

Mass Feeding Centers in Response to Disasters and Emergencies

During or following a disaster, homes and businesses may be inaccessible, destroyed or uninhabitable. Under such stressful conditions, it is essential to assure that safe, wholesome food is available to disaster victims and recovery volunteers in order to avoid further distress or diminish recovery activities due to food poisonings.

Duties of BERL Staff

1. Serve as liaison with other State agencies.
2. Volunteer and organize emergency response teams for recovery efforts.
3. Provide training and technical assistance to BERL and LPHA personnel.
4. Assess response and recovery needs and develop plans to meet those needs.
5. Perform sanitation and safety inspections of mass feeding centers, as needed.
6. Conduct other environmental public health services, as needed.
7. Notify Central Office of any difficulties obtaining compliance with sanitation standards during the response to an emergency or disaster.

Common Responsibilities of LPHA

1. Obtain locations of mass gathering sites.
2. Supervise sanitation of the grounds.
3. Advise responsible officials regarding the construction of food service facilities.
4. Inform responsible officials of sanitation requirements and services offered by health departments as soon as possible after receiving notification of mass gathering site locations.
5. When necessary, encourage planning toward improvement of food sanitation facilities.
6. Inform Regional staff of any difficulties in obtaining safe food handling practices/facilities.
7. Refer to the private water section for issues regarding potable water supplies.
8. Refer to the Sewage Section for issues related to sewage disposal.
9. Maintain inspection documentation for overall evacuation of food safety during the event as well as for financial reimbursement if FEMA is involved.
10. Provide food safety educational materials and/or training to responsible officials as well as volunteers and any other affected parties.

Method

It is a high priority to assure that mass feeding centers and their food supplies are in sound condition. The food delivery, as well as the food preparation and serving, will need surveillance and inspection to prevent food-borne illness, food contamination or spoilage.

A. Location

1. Possible sites
 - a. Permanent structures; schools, armories, churches, etc.
 - b. Temporary structures; mess tents, mobile food service units
2. Any building considered for use as a food preparation/serving site:
 - a. Should be capable of being readily cleaned;
 - b. Have adequate lighting to facilitate cleaning;

- c. Permit adequate ventilation for removal of excessive heat and moisture; and
 - d. Should be distant from solid waste and human waste disposal.
- B. Assure soundness of foods- Refer to subsection 3.5: Distressed Foods
1. Do not accept food or water from unapproved or unknown sources.
 2. Food packaging should appear sound with no signs of possible contamination or spoilage. Refer to the subsection on examining distressed foods section 3.6a for inspection details for food packaging.
 3. Home canned foods are not acceptable.
 4. Fresh foods should be examined for acceptability.
 - a. Food items should have no visible contamination or off-odor. Surface contamination sometimes may be washed or rinsed off the products, enabling them to be satisfactory for consumption.
 - b. Consideration should be given for where the food was obtained. If the food items were stored where chemicals could have contaminated the foods, these items must not be accepted.
 - c. Perishable fresh food items, such as meats and dairy products, have the additional consideration for assurance that the products have not exceeded 45°F for greater than 4 hours.
 - d. Frozen foods have additional considerations. The ideal temperatures for storing frozen foods is 0°F.
 - i. If the product is still frozen hard and is not visibly contaminated, it can be assumed to be safe.
 - a) Seafood or organ meats (e.g. liver) will deteriorate quickly at temperatures above freezing and should not be refrozen once thawing has begun.
 - b) Red meats or poultry, if partially thawed but still having ice crystals, can be either cooked immediately or refrozen.
 5. Game products are not acceptable unless inspected by USDA.
 6. Food storage areas need to be dry and capable of keeping products off of the ground to prevent deterioration or contamination.
 7. Keep cold foods cold; keep hot foods hot. The critical temperatures are 45°F or below for cold foods and 140°F or above for hot foods. If food will be delivered off-site and then served elsewhere, provisions will be necessary to maintain proper temperatures.
- C. Site operations
1. Personnel working in feeding centers should:
 - a. Be in good general health, with no open sores or infections;
 - b. Preferably have prior experience in food handling; and
 - c. Be provided with clean clothing as needed, but on a daily basis at a minimum.
 2. Food contact equipment and utensils, and food preparation and serving areas:
 - a. Equipment and utensils should be of materials that are durable, easily cleaned, and will not transfer toxic chemicals to the food being prepared (e.g. galvanized pots should not be used for lemonade);

- b. Equipment and utensils should be clean prior to use;
 - c. Food contact surfaces should be sanitized. Sanitizing of equipment and food contact surfaces can be accomplished by using ½ tablespoon of household bleach per gallon of water;
 - d. All food service equipment will need to be cleaned after each day's usage, more often as equipment becomes encrusted with food debris; and'
 - e. Keep food preparation surfaces clean, and avoid contact between raw and ready-to-eat foods.
3. Equipment for utensil washing is necessary. Either the three vat sink or the mechanical dishwasher is acceptable:
- a. Three sinks for washing, rinsing and sanitizing procedure: wash in hot water with soap or detergent; rinse in clear hot water; and sanitize by immersion.
 - i. Sanitization can be accomplished in one of the following manners:
 - a) ≥ 30 seconds in clean water $\geq 170^{\circ}\text{F}$;
 - b) ≥ 1 minute in a clean solution containing 50 – 200 ppm available chlorine as hypochlorite at a temperature $\geq 75^{\circ}\text{F}$;
 - c) ≥ 1 minute in a clean solution containing $\geq 12\frac{1}{2}$ ppm available iodine and having a pH not higher than 5.0 and at a temperature of $\geq 75^{\circ}\text{F}$;
 - d) In a clean solution containing any other chemical sanitizing agent recognized by DHSS as effective and will provide the equivalent bactericidal effect of *b*) above;
 - e) Be treated with steam, free of materials or additives; or
 - f) Rinsed, sprayed or swabbed with a chemical sanitizing solution at least twice the concentration described above in the case of equipment too large to sanitize by immersion.
 - b. A mechanical dishwasher capable of adequately washing the utensils followed by sanitization by heat or sanitizing chemicals:
 - i. Single-tank, stationary-rack and door-type machines and spray-type glass washers using chemicals for sanitization:
 - a) Temperature of wash water $\geq 120^{\circ}\text{F}$;
 - b) Wash water kept clean;
 - c) Sanitizing chemicals added automatically;
 - d) Chemical sanitizing rinse water temperature $\geq 75^{\circ}\text{F}$;
 - ii. Machines using hot water for sanitizing:
 - a) Wash water and pumped rinse water kept clean;
 - b) Single-tank, stationary-rack, dual-temperature machine:
 - 1) Wash temperature $\geq 150^{\circ}\text{F}$;
 - 2) Rinse temperature $\geq 180^{\circ}\text{F}$;
 - c) Single-tank, stationary rack, single temperature machine;
 - 1) Wash and rinse temperature at $\geq 165^{\circ}\text{F}$;
 - d) Single-tank, conveyor machine;
 - 1) Wash temperature $\geq 160^{\circ}\text{F}$;

- 2) Rinse temperature $\geq 180^{\circ}\text{F}$;
 - e) Multi-tank, conveyor machine;
 - 1) Wash temperature $\geq 150^{\circ}\text{F}$;
 - 2) Pumped rinse temperature $\geq 160^{\circ}\text{F}$; and
 - 3) Final rinse temperature $\geq 180^{\circ}\text{F}$; and
 - f) Single-tank, pot, pan and utensil washer;
 - 1) Wash temperature $\geq 140^{\circ}\text{F}$; and
 - 2) Rinse temperature $\geq 180^{\circ}\text{F}$.
 4. Provide handwashing facilities at toilets and in food preparation areas.
 - a. Clean water, soap, sanitary towels and a waste can are needed.
 - b. If plumbed handwashing facilities are not feasible, a temporary handwashing station may be provided. An example of an alternative handwashing station is located at the end of this section.
 - c. Personnel involved with food handling are to wash their hands prior to food handling, when soiled, and after restroom visits, eating or smoking.
 5. Keep hand contact of foods to a minimum. Avoid self-service whenever possible. Use single-service eating and drinking utensils when possible.
- D. Assure safety of water supply:
1. Use community public water supply, if not compromised.
 2. If water must be disinfected for potable use, refer to Section 4.0 Private Water, Subsection 4.2 Requirements for Operating Regulated Establishments-Boil Orders.
 3. If it is inconvenient or impractical to disinfect water, an alternate supply may be considered, See Section 4.0 Private Water, Subsection 4.2 Requirements for Operating Regulated Establishments-Boil Orders.

General Good Sanitation Practices

- A. Garbage storage shall be as follows:
1. Garbage should be stored in a covered, durable, leak proof container with fly-tight lids. If such containers are not available, then garbage should be stored at least 100 yards away from housing and food preparation/serving areas until the garbage can be properly disposed of;
 2. Refuse should be picked up at least twice a week to break up the life cycle for flies; and
 3. Burning of garbage should only be used as a last resort.
- B. Remove or dispose of boxes, packing material, and other waste materials as soon as possible.

Method

- A. Hands should be washed before the following activities:
1. Preparing or eating food; or
 2. Treating a cut or wound or tending to someone who is ill.
- B. Hands should be washed after the following activities:
1. Using the restroom;
 2. Handling uncooked foods, particularly raw meats;

3. Blowing your nose, coughing or sneezing;
 4. Handling garbage;
 5. Tending to someone who is ill;
 6. Changing a diaper; or
 7. Handling animals, particularly reptiles and exotic animals.
- C. Hands should be washed thoroughly by:
1. Using soap and warm, running water;
 2. Wash all surfaces thoroughly, including wrists, palms, back of hands, fingers and under fingernails;
 3. Rub hands together for at least 10 to 15 seconds; and
 4. When drying hands, use a disposable towel or a hand-dryer.
- D. Handwashing facilities, at a minimum, need to be conveniently accessible at:
1. Food preparation and serving sites;
 2. Toilet facilities, and
 3. Other areas that may allow for possible disease transmission routes.
- E. Temporary Handwashing Station – In the event that plumbed potable water under pressure is not available, a temporary alternative handwashing station, as described and illustrated on the following pages may be considered. Features for a temporary alternative handwashing station include:
1. A container that is suitable for storing several gallons of water. The spigot on the container should allow for the user to freely wash both hands, thus a faucet type or a coffee urn type spigot is preferable to a push button type;
 2. Water should be of potable quality, either from an approved source or treated to be acceptable;
 3. If possible, the water should be warmed to luke-warm temperatures (100°F - 120°F) to encourage thorough handwashing;
 4. A soap dispenser is preferable to bar soap. If bar soap must be used, provide a soap rack to keep the soap dry between uses;
 5. Disposable paper towels should be provided. Common use towels are discouraged, as they may spread contamination to subsequent users;
 6. A towel dispenser is preferable to open rolls of paper towels. An open roll of towels can easily have inner towels soaked as a user tears off an outer towel. This may spread contamination to subsequent users;
 7. A bucket or other watertight container is needed to catch wastewater while hands are washed. As needed, this wastewater should be dumped into a sink drain or other area where it will not cause further problems; and
 8. A waste receptacle is needed for used paper towels.
- F. Plastic gloves should not be automatically viewed as a substitute for handwashing.
1. Because gloves will be in contact with the same items as ungloved hands, the gloves can become dirty or contaminated in the course of their use;
 2. Hands become hot and moist while wearing gloves, providing an environment where micro-organisms can thrive; and
 3. To be effective, gloves should be changed and hands washed on a regular basis or when the gloves have been soiled.

G. Commercial anti-bacterial hand gels are not a substitute for proper handwashing. While these gels can reduce the number of bacteria on clean hands, they cannot effectively counteract gross contamination of dirty hands

