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Worksheet Instructions

California Hospital Emergency Food Planning Tool

I. Key Assumptions: **Estimating Food Plan Population Groups**

The purpose of this worksheet is to identify the estimated number of individuals by category/group to be included in hospital emergency food supply planning assumptions. These estimates will serve as the basis for subsequent steps in emergency food calculations and should be consistent with the hospital Emergency Operations Plan (EOP). Nutrition managers should work with emergency management in developing the assumptions to ensure consistency.

**NOTE: Each hospital should establish and enter assumptions in this and subsequent worksheets based on their specific plans and circumstances, as well as regulatory requirements. For example, a small rural hospital may well have very different emergency food plan assumptions than a large, urban academic medical center. The tool is designed to allow each hospital to consider and document their planning assumptions and meet regulatory requirements, not to impose additional requirements.**

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**A. Basic Needs Population (inpatients)**

This section identifies hospital average daily patient census under *normal* operations. Identification of this base demonstrates that emergency plans take patient surge into consideration. Most California hospitals' average daily census is between 60-70% of licensed bed capacity. Therefore, *average* staffed beds are used to represent a reasonable base for planning purposes; it is best not to use a single day or month for this purpose due to significant variability, but to use a quarter or year unless there are known reasons to use more current estimates (e.g., new beds). These figures are generally available from your finance department and reported quarterly to the State.

**B. Surge Targets: Emergency/Surge Populations (inpatients, emergency department and staff)**

In this worksheet, estimate the number of individuals to be included in the emergency food plan. How many meals or meal alternatives and for how long will be addressed in subsequent worksheets. Staff ratios to patients include ALL essential staff (not nursing ratios) and are used to allow for easy update of calculations as licensed/surge bed assumptions change.

**Licensed Hospital Beds** are all *inpatient* beds under the hospital license, regardless of type (e.g., general acute care, psychiatric, Distinct Part Skilled Nursing Facility) and serve as the basis for estimated emergency/inpatient surge. Enter the number of licensed beds in the worksheet and the percent of licensed beds that your facility's EOP estimates for surge capacity; if hospital surge capacity estimates are less than 100%, *then default to 100% of licensed beds*.

**Staffing Ratio** represents *essential* hospital staff necessary to providing hospital patient care (Emergency and Inpatient), to continuing essential hospital operations and emergency management. It is recommended that hospitals NOT include non-essential staff in food planning calculations for any disaster that would require activation of the emergency food plan. Also consider the type of event and ability of staff to come to work (and go home after a shift), modification of staffing ratios due to government emergency declaration and surge, services that will be constrained or limited (e.g., outpatient) and other factors that may impact staffing.

These assumptions should be established in coordination with emergency management, business continuity plans and operations and take alternative treatment area plans for surge into consideration.

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*If the hospital operates other, off-license programs or services (e.g., community center/shelter) not directly related to hospital care, separate plans should be established for those programs or services; they should not be included in hospital plans. This separation is also required by federal agencies who reimburse agencies providing community services to victims during a declared emergency.*

The results of this section will be total inpatients, emergency patients and total *essential* staff to be included in the emergency food plan. Normal Newborn Nursery staff should be included in staffing figures.

**C. Surge Targets: Optional Populations**

Optional Populations are those that the hospital may decide to include in emergency food plans, but are not required by regulation. It is generally assumed that ambulatory care patients in clinics or ancillary services will leave the hospital campus and receive care and shelter through community resources, if necessary.

The hospital may decide to include **Ambulatory Care Patients** undergoing treatment or procedures (surgery, infusion, dialysis, etc) at the onset of an event and who cannot leave until they have recovered. Some ambulatory care services may be continued by the hospital during the event (e.g., alternate care areas for surge, ongoing care patients). If the hospital emergency food plan is to feed these populations during an event, then enter the number of patients in each category. Consider whether it is a point in time figure (e.g., how many will actually be in the surgery suite at the onset, not how many cases scheduled throughout the day) unless these services will be continued and/or used for surge and your plan is to feed these patients. It is not required that the hospital feed patients undergoing Ambulatory treatment.

**Ambulatory Care Staffing Ratios** represents the number of essential staff per Ambulatory Care patient needed to continue care and not included in the inpatient figures above. If you estimate there will be 20 patients and 10 staff, then you would enter .5 in the cell. The results of this section will be estimated Ambulatory Care area patients and staff. Ambulatory Care area staff who may be reassigned to inpatient or emergency services should be included in Section B – Surge Targets – Emergency/Surge Populations above.

At the hospital's option, there may be **Other** population groups included in the hospital emergency food plans and the EOP. Review each category in this section and determine both if, and how many, need to be included in emergency food calculations.

Does the hospital EOP include providing **Staff Family/Dependent** care during a disaster so that staff may come to/remain at work? If so, what are your estimates for how many *essential* staff would require this support? Enter this figure into the Staff Family/Dependent cell as a ratio to staff. For example, if you have 300 essential staff and your EOP estimates that 50 will need dependent care for a family member, then you would enter .17 into the cell. Staff should be encouraged in advance to make alternative arrangements for family/dependents during a disaster/emergency.

Will the hospital limit **Visitors** during a disaster? Will the hospital close its cafeteria to the public during a disaster? Both of these steps are recommended at the onset of any event that may require activation of the emergency food plan; it is easier to expand food service if the situation improves, but difficult to implement after scarce resources have already been consumed.

During a disaster, a hospital may well be viewed as a shelter or community resource and must act quickly to implement policies that preserve scarce resources for its primary responsibility to patients and staff. It is anticipated that the hospital may allow one family member to remain with some patients (e.g., pediatrics). It is not necessary to feed other visitors that may be allowed, and it is suggested that policies are limited to a small number that may remain with the patient and, therefore, may not have access to community resources.

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Does your hospital plan to provide meals to **Physicians**? If so, estimate the number of **hospital-based** physicians that would require meals and enter the number per inpatient. This Hospital-based physicians should be limited to those physicians expected to be at the hospital for long portions of the day (e.g., emergency, trauma surgeons, hospitalists, intensivists, radiologists, etc). Separately Identify **rounding** physicians on staff who may come and go for short periods. Enter the total number divided by inpatients for each category of physician (e.g.,  $20 \div 300 = .66$ ).

Will the hospital utilize **Volunteers** during a disaster response? If so, estimate the number of volunteers per inpatient and enter that figure. For example, if you estimate you will have 300 patients and 20 volunteers per day enter .066 in the cell ( $20 \div 300$ ).

If there are **Other** essential individuals that are not identified in the sections above, document and estimate the number and enter the ratio per inpatient. As noted previously, it is recommended that estimates be limited to those *essential* to care/operations.

#### D. Surge – Emergency Planning Population Assumptions (Summary)

Completing this worksheet will result in a summary of patients, staff and other individuals to be included in the hospital emergency food plan. These figures will carry over to the subsequent worksheets used to identify what, how often and for how long the hospital plans to feed each population category.

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II. Key Assumptions: **PATIENT Meal Requirements/Assumptions**

The purpose of this worksheet is to identify assumptions for nutritional needs both by patient age/life stage and by meal type (e.g., regular, diabetic, pureed, etc). These estimates will serve as the basis for subsequent steps in emergency food calculations and should be consistent with hospital Nutrition Care Standards as well as emergency meal plan documents describing how specific dietary needs will be met.

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**A. Patient Nutritional Needs Per Day**

In this section, the hospital will identify the proportion of hospital inpatients in each age/life stage relevant to meal planning and their Basic Daily Nutritional Needs consistent with the hospital Nutrition Care Standards.

Enter the appropriate percentage of total patients in each age/life stage category, include normal newborns in the total. Identify additional categories as appropriate to accommodate hospital specific Nutrition Care Standards.

Enter the Basic Daily Needs for calories, protein and liquid for each age/life stage.

These entries will result in the average *Basic Daily Needs* for inpatients and will carry over to subsequent worksheets.

**B. Patient Dietary Requirements -Meal Type**

In this table, the hospital will identify the proportion of hospital inpatients by meal type as relevant to meal planning and should be consistent with hospital Nutrition Care Standards and separate emergency meal plans documenting how each need will be met. Enter the appropriate percentage of total patients in each category, include normal newborns in the total. The subtotal, excluding NPO, enteral feeding and infant patients, will serve as the basis for *meal* and other feeding estimates in subsequent worksheets.

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III. Key Assumptions: **PATIENT Meal Plan Assumptions – Inventory**

The purpose of this worksheet is to identify PATIENT emergency/disaster menu requirements and translate those requirements to inventory needs. Meal planning assumptions should be consistent with the results of the previous worksheet (II. Patient Meal Requirements), hospital Nutrition Care Standards and emergency meal plan documents describing how specific dietary needs will be met.

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**A. Days of Food**

This section will be used to calculate the days of food for patients to be included in emergency food plan calculations. Enter the number of days you plan to feed each category of patient to identify the total days of food required. Two meal planning phases are provided:

*Phase 1:* Initial period during which hospital may be utilizing more perishables and other food supplies

*Phase 2:* Subsequent period during which hospital may be limited to staples/non perishables and/or meal replacements.

The Total days for both phases should be no less than 7 days of food for patients to meet Title 22. Patients are broken down by those receiving meals, enteral feeding or infant formula carried forward from previous worksheets.

**B. Patient Disaster Menu**

This section identifies the average disaster menu for emergency food planning purposes for Phase 1 and Phase 2. Each worksheet is to document the key assumptions underlying the patient menu for each phase, including:

- Units of measure to be used in calculating each type of food in the menu (e.g., cups, fluid ounces, grams, etc)
- Calories/unit of measure for each type of food (how many calories per ounce of protein, cup of starch, etc)
- The units of protein, starch, vegetable, fruit, milk, condiments and oils/fats for each meal provided (per meal)
- The calories for snacks, Meals Ready to Eat (MRE) and other meal alternatives and how often they will be used in the meal plan (each)
- Enteral feeding patient and Infant formula assumptions

Based on hospital emergency food plans and Nutrition Care Standards, enter appropriate assumptions into each table. This will result in an *average daily unit* quantity and calories per patient. For each phase, if you plan to use only MRE or other meal replacements for patients, then populate that row and provide clear documentation of nutritional content in your emergency food plan. If you plan to use a combination, populate the appropriate columns and rows to reflect that plan. For example, if you plan to use MRE for two meal replacements and provide one meal, then you would only enter assumptions for one meal and MRE for two meal replacements into the table (zero out other cells). Daily calories should be at least equal to the average need calculated in Worksheet II - A: *Patient Meal Requirements*. If the hospital will maintain a single disaster menu, then zero out (do not clear) the servings in the Phase 2 table.

Note: The hospital's emergency food/meal plan should describe how the regular menu will be modified for different patient menu types (e.g., low sodium, diabetic, etc.) and methods (e.g., ground, pureed). This document addresses emergency food supply calculations, not preparation; however, it is recommended that disaster menus be as consistent as possible across populations and modifications to a basic menu simplified.

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**C. Menu to Inventory Needs and Total Servings**

For each worksheet by phase, the final table translates the menu into inventory requirements by taking the daily quantity (e.g., 3 cups of starch) and calculating total ounces for the days of food meal for patients. Enter your assumptions per unit into each table (orange/dotted line cells) and it will calculate the total ounces or quantity required to meet your patient meal plan as well as the *average* per serving and the number of servings. Because each diet requirement may be met through the use of different resources, the hospital must ensure the food inventory matches the total plan requirements (see later worksheets).

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**IV. Key Assumptions: STAFF- OTHER Meal Plan Assumptions**

The purpose of this worksheet is to identify NON-PATIENT emergency/disaster menu requirements and translate those requirements to inventory needs. The estimates entered should be consistent with hospital Nutrition Care Standards and emergency meal plan documents describing how specific meal needs will be met for non-patients. These requirements will differ from patients.

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**A. Meals**

This section will calculate the days of food for staff and any other individuals that you may plan for in your emergency food plan. The categories of individuals that could be included in the hospital plan are identified. Two meal planning phases are provided:

*Phase 1:* Initial period during which hospital may be utilizing more perishables and other food supplies

*Phase 2:* Subsequent period during which hospital may be limited to staples/non perishables and/or meal replacements.

Enter the number of days *in each phase* you wish to plan for each category of individual and the number of meals per day to identify the total meals required. For example, your plan may state that you will provide 7 days and 3 meals a day for staff (assuming 3 shifts), 3 a day for hospital physicians but 2 meals per day for rounding physicians and one for volunteers. It is recommended that you plan for a *minimum* of 4 days for essential staff. Whatever you plan for must be consistent with these calculations and your inventory; therefore, it is recommended that you be prudent but conservative.

**B. Staff/Other Disaster Menu**

This section identifies the average disaster menu for emergency food planning purposes for *Phase 1 and Phase 2* (there is a table for each Phase) The worksheet documents the key assumptions underlying the NON-PATIENT menu, including:

- Units of measure to be used in calculating each type of food in the menu (cups, grams, etc)
- Calories/unit of measure for each type of food (how many calories per gram of protein, cup of starch, etc)
- The units of protein, starch, vegetable, fruit, and oils/fats for each meal provided (per meal)
- The calories for snacks and Meals Ready to Eat (MRE) and how often they will be used in the meal plan.

Based on hospital emergency food plans, enter your assumptions into the table which will result in an average daily quantity and calories per person. Keep in mind yield versus dry weights when entering as the calculation will result in dry weights needed for inventory. If you plan to use only MRE for non-patients, then only populate the MRE row and provide clear documentation of their use in your plan (zero out meal cells). If you plan to use a combination of meals and MRE, populate the appropriate columns and rows to reflect that plan. Do this for each Phase. For example, if you plan to use MRE for two meal replacements and provide one meal, then you would enter assumptions for two meals and MRE for one meal (and enter a 0 into the cells in the other columns). Nutritional standards for staff/others should be addressed in your plan.



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**C. Menu to Inventory Needs and Average Servings**

This table translates the menu into inventory requirements by taking the quantity and translating it to ounces. If the plan calls for an average of 1 cup of starch per meal, then the worksheet will translate that to 8 ounces times the total number of meals. Enter your assumptions per unit into the table and it will calculate the total ounces or quantity required to meet your meal plan, as well as total number of servings (average). Because each diet requirement may be met through the use of different resources, the hospital must ensure the food inventory matches the total plan requirements.

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**V. Key Assumptions: Total Inventory Needs and Servings**

The purpose of this worksheet is to summarize both patient and non-patient (staff and other) emergency/disaster menu food inventory requirements and total servings that inventory should generate. These estimates should be consistent with food inventory lists and actual inventories.

***Note:** All data in this worksheet is calculated and carried forward from previous worksheets. Data should NOT be entered into cells colored light blue (solid line borders) as these are automatic calculations; entry of data into these cells will result in a loss of automatic calculations.*

The data from this worksheet should be utilized to develop/reconcile to food inventory lists and emergency food supplies. This tool should not be integrated into formal emergency food plans until inventory lists and inventories are consistent with the estimated requirements identified through use of the tool.

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**VI. Example: Food Inventory and Par List**

The purpose of this worksheet is to provide an Example of an inventory format that is linked to the categories of food (Food Type) and calculation methods in the Food Planning Tool.

*Note: There are descriptive comments associated with each relevant column header – simply roll your mouse over the column title cell and the comment will pop up. You may also print the page with comments at the end of the page (go to Page Set-up, Sheet Tab, Comments, and select at End of Sheet from the drop down box).*

The information items currently entered into the worksheet are intended to serve as examples only. Each hospital should enter actual inventory items in accordance with their specific plans; however, total items in each Food Type should meet or exceed those calculated using the Tool. For example, if *Attachment C-IV – Meal Plans to Inventories* indicates that the hospital needs 91,804 ounces of starch to meet its plan, or 11,476 servings for both patients and others as used in the example, the food inventory should include that amount of starch for that number of servings; again, remember to calculate and document dry versus served amounts for inventory purposes.