave (Commercially processed ready-to-eat food, sealed container)</td>
<td>135°F</td>
<td></td>
</tr>
</tbody>
</table>
EMERGENCY SHELTER INFORMATION

The Red Cross has been commissioned to provide most, if not all, official primary emergency shelter management. Typically Red Cross shelters will be located in schools, churches, cafeterias, and sports facilities. The following is intended to be guidance information for emergency shelters.

1. A minimum of two (2) means of fire egress should be available. Use available space inside structure(s) to prevent overcrowding, and increase fire safety.

2. Shelter personnel should be assigned in numbers that are commensurate with the shelter population to monitor sanitation, prevent overcrowding, and provide information.

3. Shelters should provide the following:
   - Beds or cots, with clean blankets and sheets
   - Food; all food should be provided, stored, handled, and prepared in conformance with the California Health and Safety Code.
   - Adequate potable water:
     - Housing Center: 4-5 gallons/person/day [15-20 liters/person/day]
     - Feeding Center: 5-8 gallons/person/day [20-30 liters/person/day]
     - First Aid Station: 10-15 gallons/person/day [40-60 liters/person/day]
     Suspect water can be made potable for emergency shelters according to approved procedures. (See CCDEH DISASTER FIELD MANUAL 2-5)
   - Sufficient toilet facilities:
     1. One toilet for every 10 – 20 females
     2. One combined toilet/urinal for every 25-50 males
     3. Or a minimum average of 1 toilet/20 people
   - Adequate space, ventilation and light:
     1. Minimum floor space of 30 sq. ft./person for single-tier bed units; 20 sq ft./person for double-tier bed units.
     2. A minimum of 40-50 cubic feet of air space/person
     3. Bed units spaced a minimum of 3 feet apart
     4. Beds arranged alternatively head-to-toe to reduce spread of communicable diseases
     5. Auxiliary light source, primarily from battery-powered flashlight (do not use lanterns, candles or open flame until security of local gas supply lines is fully established)
   - Adequate solid waste containment and disposal:
     1. Provide one 30-gallon non-combustible container (with plastic containment bags and lid) per 10 people, at a minimum. Additional volume may be needed to prevent overflow. Daily refuse removal is important to avoid generating odors; attracting vermin and contaminating stored food and water on the premises.
Emergency equipment: including automatic fire extinguishing systems, portable fire extinguishers, and emergency evacuation plans; emergency transport vehicle.

Health Supervision:
1. At least one full-time health professional (medical doctor, registered nurse, licensed vocational nurse or certified instructor in First Aid/Red Cross principles) should be onsite and responsible for health supervision.
2. A medical log book should be maintained with the following information:
   - Name, age, personal information of person treated
   - First aid or medical treatment provided, and dates of treatment.
   - Name, title of treatment provider
3. Report should be made to the designated local agency of all occurrences of foodborne illness (858) 505-6814, and medically diagnosed infectious, contagious or communicable disease.

Facilities for maintaining personal hygiene:
1. One handwash/lavatory fixture with available clean (warm or hot, if possible) water per 15 people; provide soap and single-service towels.
2. One showering facility/fixture per 15 people, if possible, and particularly if prolonged habitation in shelters are necessary.
3. Laundry facilities may be established, if designed in such a way as to minimize contamination of stored food and water and surrounding soil and water resource with waste effluent; i.e. treat as sewage.

4. When shelters are to be located outdoors and tents are used for shelter, the shelter site should be located on high, well-drained ground; the following additional guidelines should be applied:
   - 16’ x 16’ tents are preferred, with no more than 6-8 individuals per tent.
   - Tents should be separated from each other by not less than 10 feet.
   - Tent material should be of flame retardant material.
   - Heating, smoking, or the presence of any open flame inside tents is not advised. Electrical wiring and equipment used in tents should meet the requirements of the National Electrical Code or Underwriters’ Laboratories as appropriate.