

Guidelines for a Disaster Food Services Plan at a Healthcare Facility

This document is not intended to provide legal advice or to establish rules or regulations. This document represents guidance for providing food services in a disaster, based on the recommendations of peer Food Services Directors at healthcare facilities, other topic experts and Food Vendors. (See *Appendix A: Members of the State Expert Panel on Food Services in a Disaster.*)

1. **Purpose:** These guidelines are intended to provide recommendations to healthcare facilities regarding food services in either an internal or an external emergency, especially in a sustained incident that may last for days or weeks, during which there may be a disruption of the food supply chain.
2. **Prerequisites:** The following are the prerequisites that each healthcare facility should have in place prior to establishing its *Disaster Food Services Plan*.
 - a. In an emergency situation, it is assumed that the facility will work under the Incident Command System.
 - b. As part of its emergency preparedness planning, the facility should annually update its Hazards Vulnerability Analysis (HVA). The facility should determine which of the likely and credible threats, identified in the HVA, would potentially cause disruption of food services.
 - c. The facility should have a plan for water emergencies along with identifying a source for potable water in the case of a loss of water supply. See *Guidelines for Healthcare Facilities for the Management of Water Emergencies*¹.
 - d. The facility should include security for its food products in its overall facility Security Plan.
 - e. The facility will need to coordinate with Plant Operations the availability of back-up electrical power for Food Services, if Food Services is not already connected to emergency power. Priority needs for electrical generation include:
 - i. refrigeration
 - ii. hoods
 - iii. stoves, ovens and steamers
 - iv. freezers
 - f. The facility should also have a plan for the maintenance of refrigerated foods should there be a loss of power (see *Appendix B: Guidelines for Food Safety during Temporary Power Outages*).

¹ <http://www.dhs.wisconsin.gov/preparedness/pdfs/mlorutilitymanagement/wateremergguidejul2009.pdf>

- i. This includes, but is not limited to, monitoring temperatures; limiting access to the refrigerated areas, etc.
 - ii. The facility may need to consider Memorandum of Understanding (MOU) for obtaining refrigerated trucks to hold refrigerated foods temporarily. This MOU should also include provision for obtaining fuel to keep the refrigerated trucks operating.
 - g. The facility should have a plan where to obtain Food Services workers with special skills, e.g. cooks, dieticians, etc. from other institutions such as culinary schools, restaurants, etc.
 - h. Conservation of food supplies must start immediately at the beginning of a known emergency. Strategies will be incident-specific and may include but are not limited to:
 - i. cutting back to two meals per day for non-patients
 - ii. reducing hours of cafeteria services
 - iii. curtailing complimentary beverages
 - i. The facility should consider the food needs and customs of special populations in its service area and address in its food policy whether family members can bring in food for patients, especially if there are certain religious, social or cultural customs that should be honored.
 - j. The facility, through its Information Technology Policy (IT), should have appropriate Food Services information on back-up and retrievable along with hard-copy lists of contacts for Food Vendors and other key contacts.
 - k. Ultimately, the *Disaster Food Services Plan* should allow the facility to function on its own, should outside resources not be available.
3. Using the *Daily Meal Computation Workbook* (See Appendix D.)
- a. Worksheet 1: *Daily Meal Computation Form*
 - i. This spreadsheet assists the facility in determining the number of meals that it may serve during a disaster. The facility may adapt this worksheet to its own needs.
 - ii. The two numbers on the *Form* that matter the most because these numbers are carried over to other worksheets are:
 - 1. the estimated Total Patient Meals Per Day
 - 2. the estimated Total Non-Patient Meals Per Day

- iii. The facility should note that the following food products are not included in this version of the *Daily Meal Computation Workbook*.
 - 1. Food products available on patient floors
 - 2. Patient snacks and nourishments
 - 3. Non-Patient snacks
 - 4. Water/Coffee/Other Beverages
- iv. The facility should note that this *Daily Meal Computation Workbook* is based:
 - 1. on conservative estimates
 - 2. patients being given priority to these items on the *Menu*
 - 3. others such as staff and visitors will be given what is available after taking care of patients
- v. The *Daily Meal Computation Workbook* also contains a listing of essential disposable items and also chemicals needed for cleaning.

b. Worksheet 2: *Menu Sheet With Computation*

- i. This spreadsheet provides the facility with a sample of shelf-stable food items for breakfast, lunch and dinner for Sunday through Saturday.
- ii. The Columns of this spreadsheet provide the following information:
 - 1. Brand name of the food product
 - 2. Size: refers to the package size
 - 3. Description: rather than name specific products such as Corn Flakes, the menu lists the food products by category such as cold cereal, canned juice, etc. These are intended to be shelf-stable items.
 - 4. QTY (quantity) per meal served indicates the number of portions for this meal
 - 5. Unit of Measure is the amount of the portion
 - 6. Total Units Per Case is the number of portions per case
 - 7. Total Patient Meals: This number is **automatically calculated** from the *Daily Meal Computation Form*

8. Total Employee, Guests and Visitor Meals: This number is **automatically calculated** from the *Daily Meal Computation Form*

9. Total Cases to be Ordered: This number is **automatically calculated** based on portion size times total units per case times total meals

10. Item Code: This is a field that is facility specific. This column is the product number for the particular food item from the Food Vendor of the facility.

iii. The Rows list the recommended food products for each meal for seven (7) days. These are intended to be shelf-stable items.

c. *Worksheet 3: Shopping Lists*

i. This spreadsheet provides the facility with a Shopping List for three time periods:

1. Days 1-4 (96 hours as recommended by the Joint Commission)
2. Days 5-7 (72 hours as recommended for residential care facilities)
3. All Days (one week)

ii. The Rows list all the food items that have been recommended in the 7-Day Menu.

iii. The Columns indicate:

1. the name of the shelf-stable food product
2. the total number of meals to be served with this food product for the various time periods, which is **calculated automatically** from the previous worksheets
3. the total number of cases needed for the various time periods, which is **calculated automatically** from the previous worksheets

d. *Worksheet 4: Disposables*

i. This spreadsheet provides the facility with the Shopping List for disposable items.

ii. The Rows list all the various disposables that are needed to match the 7-day menu.

iii. The Columns indicate:

1. Brand Name of the products; this will be specific to each facility and may affect other counts such as size and total units per case.
2. Size of the product, if applicable
3. QTY (quantity) per meal served. These are the **suggested quantities** unless the facility wants to adjust the quantity per meal served. These numbers must be inserted manually.
4. Total Units per Case will be specific to the brand and must be inserted manually in the spreadsheet.
5. Total Patient Meals: This number is **automatically calculated** from the *Menu Sheet With Computation*
6. Total Employee, Guests and Visitor Meals: This number is **automatically calculated** from the *Menu Sheet With Computation*
7. Total Pieces Required: this is calculated by formula – Total Patient Meals plus Total Employee, Guests and Visitor Meals.
8. Total Per Day Cases to be ordered (rounded up): This is calculated by a round up formula – Total Pieces Required divided by Total Units per Case.
9. Total Pieces Required: This is calculated by formula – Total Pieces required times 7 days.
10. Total Per Week Cases to be ordered (rounded up): This is calculated by a round up formula – Total Pieces Required divided by Total Units per Case.

4. Food Services Disaster Plan

a. Menu and Food Products Inventory

- i. Using the *Daily Meal Computation Workbook*, the facility should have a seven-day inventory of shelf-stable items for the number of meals it anticipates serving in a sustained emergency that may disrupt the availability of water, power and/or delivery of food supplies. At a minimum, a residential care facility should consider an inventory of

food products for 72 hours and a hospital should consider an inventory of food products for 96 hours.

1. The facility will need to build this inventory over time.
 2. The facility should ensure there is sufficient storage space for this inventory.
 3. Even with shelf-stable items, the facility should have a plan to rotate these products, based on product specifications.
- ii. The facility should implement its Disaster Food Services Plan, considering the following recommendations:
1. The facility should assume that if there is a disruption in the food supply and/or delivery, fresh produce and dairy products would be the first items to be in short supply with the menu being adapted to use perishable foods first, especially if there is a loss of power for refrigeration.
 2. If it is anticipated that there may be a loss of water and/or heat, then those food products in inventory that require water and/or heat should be utilized first, if possible. The food products recommended on the *Menu Sheet With Computation* is based on food products that require a minimum need for water and heat in their preparation.
 3. The *Menu Sheet With Computation* of shelf-stable items is intended primarily for patients.
 4. The facility food vendor may still be able to continue to supply some food products, based on the “normal menu” of the facility.
 - a. Food products from the vendor or from the facility inventory are intended for non-patients.
 - b. The facility may also plan for “Grab N Go” meals for staff, e.g. sandwiches, etc., if staff may need to take “working lunches.
- Note:** The facility should be aware that staff will also need time to relax in areas other than their work areas due to the high levels of stress.
5. The facility still needs to pay attention to those patients on special diets, especially:

- a. those with food allergies
- b. those whose diet needs texture modifications
- c. It is important to recognize that limited food supplies may not allow the facility to address patients with disease specific diets, e.g. renal patients with low sodium diet needs

b. Other Inventory Needed

- i. The facility should have disposable dinnerware available for the number of meals it intends to serve in its identified planning period.
 1. The facility should also have hand sanitizers available if there is no water available for hand-washing before and after meals.
 2. The facility should have cleaning materials for washing the limited “pots and pans” that may be used.
 3. The facility should have a plan for waste disposal which will significantly increase with the use of disposables.
- ii. The facility should have the ability to heat water and/or limited food products through the use of gas grills or other such devices with grills and gas supply and other such devices stored safely.

c. Vendor Agreements

1. The facility should have discussions with its Food Vendor about how both can work together to make sure that the facility has food products to meet its needs.
2. The facility may choose to have a Memorandum of Understanding with their food vendor(s) or a similar written agreement, outlining the responsibilities of both the facility and the vendor during a disruption of the food supply chain in a disaster.

Note: *Appendix C: Memorandum of Understanding* provides a sample agreement or can be used to identify the issues for discussion with the food vendor(s) of the facility.

Appendix A: Member of the State Expert Panel on Food Services in a Disaster

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Appendix B: Guidelines for Food Safety During Temporary Power Outages

Samples of such guidelines can be found at the following sites:

<http://www.dhs.ca.gov/fdb/local/PDF/fsn0102.pdf>

<http://www.doh.wa.gov/ehp/food/establishmentpoweroutage.pdf>

http://www.in.gov/isdh/files/Power_Outages_2_.pdf

http://www.fsis.usda.gov/Fact_Sheets/keeping_food_Safe_during_an_emergency/index.asp

Appendix C: Memorandum of Understanding

This document is not intended to provide legal advice or to establish rules or regulations. This document provides a sample Memorandum of Understanding which should be adapted to the unique needs of each healthcare facility and its food vendor(s). At a minimum, this document should serve as a list of talking points for the discussion between the healthcare facility and its food vendor(s) about how both will work together to manage a disruption of the food supply change so that the healthcare facility.

This Agreement is entered into on (*insert date*) between (*insert facility name*) (hereinafter, the FACILITY) and (*insert vendor name*) (hereinafter, the VENDOR)

Whereas, food services at healthcare facilities are critical for the care of patients and/or residents;

Whereas, healthcare facilities have plans for the continuity of operations during emergency situations, especially sustained incidents;

Whereas, healthcare facilities recognize that collaboration with vendors and integration of plans with vendors is necessary to maintain continuity of operations;

Whereas, food vendors are an essential partner with healthcare facilities;

Therefore, the Parties agree to the following terms:

1. VENDOR Responsibilities

- a. VENDOR will take into consideration the food products listed in the *Menu With Computation* for inclusion of these food products in the VENDOR inventory; VENDOR will inform FACILITY if any of the food products listed in the *Menu With Computation* are not maintained in the VENDOR inventory.
- b. VENDOR agrees to provide, to the extent reasonably possible, the quantities of food products, requested at the time of the disaster, by the FACILITY, but not more than the food products required for the number of meals anticipated for a one week period.
- c. VENDOR agrees to make categorical substitutions of food products only with the approval of the FACILITY, when possible. The FACILITY shall not unreasonably withhold such approval.
- d. VENDOR agrees to ship orders within 48 hours of the receipt of the order from the FACILITY.
- e. VENDOR shall make deliveries to the usual delivery location at the FACILITY unless otherwise directed, e.g. to an off-site FACILITY storage area.

- f. If the incident involves a need for Universal Precautions and/or Contact, Droplet or Airborne Precautions,
 - i. VENDOR may request personal protective equipment from the FACILITY, if the VENDOR must enter the FACILITY.
 - ii. VENDOR agrees to abide by all infection control recommendations while on the premises of the FACILITY.
- g. VENDOR agrees to hold discussions with the FACILITY so that the FACILITY and VENDOR have a mutual understanding of the following issues that may affect both Parties:
 - i. the amount of inventory for particular food products on the *Menu With Computation* that the VENDOR typically has available
 - ii. the priority that the VENDOR has in place or should have in place for servicing various accounts
 - iii. the intent of the VENDOR not to raise prices during the emergency.

2. FACILITY Responsibilities

- a. FACILITY will work in good faith with VENDOR to come to agreement on payment terms, prior to any incident, recognizing that the emergency may negatively affect cash flow at the facility;
- b. FACILITY agrees to have a minimum of seven days² inventory of recommended shelf-stable food.
- c. FACILITY agrees to maintain normal delivery cycle, if possible, so as to assist the VENDOR in their weekly planning for inventory management.
- d. FACILITY agrees to request only a one-week supply of food products, based on the anticipated number of meals expected at the FACILITY.

This Agreement shall be in full effect by signature of the undersigned Parties.

Signature of FACILITY

Date

Signature of VENDOR

Date

² The Joint Commission recommends that hospitals plan for self-maintenance of food services for a minimum of 96 hours. It has been recommended that residential care facilities plan for self-maintenance of food services for a minimum of 72 hours.

Appendix D: Daily Meal Computation Workbook

[This workbook contains individual worksheets referred to in this planning document. It is a separate Microsoft[®] Excel workbook that should accompany this document.]