Emergency/Disaster Plan for Food and Dining Services

Be Prepared For Any Emergency

Your Premier Senior Nutrition Resource

Becky Dorner & Associates, Inc.
www.beckydorner.com

License Agreement

READ THE FOLLOWING TERMS AND CONDITIONS BEFORE USING THIS MANUAL/CD-ROM OR ELECTRONIC VERSIONS. USING THIS MATERIAL INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS.

LICENSE. The materials that are the subject of this Agreement (hereinafter referred to as the "Licensed Materials") shall consist of printed materials, electronic information, audio or video/DVD information or published information in any form by Becky Dorner & Associates, Inc. (hereinafter referred to as BD&A). Licensee and its Authorized Users acknowledge that the copyright and title to the Licensed Materials and any trademarks and service marks relating thereto remain with BD&A. Neither Licensee nor its Authorized Users shall have right, title or interest in the Licensed Materials except as expressly set forth in this agreement. In consideration of payment, BD&A hereby grants Licensee a non-exclusive, non-transferable, and revocable License to make permitted use of the Licensed Materials and to provide the Licensed Materials to Authorized Users in accordance with this Agreement.

USAGE. The Licensee shall ensure that only Authorized Users are permitted access to the Licensed Materials. Licensee may install and/or use Licensed Materials based on the agreed upon number of Authorized Users per terms of the Purchase Agreement, Letter of Agreement or Invoice. Licensee is not permitted to make unauthorized copies, alterations or modifications to the Licensed Materials unless specified in the Users' Manual or by prior written authorization of BD&A. Other than as specifically permitted in this Agreement, Licensee may not use the Licensed Materials for commercial purposes, including but not limited to the sale of the Licensed Materials or bulk reproduction or distribution of the licensed materials in any form.

MATERIAL CONTENT. The Licensed Materials are provided for your own personal, educational noncommercial use as a resource aid only. If you intend to use this material for the nutritional needs of an aged, sick or injured person or a person who suffers from a chronic disorder or disease, you should first consult that person's physician or physicians and if none, a physician who practices in the applicable field of medicine.

The Licensed Materials are in the nature of general concepts and, therefore, where its use may be appropriate for one person, its use may not be appropriate for another. The Licensed Materials are not intended to be a substitute for professional medical advice. Consequently, BD&A shall not be liable for any loss or damage directly or indirectly to the Licensee or Authorized Users of any material or information contained in the licensed materials.

LIMITATIONS ON WARRANTIES. BD&A shall not be liable to the Licensee for any indirect, special, incidental, punitive or consequential damages, including but not limited to loss of data, business interruption, or loss of profits arising directly or indirectly from or in connection with the license granted under this Agreement. The forgoing applies regardless of whether the claim or damages result or arise under breach of contract, tort, or any other legal theory.

BD&A makes no representation or warranty, and expressly disclaims any liability with respect to the content of any Licensed Materials, including but not limited to errors or omissions contained therein, libel, infringement of rights of publicity, privacy, trademark rights, moral rights, or the disclosure of confidential information. Except for the express warranties stated herein, the Licensed Materials are provided on an "as is" basis, and BD&A disclaims any and all other warranties, conditions, or representations (express, implied, oral or written), relating to the Licensed Materials or any part thereof, including, without limitation, any and all implied warranties of quality, performance, merchantability or fitness for a particular purpose. BD&A makes no warranties respecting any harm that may be caused by the transmission of computer virus, worm, time bomb, logic bomb or other such computer program. BD&A further expressly disclaims any warranty or representation to Authorized Users, or to any third party.

ACKNOWLEDGEMENT. THE LICENSEE AND AUTHORIZED USERS ACKNOWLEDGES THAT THEY HAVE READ THIS LICENSE, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS.

Becky Dorner, RDN, LD, FAND is widely-known as one of the nation's leading experts on nutrition, aging, and long-term care. An experienced speaker and extensively published author, Becky is Founder/ President of Nutrition Consulting Services, Inc., whose dedicated team of RDNs and NDTRs have served health care facilities in Ohio since 1983 and currently provide food and nutrition services to approximately 100 health care facilities in two states; and Becky Dorner & Associates, Inc., which provides a broad library of credible continuing education (CE) programs and nutrition resources.

Becky's mission to improve nutrition care for older adults has inspired her to present more than 500 programs for national, international and state professional meetings in 5 countries and 50 states; host more than 140 national professional CE webinars and teleseminars since 2004; and to publish more than 300 nationally/internationally recognized health care articles, manuals and CE programs including menus/recipes, clinical manuals, self-study CE programs, inservices, and publications primarily for health professionals working with older adults. Her free email magazine keeps 35,000 health care professionals up to date on the latest news in the field.

Becky has been an active leader holding more than 20 board positions on national and state professional associations since 1984. Past positions for the Academy of Nutrition and Dietetics include the Board of Directors as Speaker-elect/Speaker/Past Speaker of the House of Delegates, Chair of the Council on Future Practice and Chair of the Dietetics in Health Care Communities DPG. She also served on the National Pressure Ulcer Advisory Panel for 10 years (6 years as a director). Honors include: Academy of Nutrition and Dietetics Medallion Award, Fellow of the Academy of Nutrition and Dietetics, and the Academy Award of Excellence in Business and Consultation.

Contributing Author: *Liz Friedrich, MPH, RD, CSG, LDN, FAND* is a Registered Dietitian Nutritionist and president of Friedrich Nutrition Consulting, which provides a variety of nutrition consulting services with a focus on gerontological nutrition. She has co-authored numerous articles in journals and magazines on nutrition and aging, wound healing, and end of life care. She is an accomplished speaker on those same topics, and other subject areas relevant to older adults. Liz also serves as an expert witness in cases against long-term care facilities and registered dietitian nutritionists. In 2009 and again in 2014 Liz became Board Certified as a Specialist in Gerontological Nutrition.

Liz has served as a volunteer for the North Carolina Dietetic Association (NCDA), the Nutrition Entrepreneurs Dietetic Practice Group (NE DPG), and Dietetics in Health Care Communities Dietetic Practice Group (DHCC) in many different board positions and is a Fellow of the Academy of Nutrition and Dietetics. She is the recipient of two North Carolina Dietetic Association awards, the Recognized Young Dietitian of the Year (1991) and the Member of the Year (2000). She was awarded the Distinguished Member of the Year Award from the Dietetics in Health Care Communities Dietetic Practice Group.

Continuing Professional Education Program

Thank you to our continuing professional education expert reviewers:

Linda S. Eck Mills, MBA, RDN, LDN, FADA
Career Coach, International Speaker, Author
Dynamic Communication Services
Bernville, PA

Marne Keeler, RDN, LD
Consultant Dietitian
Katy, TX

Mary Ellen Posthauer, RDN, CD, LD, FAND
President, MEP Healthcare Dietary Services, Inc.
Past Director/President-National Pressure Ulcer Advisory Panel
Nutrition411 Advisory Board
Evansville, IN

A copy of this manual should be kept in a very well-known and easily accessed location in the kitchen or storage area.

In our constant effort to serve your needs and improve this manual, your comments are always appreciated. Please send them to:

Becky Dorner & Associates, Inc.
info@beckydorner.com
www.beckydorner.com
800-342-0285

Emergency/Disaster Plan for Food and Dining Services

Table of Contents

Continuing Professional Education

If you purchased the continuing education course with this manual, please login to your account at www.beckydorner.com. Click into your Member Area and then on Tests on the left sidebar.

If you would like to purchase the continuing education course that goes with this manual, please visit our website at www.beckydorner.com. Please check the expiration date to make sure that the book edition you have matches the course you are purchasing. Courses are typically only valid for 3 years.

Chapter 1: Introduction

Emergency/Disaster Plan for Food and Dining Services

Introduction

When a disaster strikes the outcome can be devastating. Most people who have survived a disaster agree that their chance for survival dramatically increased because they were prepared, knowledgeable, adaptable, and calm during their experience. This manual was written to help assist health care facilities survive a disaster safely, and to help them provide adequate food and water during and after an emergency event.

This document is intended to provide registered dietitian nutritionists (RDNs), nutrition and dietetic technicians, registered (NDTRs), certified dietary managers (CDMs), directors of food and nutrition services, and other food and nutrition services personnel with detailed information on planning for emergencies. This manual provides information on:

- How to be prepared for different types of disasters.
- How to train staff to be prepared for disasters.
- How to determine needed emergency supplies to have on hand.
- How to assure adequate and safe water supplies.

The manual contains:

- Sample policies and procedures.
- Safe food handling guidelines during a disaster.
- Sample emergency menus, recipes and supplies.

A disaster can strike anywhere and at any time. The key to successfully surviving and moving forward is planning in advance.

It is important to be familiar with the types of natural disasters that are common in different areas of the country. Hurricanes or snow emergencies usually allow for some preparation but some natural disasters such as earthquakes, tornados, or sudden flash floods come without much warning. Some disasters, including fires, terrorist attacks, or explosions can also occur unexpectedly. It is essential to have a plan of action that has been tested and evaluated and is ready to implement when a disaster strikes.

Because a disaster could happen at any time, it is imperative to have enough water and food in storage at all times. In the event of a power outage, contaminated water supply, or evacuation, food items should be as simple as possible to prepare and serve and water purification may be necessary.

In case of an unexpected disaster, take the following actions:

1. Remain calm.
2. Attend to anyone who needs immediate attention. If there are injuries sustained, advise staff where to receive medical attention.
3. Locate a working cell phone if phone lines are down.
4. Call 9-1-1 for assistance.
5. Contact the designated person in charge of emergencies in the department and/or facility to contact any and all appropriate authorities.
6. If immediate safety is in jeopardy, evacuate to a safer location.

Recent Disasters in the United States

It is helpful to put disasters into perspective with some recent historical context. According to the National Fire Protection Association, U.S. fire departments responded to an estimated average of 5,650 structure fires in health care properties per year in 2009 to 2013. In 2009 to 2013, cooking was the leading cause of fires in all health care properties, accounting for 65% of fires. Almost half (46%) were at nursing homes, and almost one-quarter (21%) were in hospitals or hospices (1).

Natural Disasters

In the aftermath of the 2004-2005 hurricanes on the gulf coast, the U.S. Department of Health and Human Services Office of Inspector General evaluated emergency preparedness among area nursing facilities. According to their 2006 report, 94% of facilities nationwide met federal standards for emergency plans and 80% for sufficient training in 2004-2005 (2). A follow-up report released in 2012 (3) indicated that gaps continued to exist in emergency preparedness. In the follow-up report CMS was charged to revise the regulations for skilled nursing facilities to provide specific requirements for emergency readiness and training.

There are lessons to be learned with each disaster, and 2004-2005 were years to learn a lot. Within six weeks during August and September of 2004, four hurricanes battered Florida: Charley, Frances, Ivan and Jeanne. The storms had devastating effects. In 2005, hurricane season proved to be a major disaster for the states of Louisiana, Mississippi, Texas and Florida. Hurricanes Katrina and Rita hit the Gulf Coast in the summer and fall wreaking havoc, death and destruction in their wake. At the time, these two hurricanes were the most costly natural disasters in U.S. history – measured in human lives, and damaged and destroyed property.

Approximately one million people were ordered to evacuate the Houston/Galveston area. Freeways were jammed for hours stranding evacuees without needed food, water, gasoline and supplies. Frail, older adults evacuated from nursing homes sat on buses for up to 14 hours or more during the evacuation process. Many people were horrified to hear about a bus explosion that killed a number of assisted living residents trying to evacuate the area. Sadly, 34 nursing home residents who were not evacuated from a Louisiana nursing home died in the flooding.

Within a span of 12 days in September 2008, Category 2 Hurricanes Gustav and Ike made landfall in Cocodrie, Louisiana and Galveston Island, Texas. Hurricane Gustav forced the evacuation of 92 nursing homes in the coastal parishes of Louisiana. In March 2009, flooding of the Red River forced the evacuation of six nursing homes in North Dakota. Across the river in Minnesota, one nursing home was evacuated and the residents of another sheltered in place.

In 2011, a massive tornado outbreak hit the mid-western and southern U.S. spawning 358 tornadoes that devastated several cities and resulted in 348 deaths. In late 2012, severe flooding from Superstorm Sandy affected 24 states, including the entire eastern seaboard from Florida to Maine and west across the Appalachian Mountains to Michigan and Wisconsin, with particularly severe damage in New Jersey and New York.

Superstorm Sandy's storm surge hit New York City on October 29, flooding streets, tunnels and subway lines and cutting power in and around the city. One hospital was evacuated due to loss of power.

In 2013, a sudden and unexpected ammonium nitrate explosion occurred in West Texas, killing 15 and injuring 160 people. The blast damaged the nearby West Rest Haven nursing home, and many residents were evacuated.

The spring and summer of 2017 brought major fires in the west, including Washington State, Oregon, and Montana. In the fall of 2017, fires in California claimed the lives of 17 people, as well as devastating property. People who fled had little warning and little time to evacuate.

In the summer of 2017, Hurricane Harvey created catastrophic events dumping approximately 27 trillion gallons (51 inches) of rain on Texas and Louisiana in 6 days. No one could have predicted the devastation: 72,000 people had to be rescued; 30,000 were in need of temporary shelter after the storm. People all over the country watched as nursing home residents sat in their wheelchairs waist deep in flood waters (http://www.cnn.com/2017/08/27/us/harvey-impact-by-the-numbers-trnd/index.html).

Hurricane Irma (H Irma) soon followed, breaking records for its size and force. At 70,000 square miles of storm force winds, it was larger than the 65,000 square miles of Florida; at 300 miles wide, it was double the width of the Florida peninsula. More than 20 million people in 3 states experienced at least 75 mile per hour winds with H Irma (at its peak, winds were 180 miles per hour) (http://www.cnn.com/2017/09/06/weather/irma-hurricane-numbers-stats-trnd/index.html). Sadly, once again, people all over the country watched the news as 8 nursing home residents (and later more) died of the effects of the extreme heat in the aftermath of the storm as large numbers of Florida residents were without power after the storm. This author learned firsthand what it was like to be an evacuee during H Irma.

In 2017 CMS issued a final rule to establish consistent emergency preparedness requirements for health care providers participating in Medicare and Medicaid, to increase patient safety during emergencies, and establish a more coordinated response to natural and man-made disasters. Refer to Chapter 2: Regulations Related to Emergency Preparedness on pages 10-24 for more information.

The enormity of these and other disasters involving tornadoes, flooding, mudslides, and large snow events take many by surprise. No matter how well prepared any healthcare facility is, there are many things that can't be predicted. However, these experiences can be used to learn how to cope with emergencies and how to be ready when disaster strikes.

Stories from Disaster Survivors

Food service includes a lot of paperwork - menus, recipes, production sheets, menu substitution logs, temperature logs, diet orders, meal counts, weekly flash reports,

facility policy and procedure manuals, employee records, inservice records, equipment manuals, etc.

One of our residential treatment centers had the kitchen completely destroyed by Superstorm Sandy and operated from a mobile kitchen for a month while the kitchen was rebuilt. Despite all the advanced notices of the impending storm, the food service manager failed to move these documents, and failed to back-up his computer to the corporate server or a flash drive.

The result was the need to recreate as much as possible. Menus, recipes, production sheets, meal counts, weekly flash reports were all available from other sources within the company, but this took time to put back together. Gone were the temperature logs, diet orders, facility policy and procedure manual, employee records, inservice records, and equipment manuals.

Lessons learned:

- With computers and the portability of data, this information should have all been in an electronic format and kept safely at a remote location. At the end of the month, items like temperature logs can be scanned and filed electronically.
- All documents required for regulatory purposes should be kept current in an electronic format. While this may take a few minutes on a regular basis to keep the information current, the most you would lose is the records from the current month. That is a lot better than the consequence of losing all of this information.

On a positive note, this facility now has a new kitchen and a new food service manager.

Linda S. Eck Mills, MBA, RDN, LDN, FADA
Career Coach, International Speaker, Author
Dynamic Communication Services

Emergency/Disaster Plan for Food and Dining Services

Our company provides nutrition and dietetic services throughout the state of Texas. The months following hurricanes Rita and Katrina in 2004 were interesting and challenging for us. Fortunately, we did not suffer the catastrophic losses that many people did. However, the impact of both hurricanes affected our business, our employees and many of the facilities that we provide services to. The impact on the residents in these facilities was tremendous. It was amazing to me the effect these disasters have had on people and areas not in the immediate impact zone. I thought I would share some of that with you.

We received over 500 residents from Louisiana into our Texas facilities. Many came without medical records, history or physical information. All were very confused and scared. Our RDs were called in to help with gathering information on nutritional needs, feeding ability, etc. I remember one of my RDs calling me and saying that the stories the evacuees told had the nurses, physician assistants, the dietitian and the nursing home staff in tears all day long. We developed a very basic feeding plan until we could get lab, medical information and history together. We also had to make major changes on our "Texas Country" menus to accommodate the desires of the people from Louisiana.

When Hurricane Rita hit, we had 28 of our Texas facilities evacuate to facilities further in from the coast. As the hurricane changed course, the ripple effect of more buildings evacuating was unbelievable. The day before Rita hit, our governor announced that if a nursing home administrator did not evacuate their residents and the residents died or suffered, that administrator would face the full impact of the law. The evacuation was unprecedented. We have emergency plans in all these buildings for water, paper supplies, and emergency food. However:

- We did not plan for spending twelve hours on the highway, not being able to use the emergency food, because the residents were stuck in a bus.
- We did not have adequate water in small bottles, adequate snacks or other nursing supplies.
- We have always written policies that said local vendors would bring additional supplies - they could not get there. Major vendors closed their warehouses and did not call and tell our facilities so the buildings did not get deliveries for two days prior to the hurricane or four days after.
- Buildings that typically housed 60 residents now had 100 residents - overnight. My business partner and I answered phone call after phone call about how to feed and hydrate this many people with the supplies they had.

Among the effects of Hurricane Rita was that our dietitians' reports and medical records were missing and nutritional assessments were gone. The physical impact on the residents was very evident. We saw much weight loss, new skin issues and dehydration. Many of our hospice residents passed away. Staffing in the nursing homes is always a challenge, but we saw tremendous shortages in the areas directly hit by the hurricane. Some employees left with the evacuation, could not get back to their homes, so they relocated and took jobs elsewhere.

Our business experienced a significant decrease in billable hours during and after Rita. Our dietitians in those affected areas suffered personal damage and loss of wages. We

experienced a decrease in frequency of payment from many facilities, because the evacuation cost many of the facilities $50,000 to $100,000.

As a result, we are trying to be more specific in how we prepare a facility for disaster planning.

- We check frequently for water supplies, asking facilities to have some water available in individual bottles.
- We ask for supplies to include individual snacks, moist towelettes, and to have snacks and water available for staff.

I do not think that anyone could have been completely prepared for the impact of either of these two hurricanes. I am grateful that our company was able to provide support, encouragement and help during this time. I am also deeply proud of the nursing and dietary staff who stayed and helped (many without pay) the buildings that evacuated.

Within the last two years, there was a day of “perfect storms” in Texas. Drought conditions, very low humidity and winds greater than 40 mph created catastrophic conditions for fires. In one afternoon, over 200 counties in Texas were burning with brush fires and wildfires. Central Texas was one of the hardest hit. We had many facilities faced with evacuation from their homes and calls to remove their loved ones from facilities that were in danger. In one county alone, the fires burned for five to seven days. We had policies and procedures, emergency food and water, and evacuation food and water supply policies in place.

We also fed an extra 50 to 300 people per day in many of these skilled nursing facilities, hospitals, head start and congregate feeding sites for one to five weeks after the fires. The fire burned 1700 homes and displaced over 7000 people. These people remained in the community waiting to hear about their homes. The health care facilities absorbed the responsibilities of feeding families and loved ones of residents, patients, and employees.

We helped by providing larger quantity recipes, finding new vendors that could deliver on roads that were not blocked, and working within the community to accept donations and set up procedures. We also worked with the state to ensure that food safety regulations were followed and understood by all. I would encourage “worse case scenarios” be discussed, plans be made at least yearly, and menus and recipes for feeding two to three times the current population be completed and placed with your emergency plans. Consider plans for infants, children and nontraditional residents.

Cynthia Piland, MS, RD, LD
President, Piland, Adams & Associates, Inc.
La Grange, TX

Tips from Survivors

There may be problems with staff not reporting to work on the day of a planned evacuation. The staff and residents/patients both experience emotional distress. For residents/patients and families, there is a great deal of fear associated with the uncertainty of where the residents/patients are being transferred, and what is going to happen to them.

In addition to being separated from family outside of the facility, residents/patients may also be separated from relatives that are living or working in the same facility. For staff, there is a great deal of fear about what is going to happen to their own families while they are working. Families are often separated and anxiety levels are high, especially if there is uncertainty regarding a family member's safety.

Here are a few other miscellaneous tips:

- Make sure all staff has appropriate identification to get through security check points, such as highway patrol, sheriff, police, etc.
- Keep fold-up plastic containers that can be filled with water when a storm warning is posted. (These come in 5 gallon sizes and can be filled in the kitchen).
- Stock baby formula and supplies to use for children of staff, emergency personnel and evacuees who may be staying in the facility during and after the storm.
- Garbage pick-up may be disrupted. The facility may need to arrange to use dumpsters in other locations after the facility dumpsters are full.
- If a generator is working, it can provide intermittent power to freezers and refrigerators to keep them at the appropriate temperatures. You may have to share the generator with other areas in the facility.
- Arrange for additional fuel from local suppliers for generators. If possible, obtain extra fuel that staff can use to fill their cars in order to report to work.
- Arrange portable toilets to be available for use when water is not available in the facility.

Lynn Moore, RD, LD
President, Nutrition Systems, Inc.,
Port Gibson, Mississippi

Observations from a Florida Disaster

Everyone quickly got very bored just eating tuna and peanut butter - use creativity when planning disaster menus.

Water goes much faster than you would think, so have plenty of extra supplies. We were using it to rinse toothbrushes, clean eyeglasses, wash hands, etc. since there was a boil water order for over a week - so plan for extra water - not only drinking water.

No one can take credit cards when there is no power so have plenty of cash on hand.

Oxygen users need liquid oxygen - not a concentrator that needs power.

People tend to eat from boredom simply because there is nothing else to do (or from stress) - so you need to plan snack foods and special diet foods such as sugar free foods for those with special therapeutic diet needs.

They are not joking when they say you need to plan for at least 3 days before any services or help kicks in. It may be more like 7 days or even 14.

Generators are of no use when gas is not available. Plan for gas and lots of it!

Flashlights are a pain to carry around – Have battery operated lanterns that can sit on their own.

Nancy Collins, PhD, RD, LD/N, FAPWCA
Founder of Nutrition411.com
President, Light Bulb Health, Inc.
Las Vegas, NV (formerly a Florida resident)

Chapter 2: Regulations Related to Emergency Preparedness

Occupational Safety and Health Administration (OSHA) Regulations

Federal OSHA Standards

The Occupation Safety and Health Act (1970) requires that employers prepare plans to address employee safety in the event of a disaster. OSHA has a variety of resources, including sample disaster plans, available to assist employers in developing these plans.

Section 5(a)(1) of the OSHA Act, often referred to as the General Duty Clause, requires employers to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees". Section 5(a)(2) requires employers to "comply with occupational safety and health standards promulgated under this Act" (4).

Twenty-six states have OSHA-approved State Plans and have adopted their own standards and enforcement policies. For the most part, these states adopt standards that are identical to federal OSHA. However, some states have adopted different standards applicable to this industry or may have different enforcement policies. See http://www.osha.gov/fso/osp/index.html (4) for more information and links to each state's plans.

The following information highlights regulations related to emergency preparedness and response: The complete list of OSHA regulations can be accessed at https://www.osha.gov/law-regs.html, with a detailed compliance policy outlined at https://www.osha.gov/OshDoc/Directive_pdf/CPL_2-1_037.pdf.

Emergency Action Plan (EAP): The purpose of an EAP is to facilitate and organize employer and employee actions during workplace emergencies. An EAP is a written document that is required by a particular OSHA standard. The elements of the plan are outlined on pages 11-15.

1910.38 Emergency Action Plans (5)

Application. An employer must have an emergency action plan whenever an OSHA standard in this part requires one. The requirements in this section apply to each such emergency action plan.

Written and oral emergency action plans. An emergency action plan must be in writing, kept in the workplace, and available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.

Minimum elements of an emergency action plan. An emergency action plan must include at a minimum:

- Procedures for reporting a fire or other emergency.
- Procedures for emergency evacuation, including type of evacuation and exit route assignments.
- Procedures to be followed by employees who remain to operate critical plant operations before they evacuate.

- Procedures to account for all employees after evacuation.
- Procedures to be followed by employees performing rescue or medical duties.
- The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

Employee alarm system. An employer must have and maintain an employee alarm system. The employee alarm system must use a distinctive signal for each purpose and comply with the requirements in §1910.165.

Training. An employer must designate and train employees to assist in a safe and orderly evacuation of other employees.

Review of emergency action plan. An employer must review the emergency action plan with each employee covered by the plan:

- When the plan is developed or the employee is assigned initially to a job.
- When the employee's responsibilities under the plan change.
- When the plan is changed.

Fire Prevention Plan (FPP): An FPP is a hazard prevention plan that is to assure advanced planning for evacuations in fire and other emergencies. An FPP is a written document that is required by a particular OSHA standard. The elements of the plan shall include but are not limited to: (5)

1. A list of major workplace fire hazards and their proper handling and storage procedures, potential ignition sources, their control procedures, and the type of fire protection equipment or systems which can control a fire.
2. Names or job titles of those persons responsible for maintenance of equipment and systems installed to prevent or control ignition of fires.
3. Names or job titles of those persons responsible for control of fuel source hazards.

OSHA defines an incipient stage fire as a fire which is in the initial stage or beginning stage and which can be controlled or extinguished by portable fire extinguishers, class II standpipe, or small hose systems without the need for protective clothing or breathing apparatus.

1910.39 Fire Protection Plans

Application. An employer must have a fire prevention plan when an OSHA standard in this part requires one. The requirements in this section apply to each such fire prevention plan.

Written and oral fire prevention plans

- A fire prevention plan must be in writing, be kept in the workplace, and be made available to employees for review. However, an employer with 10 or fewer employees may communicate the plan orally to employees.

Minimum elements of a fire prevention plan. A fire prevention plan must include:

- A list of all major fire hazards, proper handling and storage procedures for hazardous materials, potential ignition sources and their control, and the type of fire protection equipment necessary to control each major hazard.
- Procedures to control accumulations of flammable and combustible waste materials.
- Procedures for regular maintenance of safeguards installed on heat-producing equipment to prevent the accidental ignition of combustible materials.
- The name or job title of employees responsible for maintaining equipment to prevent or control sources of ignition or fires.
- The name or job title of employees responsible for the control of fuel source hazards.
- Employee information. An employer must inform employees upon initial assignment to a job of the fire hazards to which they are exposed. An employer must also review with each employee those parts of the fire prevention plan necessary for self-protection.

Highlights from OSHA's compliance policy for the application of emergency action plans are outlined below (6).

- Employers are generally required to provide portable fire extinguishing equipment for use in fighting incipient stage fires in the workplace, however alternatives are provided for employers who do not want their employees to fight incipient stage fires in the workplace. Details can be found at https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9811. Evacuation guidelines are outlined for those who do not choose to use portable fire extinguishers in the event of a fire.
- At the time of an emergency, employees should know what type of evacuation is necessary and what their role is in carrying out the plan.
    - In some cases where the emergency is very grave, total and immediate evacuation of all employees is necessary.
    - In other emergencies, a partial evacuation of nonessential employees with a delayed evacuation of others may be necessary for continued plant operation.
    - In some cases, only those employees in the immediate area of the fire may be expected to evacuate or move to a safe area.
- Employees must be sure that they know what is expected of them in all such emergency possibilities which have been planned in order to provide assurance of their safety from fire or other emergency.
- The designation of refuge or safe areas for evacuation should be determined and identified in the plan.
    - In a building divided into fire zones by fire walls, the refuge area may still be within the same building but in a different zone from where the emergency occurs.
    - Exterior refuge or safe areas may include parking lots, open fields or streets which are located away from the site of the emergency and which

provide sufficient space to accommodate the employees. Employees should be instructed to move away from the exit discharge doors of the building, and to avoid congregating close to the building where they may hamper emergency operations.

- The employer should assure that an adequate number of employees are available at all times during working hours to act as evacuation wardens so that employees can be swiftly moved from the dangerous location to the safe areas.
    - Generally, one warden for each twenty employees in the workplace should be able to provide adequate guidance and instruction at time of a fire emergency.
    - The employees selected or who volunteer to serve as wardens should be trained in the complete workplace layout and the various alternative escape routes from the workplace.
    - All wardens and fellow employees should be made aware of handicapped employees who may need extra assistance, such as using the buddy system, and of hazardous areas to be avoided during emergencies.
    - Before leaving, wardens should check rooms and other enclosed spaces in the workplace for employees who may be trapped or otherwise unable to evacuate the area.
    - After the desired degree of evacuation is completed, the wardens should be able to account for or otherwise verify that all employees are in the safe areas.
- Emergencies that may need to be addressed by EAP's or FPP's include, but are not limited to natural disasters (e.g. hurricanes, tornadoes, floods, etc.) and man-made disasters (e.g. terrorism).
    - Guidance on disaster/emergency planning with respect to terrorism can be found on internet sites such as the National Emergency Management Association (NEMA) website at http://www.nemaweb.org or the FEMA website at http://www.fema.gov.
- The use of floor plans or workplace maps which clearly show the emergency escape routes should be included in the emergency action plan. Color coding will aid employees in determining their route assignments.
- The employer should develop and explain in detail what rescue and medical first aid duties are to be performed and by whom. All employees are to be told what actions they are to take in these emergency situations that the employer anticipates may occur in the workplace.
- Fire prevention housekeeping calls for the control of accumulations of flammable and combustible waste materials. It is the intent of this standard to assure that C-3 hazardous accumulations of combustible waste materials are controlled so that a fast developing fire, rapid spread of toxic smoke, or an explosion will not occur.
    - Employers and employees should be aware of the hazardous properties of materials in their workplaces, and the degree of hazard each poses.
    - Large accumulations of waste paper or corrugated boxes, etc., can pose a significant fire hazard. Accumulations of materials which can cause large fires or generate dense smoke that are easily ignited or may start from

spontaneous combustion are the types of materials with which this standard is concerned. Such combustible materials may be easily ignited by matches, welder's sparks, cigarettes and similar low level energy ignition sources.

- Certain equipment is often installed in workplaces to control heat sources or to detect fuel leaks. An example is a temperature limit switch often found on deep-fat food fryers found in restaurants.
    - If these devices are not properly maintained or if they become inoperative, a definite fire hazard exists. Employees and supervisors should be aware of the specific type of control devices on equipment involved with combustible materials in the workplace and should make sure, through periodic inspection or testing, that these controls are operable.
    - Manufacturers' recommendations should be followed to assure proper maintenance procedures.

OSHA Documents That Might Be Useful

Principal Emergency Response and Preparedness Requirements and Guidance. Occupational Safety and Health Administration. 2004. https://www.osha.gov/Publications/osha3122.pdf.

Emergency Action Plans: How to Plan for Workplace Emergencies and Evacuations. Occupational Safety and Health Administration. 2001 (revised). https://www.osha.gov/Publications/osha3088.pdf.

Emergency Exit Routes Fact Sheet. Occupational Safety and Health Administration. 2003. https://www.osha.gov/OshDoc/data_General_Facts/emergency-exit-routes-factsheet.pdf

Emergency Management: Planning & Responding to Workplace Emergencies Fact Sheet. Occupational Safety and Health Administration. 2004. https://www.osha.gov/OshDoc/data_General_Facts/factsheet-workplaceevergencies.pdf.

Emergency Management: Preparing and Protecting Security Personnel in Emergencies. Occupational Health and Safety Administration. 2007. https://www.osha.gov/Publications/3335-security-personnel.pdf.

Federal Nursing Home Regulations

Federal nursing home regulations (developed and regulated by the Centers for Medicare and Medicaid Services, or CMS), provide general guidelines for skilled nursing facilities as it pertains to disaster preparedness. The complete set of guidance to surveyors can be found at https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf.

The following F-Tag applies to long-term care facilities and their food and dining service departments. Assisted living facilities and group homes follow state regulations, which vary from state to state.

The following information addresses regulations outlined by CMS's guidance to surveyors regarding skilled nursing facilities (7).

§483.90(i)(1) Other Environmental Conditions

Tag Number	Regulation
F922	• The facility must establish procedures to ensure that water is available to essential areas when there is a loss of normal water supply; • The facility should have a written procedure which defines the source of water when there is a loss of normal water supply, including provisions for storing the water, both potable and nonpotable, a method for distributing the water and a method for estimating the volume of water required.

In 2017, CMS issued a Final Rule on emergency preparedness that applies to Medicare and Medicaid certified facilities, including skilled nursing facilities. The Rule establishes national emergency preparedness requirements for participating providers and certified suppliers to plan adequately for both natural and man-made disasters, and coordinate with federal, state, tribal, regional and local emergency preparedness systems. The Final Rule also assists facilities to adequately prepare to meet the needs of patients, clients, residents, and participants during disasters and emergency situations. Compliance with the emergency preparedness requirements are determined in conjunction with the existing survey process for health and safety compliance surveys or Life Safety Code (LSC) surveys (8).

Departments of Food and Nutrition should work with their facility administration and other departments to contribute to the facility's emergency preparedness plan as needed. The emergency preparedness program must describe a facility's comprehensive approach to meeting the health, safety, and security needs of their staff and patient population during an emergency or disaster situation. The program must also address how the facility would coordinate with other healthcare facilities, as well as the whole community during an emergency or disaster (natural, man-made, or facility). The emergency preparedness program must be reviewed annually (8).

The term “comprehensive” in the rule is to ensure that facilities do not only choose one potential emergency that may occur in their area, but rather consider a multitude of events and be able to demonstrate that they have considered this during their development of the emergency preparedness plan. Facilities are expected to develop an emergency preparedness plan that is based on the facility-based and community-based risk assessment using an “all-hazards” approach. Facilities must document both risk assessments. An example consideration may include, but is not limited to, natural disasters prevalent in a facility’s geographic region such as wildfires, tornados, or flooding.

The Final Rule outlines guidelines for communication, emergency power, and other. According to the rule, the four core concepts of emergency preparedness are (9):

- Risk assessment and emergency planning
- Communication plan
- Policies and procedures
- Training and testing

The Rule can be downloaded at https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Emergency-Prep-Rule.html.

CMS has a website that provides information and resources on emergency preparedness that can be accessed at https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/index.html.

CMS has issued a publication on Provider Survey and Certification Frequently Asked Questions regarding declared public health emergencies (https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Downloads/All-Hazards-FAQs.pdf.

Long Term Care Facilities: Are You Ready for a Disaster?

The Centers for Medicare and Medicaid (CMS) services has created an emergency preparedness checklist that might be helpful for long term care facilities. This will help assure compliance to CMS regulations that are outlined on pages 16 and 17. The checklist is on the following pages.

Basics of Planning for a Disaster

Each facility should have an emergency plan in place. There should also be emergency food and water supplies, emergency policies, procedures, and emergency menus. The remaining pages of this manual provide a wealth of information to help assure that a facility is prepared and can function as efficiently and effectively as possible in the event of a disaster.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR MEDICARE & MEDICAID SERVICES

Survey & Certification
Emergency Preparedness for Every Emergency

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			• **Develop Emergency Plan:** Gather all available relevant information when developing the emergency plan. This information includes, but is not limited to: - Copies of any state and local emergency planning regulations or requirements - Facility personnel names and contact information - Contact information of local and state emergency managers - A facility organization chart - Building construction and Life Safety systems information - Specific information about the characteristics and needs of the individuals for whom care is provided
			• **All Hazards Continuity of Operations (COOP) Plan:** Develop a continuity of operations business plan using an all-hazards approach (e.g., hurricanes, floods, tornadoes, fire, bioterrorism, pandemic, etc.) that could potentially affect the facility directly and indirectly within the particular area of location. Indirect hazards could affect the community but not the facility and as a result interrupt necessary utilities, supplies or staffing. Determine all essential functions and critical personnel.
			• **Collaborate with Local Emergency Management Agency:** Collaborate with local emergency management agencies to ensure the development of an effective emergency plan.
			• **Analyze Each Hazard:** Analyze the specific vulnerabilities of the facility and determine the following actions for each identified hazard: - Specific actions to be taken for the hazard - Identified key staff responsible for executing plan - Staffing requirements and defined staff responsibilities - Identification and maintenance of sufficient supplies and equipment to sustain operations and deliver care and services for 3-10 days, based on each facility's assessment of their hazard vulnerabilities. (Following experiences from Hurricane Katrina, it is generally felt that previous recommendations of 72 hours may no longer be sufficient during some wide-scale disasters. However, this recommendation can be achieved by maintaining 72-hours of supplies on hand, and holding agreements with suppliers for the remaining days.). - Communication procedures to receive emergency warning/alerts, and for communication with staff, families, individuals receiving care, before, during and after the emergency - Designate critical staff, providing for other staff and volunteer coverage and meeting staff needs, including transportation and sheltering critical staff members' family
			• **Collaborate with Suppliers/Providers:** Collaborate with suppliers and/or providers who have been identified as part of a community emergency plan or agreement with the health care facility, to receive and care for individuals. A surge capability assessment should be included in the development of the emergency plan. Similarly, evidence of a surge capacity assessment should be included if the supplier or provider, as part of its emergency planning, anticipates the need to make housing and sustenance provisions for the staff and or the family of staff.

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements
* Task may not be applicable to agencies that provide services to clients in their own homes

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			• **Decision Criteria for Executing Plan:** Include factors to consider when deciding to evacuate or shelter in place. Determine who at the facility level will be in authority to make the decision to execute the plan to evacuate or shelter in place (even if no outside evacuation order is given) and what will be the chain of command.
			• **Communication Infrastructure Contingency:** Establish contingencies for the facility communication infrastructure in the event of telephone failures (e.g., walkie-talkies, ham radios, text messaging systems, etc.).

			• **Develop Shelter-in-Place Plan:** Due to the risks in transporting vulnerable patients and residents, evacuation should only be undertaken if sheltering-in-place results in greater risk. Develop an effective plan for sheltering-in-place, by ensuring provisions for the following are specified: *
			- Procedures to assess whether the facility is strong enough to withstand strong winds, flooding, etc.
			- Measures to secure the building against damage (plywood for windows, sandbags and plastic for flooding, safest areas of the facility identified.
			- Procedures for collaborating with local emergency management agency, fire, police and EMS agencies regarding the decision to shelter-in-place.
			- Sufficient resources are in supply for sheltering-in-place for at least 7 days, including:
			  - Ensuring emergency power, including back-up generators and accounts for maintaining a supply of fuel
			  - An adequate supply of potable water (recommended amounts vary by population and location)
			  - A description of the amounts and types of food in supply
			  - Maintaining extra pharmacy stocks of common medications
			  - Maintaining extra medical supplies and equipment (e.g., oxygen, linens, vital equipment)
			- Identifying and assigning staff who are responsible for each task
			- Description of hosting procedures, with details ensuring 24-hour operations for minimum of 7 days
			- Contract established with multiple vendors for supplies and transportation
			- Develop a plan for addressing emergency financial needs and providing security

			• **Develop Evacuation Plan:** Develop an effective plan for evacuation, by ensuring provisions for the following are specified: * - Identification of person responsible for implementing the facility evacuation plan (even if no outside evacuation order is given) - Multiple pre-determined evacuation locations (contract or agreement) with a "like" facility have been established, with suitable space, utilities, security and sanitary facilities for individuals receiving care, staff and others using the location, with at least one facility being 50 miles away. A back-up may be necessary if the first one is unable to accept evacuees. - Evacuation routes and alternative routes have been identified, and the proper authorities have been notified Maps are available and specified travel time has been established - Adequate food supply and logistical support for transporting food is described.

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements

* Task may not be applicable to agencies that provide services to clients in their own homes

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			- The amounts of water to be transported and logistical support is described (1 gal/person). - The logistics to transport medications is described, including ensuring their protection under the control of a registered nurse. - Procedures for protecting and transporting resident/patient medical records. - The list of items to accompany residents/patients is described. - Identify how persons receiving care, their families, staff and others will be notified of the evacuation and communication methods that will be used during and after the evacuation - Identify staff responsibilities and how individuals will be cared for during evacuation and the back-up plan if there isn't sufficient staff. - Procedures are described to ensure residents/patients dependent on wheelchairs and/or other assistive devices are transported so their equipment will be protected and their personal needs met during transit (e.g., incontinent supplies for long periods, transfer boards and other assistive devices). - A description of how other critical supplies and equipment will be transported is included. - Determine a method to account for all individuals during and after the evacuation - Procedures are described to ensure staff accompany evacuating residents. - Procedures are described if a patient/resident becomes ill or dies in route. - Mental health and grief counselors are available at reception points to talk with and counsel evacuees. - Procedures are described if a patient/resident turns up missing during an evacuation: • Notify the patient/resident's family • Notify local law enforcement • Notify Nursing Home Administration and staff - Ensure that patient/resident identification wristband (or equivalent identification) must be intact on all residents. - Describe the process to be utilized to track the arrival of each resident at the destination. - It is described whether staff's family can shelter at the facility and evacuate.
			• **Transportation & Other Vendors:** Establish transportation arrangements that are adequate for the type of individuals being served. Obtain assurances from transportation vendors and other suppliers/contractors identified in the facility emergency plan that they have the ability to fulfill their commitments in case of disaster affecting an entire area (e.g., their staff, vehicles and other vital equipment are not "overbooked," and vehicles/equipment are kept in good operating condition and with ample fuel.). Ensure the right type of transportation has been obtained (e.g., ambulances, buses, helicopters, etc.). *

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements
* Task may not be applicable to agencies that provide services to clients in their own homes

Survey & Certification
Emergency Preparedness for Every Emergency

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			• **Train Transportation Vendors/Volunteers:** Ensure that the vendors or volunteers who will help transport residents and those who receive them at shelters and other facilities are trained on the needs of the chronic, cognitively impaired and frail population and are knowledgeable on the methods to help minimize transfer trauma. *
			• **Facility Reentry Plan**: Describe who will authorizes reentry to the facility after an evacuation, the procedures for inspecting the facility, and how it will be determined when it is safe to return to the facility after an evacuation. The plan should also describe the appropriate considerations for return travel back to the facility. *
			• **Residents & Family Members:** Determine how residents and their families/guardians will be informed of the evacuation, helped to pack, have their possessions protected and be kept informed during and following the emergency, including information on where they will be/go, for how long and how they can contact each other.
			• **Resident Identification:** Determine how residents will be identified in an evacuation; and ensure the following identifying information will be transferred with each resident: - Name - Social security number - Photograph - Medicaid or other health insurer number - Date of birth, diagnosis - Current drug/prescription and diet regimens - Name and contact information for next of kin/responsible person/Power of Attorney) Determine how this information will be secured (e.g., laminated documents, water proof pouch around resident's neck, water proof wrist tag, etc.) and how medical records and medications will be transported so they can be matched with the resident to whom they belong.
			• **Trained Facility Staff Members:** Ensure that each facility staff member on each shift is trained to be knowledgeable and follow all details of the plan. Training also needs to address psychological and emotional aspects on caregivers, families, residents, and the community at large. Hold periodic reviews and appropriate drills and other demonstrations with sufficient frequency to ensure new members are fully trained.
			• **Informed Residents & Patients:** Ensure residents, patients and family members are aware of and knowledgeable about the facility plan, including: - Families know how and when they will be notified about evacuation plans, how they can be helpful in an emergency (example, should they come to the facility to assist?) and how/where they can plan to meet their loved ones. - Out-of-town family members are given a number they can call for information. Residents who are able to participate in their own evacuation are aware of their roles and responsibilities in the event of a disaster.

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements
* Task may not be applicable to agencies that provide services to clients in their own homes

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR MEDICARE & MEDICAID SERVICES

Survey & Certification

Emergency Preparedness for Every Emergency

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			• **Needed Provisions:** Check if provisions need to be delivered to the facility/residents -- power, flashlights, food, water, ice, oxygen, medications -- and if urgent action is needed to obtain the necessary resources and assistance.
			• **Location of Evacuated Residents:** Determine the location of evacuated residents, document and report this information to the clearing house established by the state or partnering agency.
			• **Helping Residents in the Relocation:** Suggested principles of care for the relocated residents include: - Encourage the resident to talk about expectations, anger, and/or disappointment - Work to develop a level of trust - Present an optimistic, favorable attitude about the relocation - Anticipate that anxiety will occur - Do not argue with the resident - Do not give orders - Do not take the resident's behavior personally - Use praise liberally - Include the resident in assessing problems - Encourage staff to introduce themselves to residents - Encourage family participation
			• **Review Emergency Plan:** Complete an internal review of the emergency plan on an annual basis to ensure the plan reflects the most accurate and up-to-date information. Updates may be warranted under the following conditions: - Regulatory change - New hazards are identified or existing hazards change - After tests, drills, or exercises when problems have been identified - After actual disasters/emergency responses - Infrastructure changes - Funding or budget-level changes Refer to FEMA (Federal Emergency Management) to assist with updating existing emergency plans. Review FEMA's new information and updates for best practices and guidance, at each updating of the emergency plans.
			• **Emergency Planning Templates:** Healthcare facilities should appropriately complete emergency planning templates and tailor them to their specific needs and geographical locations.
			• **Collaboration with Local Emergency Management Agencies and Healthcare Coalitions:** Establish collaboration with different types of healthcare providers (e.g. hospitals, nursing homes, hospices, home care, dialysis centers etc.) at the State and local level to integrate plans of and activities of healthcare systems into State and local response plans to increase medical response capabilities. *

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements

* Task may not be applicable to agencies that provide services to clients in their own homes

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES CENTERS FOR MEDICARE & MEDICAID SERVICES

Survey & Certification
Emergency Preparedness for Every Emergency

EMERGENCY PREPAREDNESS CHECKLIST RECOMMENDED TOOL FOR EFFECTIVE HEALTH CARE FACILITY PLANNING			
Not Started	In Progress	Completed	**Tasks**
			• **Communication with the Long-Term Care Ombudsman Program:** Prior to any disaster, discuss the facility's emergency plan with a representative of the ombudsman program serving the area where the facility is located and provide a copy of the plan to the ombudsman program. When responding to an emergency, notify the local ombudsman program of how, when and where residents will be sheltered so the program can assign representatives to visit them and provide assistance to them and their families.
			• **Conduct Exercises & Drills:** Conduct exercises that are designed to test individual essential elements, interrelated elements, or the entire plan: - Exercises or drills must be conducted at least semi-annually - Corrective actions should be taken on any deficiency identified.
			• **Loss of Resident's Personal Effects**: Establish a process for the emergency management agency representative (FEMA or other agency) to visit the facility to which residents have been evacuated, so residents can report loss of personal effects. *

Note: Some of the recommended tasks may exceed the facility's minimum Federal regulatory requirements
* Task may not be applicable to agencies that provide services to clients in their own homes

Page 6 Revised December 2013

Source: U.S. Department of Health and Human Services Centers for Medicare and Medicaid Services. Emergency Preparedness Checklist: Recommended Tool for Effective Health Care Facility Planning. Available at: https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-14-12.pdf Accessed January 31, 2018.

Joint Commission Regulations: Hospitals, Nursing Facilities, Home Care

Any facility that is Joint Commission Certified will need to follow all of their standards for emergency preparedness and management. Review copies of these standards carefully when developing an emergency plan.

For more information on Joint Commission standards, visit the Joint Commission website at http://www.jointcommission.org/.

Chapter 3: Disaster Planning and Preparedness

Overview of Disaster Planning

There are a number of steps that must be taken to prepare for potential disasters. This manual will serve as a guide so that when disaster strikes a plan will be in place.

Each facility must be familiar with the applicable regulations (CMS or Joint Commission) for disaster planning (as outlined in the previous section) and have a written disaster plan that includes emergency food service needs (7). Long term care facilities may find the disaster planning checklist produced by CMS located on pages 18 thru 23 helpful, as well as the CMS Emergency Preparedness Web site at https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Emergency-Prep-Rule.html.

Facilities should follow these steps when developing a disaster plan:

1. Form an “emergency management team” of facility personnel.
2. Review state, local, and federal regulations for emergency management to assure compliance to regulations (See Chapter 2: Regulations Related to Emergency Preparedness on pages 10-24).
3. Identify and analyze potential risks.
4. Identify an appropriate emergency alert system and connect to that system as necessary via text message, phone message, or email This may include access to National Weather Service broadcasts or other alerting systems. (See page 32.for more information.)
5. Develop policies and procedures to be followed in the event of an emergency. (See Chapter 9: Policies and Procedures on pages 194-226.)
6. Form relationships with local emergency management services personnel and other supportive agencies and companies (such as vendors, back up vendors, the local Red Cross, local hospitals, electricians, plumbers and other supportive services). Invite key people to meet with the emergency management team to discuss pertinent information.
7. Plan agreements in advance with supportive services and back-up companies to provide products and services such as food and water (see Sample Letter of Intent for Provision of Emergency Supplies on page 95), or garbage and recycling removal. Keep written copies of agreements in a disaster plan notebook that can be easily accessed by staff on duty, and electronic copies that are securely backed up. (A bright colored cover on the disaster plan notebook will help to quickly identify it during an emergency.)
8. Analyze communication systems and plan for phone or text message trees (see page 53), computer back-up systems, and alternate systems to reach local emergency management and supportive service agencies and companies. It will be imperative to be able to communicate with staff, families and the community.
9. Implement regular equipment maintenance checks and repairs.

10. Train staff on pertinent information regarding emergency preparedness and dealing with a variety of emergency situations.
11. Develop a plan for evacuations that includes food, water, and necessary medical information about residents/patients.
12. Develop a plan for “sheltering” in place (remaining in the facility, even if services are compromised, including back-up generators for kitchen equipment such as stoves and ovens, refrigerators and freezers, and the dishwasher). The plan should consider an influx of patients/residents, families, staff and others (including pets) that may shelter in the facility.
13. Train staff to be calm, flexible, creative and spontaneous during a disaster. Each situation is different and it is not possible to plan for everything.
14. After a disaster, have a professional carefully assess the safety of the building and equipment before returning to work areas.
15. Following an unexpected event, evaluate the disaster plan and implementation of that plan. Discuss with staff what went right and what went wrong. Revise the disaster plan as needed.

Risk Analysis

One of the first things that facility management should do is to assess the likelihood of disasters that are common to the geographic area. It may not be possible to identify all of the potential disasters, in part because of their random nature. Nonetheless, because some natural disasters are prevalent in certain geographic locations, it is feasible to determine which type of disaster might strike in many geographic areas.

Hurricanes are prevalent along the eastern coastline and the Gulf of Mexico, and can create havoc due to high winds, rain, flooding, and landslides or mudslides as well as damage to electric and gas lines in the path of the storm.

Tornados are common in the Midwest and South and can result in complete destruction of buildings as well as loss of electricity, water, sewer, and gas.

Tsunamis can threaten Hawaii and the west coast. Wildfires can occur anywhere, but are most prevalent in the western states. Snow storms, blizzards, and ice storms, common in many parts of the country, can result in loss of electric power if lines cannot bear the weight of snow or ice. Repairs can take days due to closed roads, difficult travel and maneuverability, and icy, cold conditions.

Any of these natural events have the potential to create emergency situations for days or weeks at a time, as can other unexpected disasters like dam breaks, explosions, or large terrorist attacks. In the event of any disaster, staff may have difficulty getting to work, or may have personal emergencies that affect their work schedule. The facility might need to evacuate, or may be used as a shelter to house evacuees from other areas.

In addition to disasters, there are other situations in which a facility may lose electricity, gas or water. For example, aging electrical systems can cause major power outages such as the blackout in the Midwest and East coast in August, 2003 that affected parts of New York, Pennsylvania, New Jersey, Michigan, Ohio, and Canada. More recently, smaller blackouts have occurred in many other parts of the country. Water main breaks can result in a facility needing to provide bottled water for days at a time.

Identify Risks

To identify the disasters that should be addressed in a disaster preparedness plan, begin by using the following list and then add any disasters that are geographically specific.

Natural Disasters

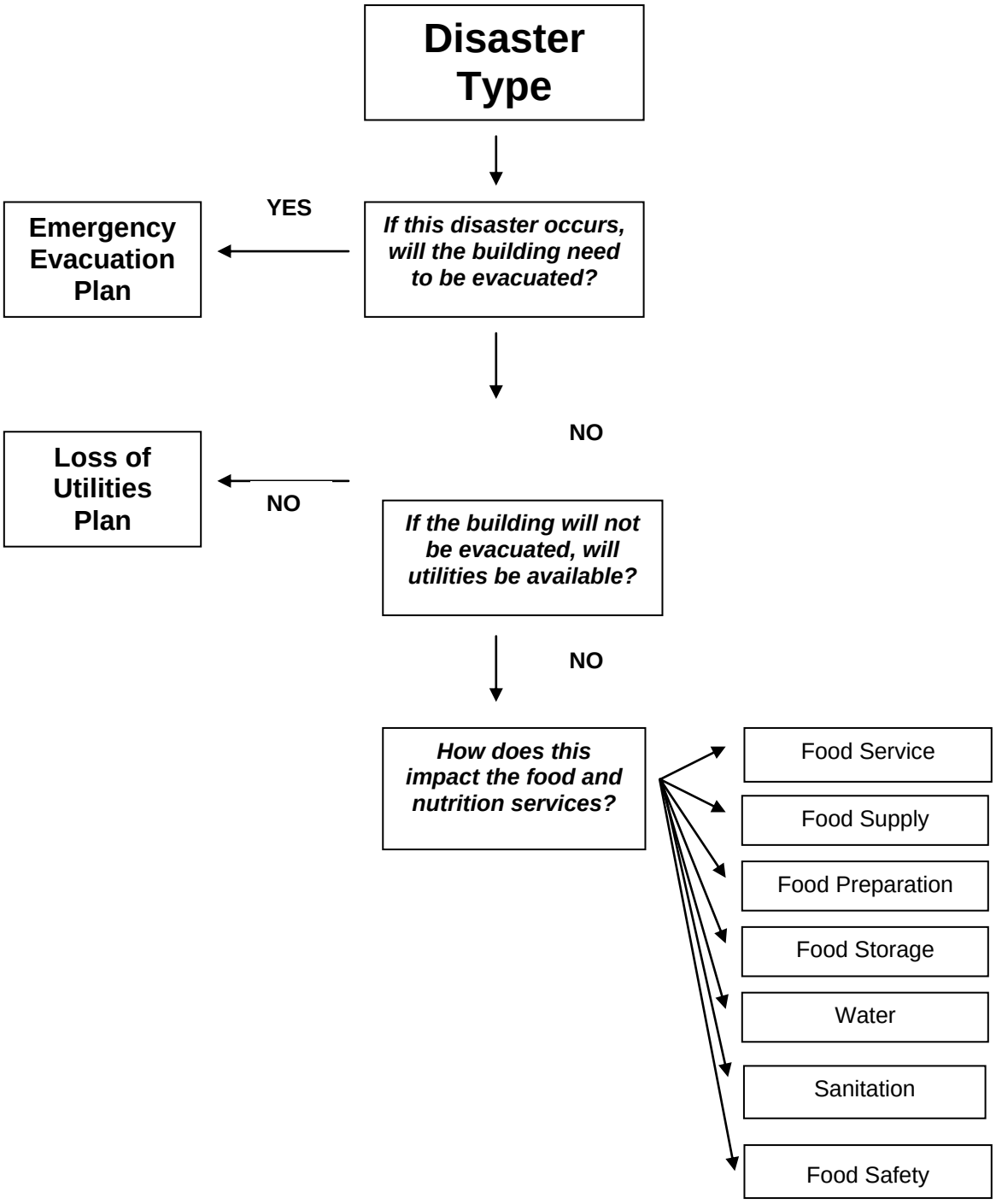
- ☐ Earthquakes
- ☐ Extreme cold or heat
- ☐ Floods
- ☐ Hurricanes
- ☐ Ice storms
- ☐ Landslides
- ☐ Mudslides
- ☐ Snow blizzards
- ☐ Thunderstorms
- ☐ Tornadoes
- ☐ Tsunamis
- ☐ Volcanic eruptions
- ☐ Wild fires

Other Disasters

- ☐ Bioterrorism
- ☐ Bomb threats
- ☐ Contaminated water supply
- ☐ Contaminated food supply
- ☐ Explosions
- ☐ Fires
- ☐ Dam breaks
- ☐ Loss of electricity
- ☐ Loss of natural gas
- ☐ Loss of water
- ☐ Mandatory quarantines
- ☐ Terrorist attacks
- ☐ Toxic chemical releases

Once all possible disasters have been identified, determine what should be done in the event that each disaster occurs. The flow chart on the following page can help with the development of a comprehensive plan.

Disaster Planning Flow Chart



Emergency Alert Systems

A national Integrated Public Alerts Warning System (IPAWS) alerts Americans of upcoming emergency situations and keeps them informed before, during, and after a disaster. These alerts can be delivered via state, local, or territorial officials and across multiple pathways, including the internet, television, cell phones, highway signs, etc. IPAWS alerting systems are in place in a number of communities (https://www.fema.gov/media-library-data/1521129760486-002f9376b7c9b48e432c1e9d44d0886e/AA_Complete_03152018.pdf) and are in process in others (https://www.fema.gov/media-library-data/1521129780910-002f9376b7c9b48e432c1e9d44d0886e/AA_InProcess_03152018.pdf) (10).

NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week. NWR requires a special radio receiver or scanner capable of picking up the signal. Broadcasts are found in the VHF public service band (11).

Some local and state agencies or large institutions (such as universities) have implemented their own emergency notification systems. Check with facility administration and/or local authorities to assure access to timely and accurate emergency notification.

Types of Disasters

Healthcare Facility Fires

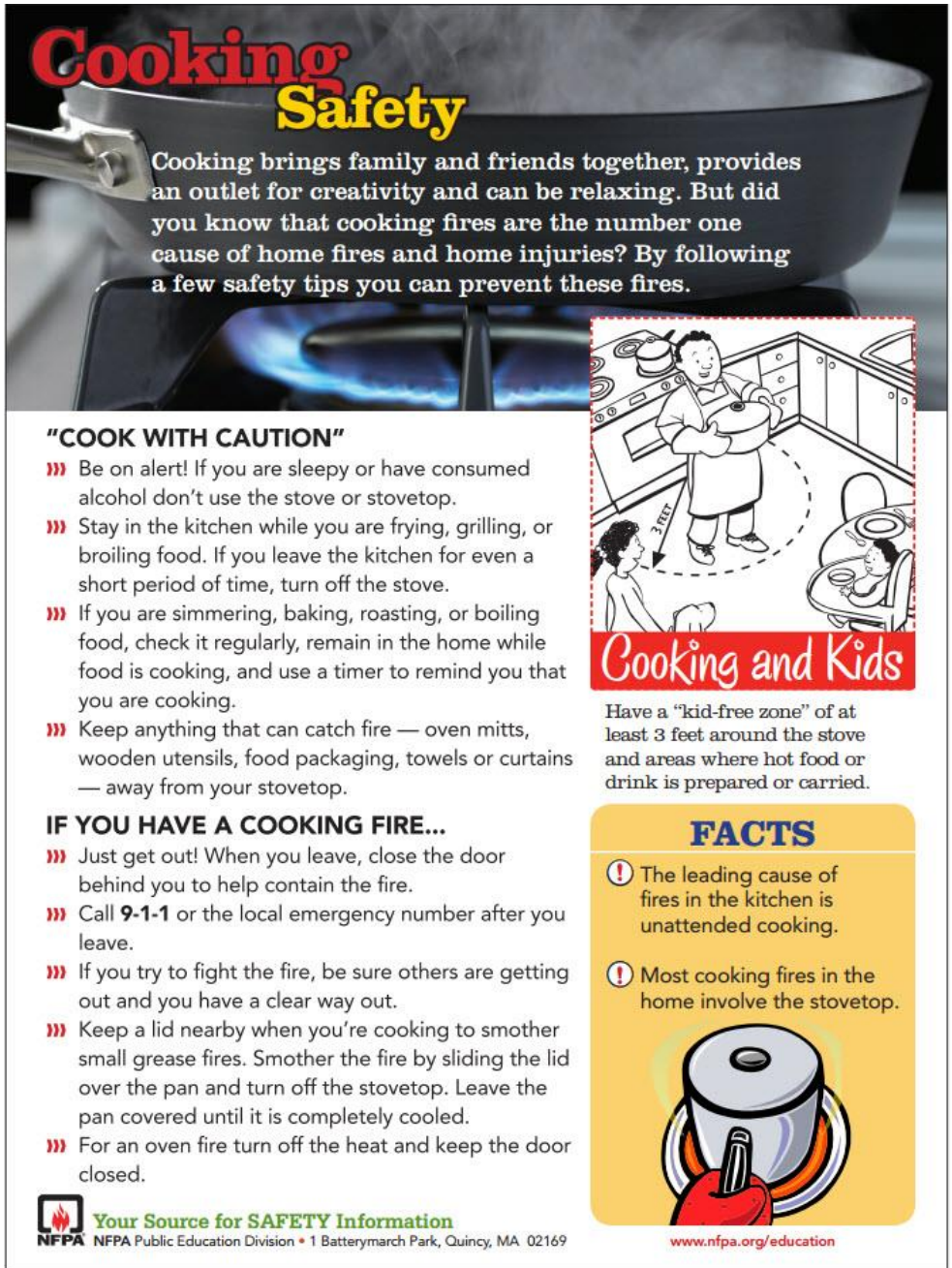
Fires are a real threat for healthcare facilities. U.S. fire departments responded to an estimated average of 5,650 structure fires in health care properties per year in 2009-2013 (1).

Cooking equipment was the leading cause of fires in all health care properties (65% of fires). However, these fires accounted for just 5% of direct property damage, an indication that most are confined fires. Fires caused by electrical distribution and lighting equipment accounted for just over one-third (34%) of direct property damage. Clothes dryers caused 4% of fires. These fires caused an annual average of four civilian deaths, 160 civilian fire injuries, and $44.9 million in direct property damage (12).

Most fires are small, and are quickly under control without major injury or damage (12). However, some can be devastating. 57% of health care properties had some form of sprinkler protection during 2007-2011 (12). Effective August 13, 2013 Medicare/Medicaid certified facilities are required to have automatic sprinklers (13).

Fire prevention training is required by federal, state and local regulations for most health care facilities. A variety of resources are available for information on fire prevention and safety for internal fires. Most facilities already have programs in place, so for purposes of this manual, this section will be brief.

Refer to Chapter 9: Policies and Procedures on pages 194-226 for additional information and ideas for staff training.



Cooking Safety

Cooking brings family and friends together, provides an outlet for creativity and can be relaxing. But did you know that cooking fires are the number one cause of home fires and home injuries? By following a few safety tips you can prevent these fires.

"COOK WITH CAUTION"

- Be on alert! If you are sleepy or have consumed alcohol don't use the stove or stovetop.
- Stay in the kitchen while you are frying, grilling, or broiling food. If you leave the kitchen for even a short period of time, turn off the stove.
- If you are simmering, baking, roasting, or boiling food, check it regularly, remain in the home while food is cooking, and use a timer to remind you that you are cooking.
- Keep anything that can catch fire — oven mitts, wooden utensils, food packaging, towels or curtains — away from your stovetop.

IF YOU HAVE A COOKING FIRE...

- Just get out! When you leave, close the door behind you to help contain the fire.
- Call **9-1-1** or the local emergency number after you leave.
- If you try to fight the fire, be sure others are getting out and you have a clear way out.
- Keep a lid nearby when you're cooking to smother small grease fires. Smother the fire by sliding the lid over the pan and turn off the stovetop. Leave the pan covered until it is completely cooled.
- For an oven fire turn off the heat and keep the door closed.

Cooking and Kids

Have a "kid-free zone" of at least 3 feet around the stove and areas where hot food or drink is prepared or carried.

FACTS

- The leading cause of fires in the kitchen is unattended cooking.
- Most cooking fires in the home involve the stovetop.

Your Source for SAFETY Information
NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169
www.nfpa.org/education

Photo source: National Fire Protection Agency website available at file:///C:/Users/Becky/Downloads/CookingSafety.pdf.

Wildfires

Before Wildfire Threatens

In areas where wildfires are a threat, healthcare facilities should be designed and landscaped with wildfire safety in mind. They should be built with materials and plants that can help contain fire rather than fuel it: fire-resistant or noncombustible materials on the roof and exterior structure of the dwelling, treated wood or combustible material used in roofs, siding, decking, trim with UL-approved fire-retardant chemicals, and plant fire-resistant shrubs and trees (14).

A resource for proper planning is www.firewise.org which provides information to assure safety from fire. Firewise workshops are offered for free online and across the nation in communities large and small.

Firewise materials are available at http://catalog.nfpa.org/Firewise-and-Wildfire-Safety-C30.aspx. The U.S. Fire Administration website also offers resources at https://www.usfa.fema.gov/prevention/outreach/.

As with any other disaster, planning prior to a threat includes pulling food, water, and supplies together and creating a disaster plan.

Be Prepared Before a Threat of Wildfire

- Find out how to promote and practice wildfire safety. Contact the local fire department, health department, or forestry office for information on local fire laws.
- Contact the local American Red Cross or Emergency Management Agency and find out about local wildfire hazards. Obtain information on how to be prepared for a wildfire.
- Report hazardous conditions that could cause a wildfire.
- Plan several escape routes. Determine a primary meeting site, along with a secondary and tertiary meeting site.
- Consider how to help others if disaster strikes. Learn CPR and First Aid.

When a Wildfire Threatens

- Use a battery powered radio, text message alerts, and online notifications for reports and evacuation information (see page 66).
- Follow the instructions of local officials.
- Instruct staff to wear protective clothing: sturdy shoes, cotton or woolen clothing, long pants, a long-sleeved shirt, gloves, and a handkerchief to protect the face.
- Prepare disaster supplies for evacuation.
- Choose a route away from fire hazards. Watch for changes in the speed and direction of fire and smoke.
- As time permits, take steps to protect the facility as directed by administration.

Inside:

- Close windows, vents, doors, blinds, or noncombustible window coverings and heavy drapes. Remove lightweight curtains.
- Shut off all utilities if possible, including bottled gas.
- Turn on a light in each room to increase visibility in the event of heavy smoke.
- Gather important documents including electronic backups and copies of resident/patient's diets, food preferences, etc.

Outside:

- Turn off propane tanks.
- Assist maintenance staff as able (and directed by administration):
  - Place combustible patio furniture inside.
  - Connect a garden hose to outside taps.
  - Set up a portable gasoline-powered pump.
  - Place lawn sprinklers on the roof and near above ground fuel tanks. Wet or remove shrubs within 15 feet of the building.
  - Gather fire tools.

Photosource: U.S. Fire Administration and FEMA website available at https://www.usfa.fema.gov/downloads/pdf/focus/apr_2016_wildfire.pdf**.**

Hurricanes, Flash Floods and Tornados

Before the Storm

When a hurricane or flash flood warning is issued, follow evacuation instructions of local authorities. When a tornado warning is issued, prepare to take cover in a safe place as directed by administration and/or local officials. When time permits before a hurricane, flood, or tornado emergency, take the following steps:

1. Check emergency generators for proper operation and adequate fuel. Determine which refrigerators and/or freezers will be operated by the generator.

2. Determine if an outlet will be available (using emergency power) to operate food preparation equipment, electronic equipment such as computers, and to charge communication devices such as cell phones.

3. Fully charge all portable and/or rechargeable electronic devices such as laptop computers, flashlights, lanterns, radios, and other electronics.

4. Check emergency cooking equipment such as gas or charcoal grills for proper operation and adequate fuel.

5. Move books, equipment, and food away from areas that may be damaged by water or wind. Raise these items 3 feet or more above the floor to prevent damage in the event of flooding.

6. Make at least two backup copies of electronic data and store the files in two different secure locations. Print two copies of data that will be needed to operate the department (i.e. computer-generated diet cards, diet lists, food order guide, emergency menus, etc.) and store in two separate safe and accessible locations that are preferably water and fire proof.

7. Move all office machines and computers to a secure place and lock them up to protect against theft, wind, fire, and/or rising water.

8. Cover large glass windows with plywood or masking tape.

9. Check the loading dock or outside of the building for items such as garbage dumpsters or cans, chairs, tables, umbrellas, and other non-secured items. If possible move them inside a building or anchor to the ground.

10. If the facility will be used as an emergency shelter, estimate the number of incoming people and their expected time of arrival.

11. Turn refrigerators and freezers to their coldest settings. Purchase blocks of ice or dry ice to place in walk-in freezers. Twenty-five pounds of dry ice should hold each 10 cubic feet of freezer space below freezing for 2 to 3 days.

12. Plan menus to use perishable and potentially hazardous foods first.

13. Check adequacy of food, supplements, enteral feeding products, water and other supplies on hand. Assure an adequate supply of disposable dishware, cups, and eating utensils is available.

    If supplies are not sufficient, contact local suppliers to arrange for immediate delivery. Implement the "Letter of Intent" with vendors. (See Chapter 6: Disaster Preparedness Forms on pages 89-98.)

14. Review inventory of disaster supplies:

    - Cleaning supplies: clean cloth towels or rags, household bleach, hand sanitizers, and/or sanitizing solutions for kitchen surfaces.
    - Portable radios, a weather radio, nonelectric clocks, portable and cellular telephones, flashlights, lanterns, extra batteries.
    - Kitchen equipment: manual can openers, manual egg beaters, potato masher or battery-operated blender.
    - Operable fire extinguishers.
    - First aid kits with all needed supplies.
    - Gravity or bolus feeding supplies for enteral feedings.
    - Water purification tablets or equipment.
    - Waterproof matches.
    - Basic tools including crowbar, wrenches, hammer, etc.

15. Determine if additional staff will be required to meet the needs of extra people and the minimum staffing required to operate the department. Evaluate employee's work schedules and contact employees with schedule changes.

16. Check the accuracy of telephone numbers and addresses of employees, vendors, and emergency agencies. Facilities must have ways to help employees communicate with their families during the time they are on duty. Family contact numbers are also essential, although this information may be the responsibility of the nursing department or administration.

17. Remind employees to:

    - Charge cell phones and other devices used for electronic communication with their loved ones and the facility.
    - Fill their cars' gas tanks.
    - Obtain enough cash, in small bills, for at least a week.
    - Secure homes, property, and important papers.
    - Make plans for their families if they have to work.
    - Carry a valid form of identification.

18. Prior to evacuating the facility or moving to a safe area of the building (as directed by administration), turn off all utilities and close all doors.

During the Storm

1. Carry a battery operated portable radio, cell phone, and any other supplies that seem pertinent to the situation.
2. Take cover as advised by local authorities. Remain in a designated safe space until advised by local authorities that the storm has passed, especially during a tornado.
3. Assure all residents/patients, staff, guests, and pets are safe.
4. If it is possible and/or necessary to serve meals during a storm, maintain safe food handling practices during food preparation and service.
    - Follow preplanned menus, using perishable foods first. When possible or necessary, be conservative with food and supplies to ensure all individuals will receive food.
    - Make arrangements for food, water and supplies for employees, emergency workers, evacuees, and their families who must stay overnight.

After the Storm

1. Re-enter the building or damaged areas of the building only with permission from local officials and facility administration.
2. Assure the safety of all people in the facility. Inspect the building for hazards including fallen electrical wires. Check for debris such as broken glass, sharp metal or wood chips, and chemical spills. Do not move hazardous materials.
3. Be alert for gas leaks. If a gas odor is strong, do not turn on cooking equipment. Call authorities.
4. Determine availability of utility service (gas and electricity), heating, air-conditioning, water, and the ability to prepare and serve food based on utilities that are available.
5. Check the condition of the storeroom, refrigerators, and freezers. Contact maintenance personnel to inspect equipment before using.
    - If power was out for more than 4 to 6 hours, discard or cook frozen foods that are not at 32°F, or hazardous refrigerated foods that are above 41°F.
6. Discard food or supplies that have been in contact with floodwater or in flooded areas as they may be contaminated:
    - Meat, poultry, fish, eggs, fresh produce; food supplies in cardboard boxes such as cereal, open containers and packages; spices and extracts, dented or bulging cans; flour, sugar, cereal, rice, coffee, or other staples could all be contaminated by floodwater.
    - Discard food that might or does contain particles of glass or slivers of debris, including canned foods with broken seams and dry goods with broken or dirty packaging. Most canned goods may be used if they do not have dents, leaks, or bulges and are sanitized prior to opening.
7. Serve only approved or purified water for drinking.
8. Contact employees who are not on duty to assure they (and their loved ones) are safe and to see if they need time off for disaster recovery or need transportation to work.

Winter Storms (Snow and/or Ice)

Before the Storm, Once a Watch has Been Issued

1. Check emergency generators for proper operation and adequate fuel. Determine which refrigerators and/or freezers will be operated by the generator.
2. Determine which outlets will be available for emergency power to operate food preparation equipment, electronic equipment such as computers, and to charge communication devices such as cell phones.
3. Fully charge all portable and/or rechargeable electronic devices such as laptop computers, flashlights, lanterns, radios, and other electronics.
4. Check emergency cooking equipment such as gas or charcoal grills for proper operation and adequate fuel.
5. Check adequacy of food, water, and supplies on hand. If supplies are not sufficient, contact local suppliers to arrange for immediate delivery. If suppliers are unable to make a delivery, purchase needed items locally.
6. Plan menus to use perishable and potentially hazardous food first.
7. Determine if additional staff will be required to operate the department during the storm or its aftermath. Notify staff to be on alert to report to work.
8. Check the accuracy of telephone numbers and addresses of employees and vendors.
9. Know what travel routes will be open and how to reach any employees who need to report to work.
10. Collaborate with administration to develop a transportation plan for employees who are unwilling or unable to drive during snowstorm.
11. Remind employees to:
    - Charge cell phones and other devices used for electronic communication with their loved ones and the facility.
    - Fill their cars' gas tanks.
    - Obtain enough cash, in small bills, for at least a week.
    - Secure homes, property, and important papers.
    - Make plans for their families if they have to work.
    - Carry a valid form of identification.

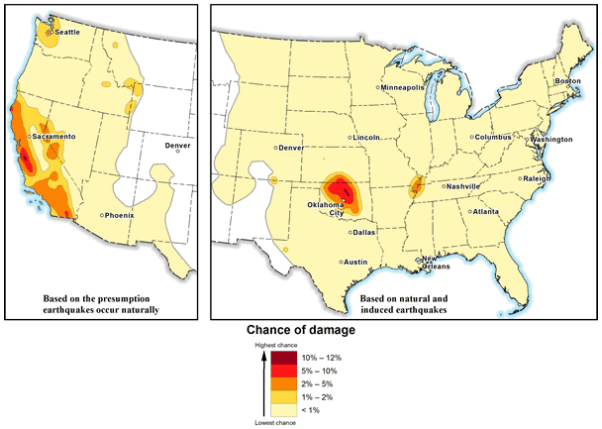
During and After the Storm:

1. If the facility's heating system shuts down, follow procedures for maintaining body temperature such as providing hot liquids and extra clothing.
2. If the power is out for an extended period of time
    - Do not store frozen foods outside, because the temperature can vary from hour to hour.
    - Discard any thawed foods that have reached room temperature and have stayed above 41°F for greater than or equal to 4 hours.

- Maintain safe food handling practices for food preparation and service.
- Follow preplanned menus, using perishable foods first.

Earthquakes

California may be the state most prone to serious earthquakes in recent years. There are other fault zones in the U.S. such as the New Madrid seismic zone in the central U.S. (Illinois, Arkansas, Missouri, Tennessee, and Kentucky).



The above map is the 2017 One Year Model for Short-Term Induced Seismicity Model, from the United States Geological Survey (USGS) Source: https://earthquake.usgs.gov/hazards/induced/index.php#2017.

During a major earthquake, people have reported hearing roaring or rumbling sound that gradually grows louder, a rolling sensation that starts out gently and, within a second or two, grows violent; or a violent jolt and then 1 to 2 seconds later, the shaking may make it difficult to stand up or move from one place to another. As with other disasters, the key to surviving and reducing risk of injury is planning, preparing, and practicing in advance. Because earthquakes occur with little or no warning it is difficult to plan. In earthquake prone areas, emergency supplies of food, water, and supplies are critically important.

Before an Earthquake

Practice drills are an essential habit for anyone near a fault line. Most earthquake deaths and injuries during an earthquake are caused by collapsing building materials and heavy falling objects such as furniture. Identify the safe spots in the work area.

The Centers for Disease Control and Prevention outlines the following guidelines that can be included in staff emergency training:

- **DROP down onto your hands and knees** to protect yourself from falling as soon as you think it may be an earthquake. This position still allows you to move if necessary.
- **COVER** your head, neck, and body under the shelter of a sturdy table or desk. If nothing is close, get down near an interior wall or low-lying furniture that won't fall on you, and cover your head and neck with your arms and hands. Stay clear of windows or glass or objects that could fall on you.
- **HOLD ON to your shelter** (or to your head and neck) until the shaking stops. Be prepared to move with your shelter if needed.

Evacuation Plans

Plan and practice evacuation with staff to be prepared and to follow directions by civil authorities. In addition to your main evacuation plan, plan a second way to exit each area. As with any other disaster, know where emergency food, water, first aid kits, fire extinguishers and other emergency supplies are located. Know where the utility switches or valves are located so that they can be turned off, if needed.

During an Earthquake

Reduce the chance of injury by staying away from objects (both large and small) that could fall during an earthquake (15).

After an Earthquake

Listen to a battery operated radio and/or be alert for instructions from local authorities for instructions from authorities to assure your safety. Use emergency procedures for hurricanes, floods, tornados, or winter storms as appropriate and/or necessary to following an earthquake.

Terrorism Events

Food and Water/Beverage Terrorism

Terrorist threats are a concern for food service operations because food, water, and other beverages can be used as a vehicle for delivering harmful agents. Food/water/beverage terrorism is an act or threat of intentional contamination of food/water/beverage for human consumption with the intent to cause death or injury to the civilian population. Means of food/water/beverage contamination include chemical, biological, or radio-nuclear agents.

In case of a terrorist threat, the most vulnerable foods/water/beverage and food/water/beverage processes should be identified ahead of time including:

- The most readily accessible foods/water/beverages processes.
- Foods/water/beverages that are most vulnerable to undetected tampering.
- Foods/water/beverages that are most widely distributed.
- The least supervised food/water/beverage production areas and processes.

Although there are many organ systems that can be affected by bioterrorism agents such as skin, respiratory tract, or the mouth and esophagus, this publication will focus on gastrointestinal systems since this system would be the main concern to the food and nutrition services department.

In case of a terrorist threat the following actions should be followed in all situations:

1. Call 9-1-1.
2. Contact designated person in charge in case of an emergency.
3. Contact local and state health departments (the number can be found under "government listings" in the telephone directory or contact the telephone operator). These numbers should also be on the facility's emergency contact list.
4. Use television, radio, internet, and text messaging alerts to obtain information on how to protect the facility and staff.
5. Evacuate the contaminated area unless otherwise indicated.
6. Direct staff where to go for medical care should they become infected.

Other actions specific to each situation are indicated below.

Biological Bioterrorism Agents
A complete listing of potential agents can be found on the Center for Disease Control Bioterrorism Web site at https://emergency.cdc.gov/agent/agentlist.asp. This manual will discuss the most common potential bioterrorism agents, which are anthrax, botulism, plague, and smallpox.

Anthrax
Anthrax is a disease caused by the bacteria, *Bacillus Antracis,* which forms spores. There are three types of anthrax including skin (cutaneous), lung (inhalation), and digestive (gastrointestinal). Anthrax is not transmitted from one person to another. Instead, it is transmitted by direct skin contact with spores, infected animals or animal products; inhalation of aerosolized spores; and consumption of undercooked or raw meat products or dairy products from infected animals (16).

Cutaneous Anthrax
Approximately 95% of anthrax infections occur when the bacterium enters a cut or abrasion on the skin, such as when handling contaminated wool, hides, leather or hair products (especially goat hair) of infected animals. Skin infection begins as a raised itchy bump that resembles an insect bite but within 1 to 2 days develops into a vesicle and then a painless ulcer, usually 1 to 3 cm in diameter, with a characteristic black necrotic (dying) area in the center. Lymph glands in the adjacent area may swell. About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare with appropriate antimicrobial therapy.

Inhalation Anthrax
Initial symptoms may resemble a common cold: sore throat, mild fever, muscle aches and malaise. After several days, the symptoms may progress to severe breathing problems and shock. Inhalation anthrax is usually fatal.

Gastrointestinal Anthrax

Anthrax can be transmitted to individuals if undercooked or raw meat products or dairy products are consumed from an animal that has been infected with anthrax. Symptoms, such as nausea, vomiting, diarrhea, bloody stools and/or emesis, and ascites can appear within 1 to 7 days of infection (16). GI Anthrax is the least common form of anthrax.

Action to Prevent Infection:

1. Do not handle, serve, or consume potentially infected animal products, such as meat and dairy products.
2. Take diet histories of infected individuals to determine if food(s) recently consumed might contain anthrax.
3. Save suspected food for testing by local health authorities. If still serving food, heat foods and/or drinks to 176°F (equal to or greater than 80ºC) for 10 minutes or until boiling is observed.

Botulism

Botulism is a muscle paralyzing disease caused by a nerve toxin produced by the bacterium *clostridium botulinum*. It and other species of clostridium are considered to be the most potent toxins known (17). There are five types of botulism including foodborne botulism, infant botulism, wound botulism adult intestinal colonization, and iatrogenic botulism resulting from accidental inhalation (18). Foodborne botulism is caused by consumption of foods that contain the botulism toxin. Infant botulism is caused by the consumption of bacterium spores. The bacterium sits in the intestines and releases the toxin infecting the infant. Wound botulism is caused when a wound infected with *clostridium botulinum* releases the toxin. All types of botulism can be fatal and require immediate action; however foodborne botulism will be emphasized in this publication.

Foodborne Botulism

This type of botulism can be especially dangerous because it has the capacity to infect numerous persons through the consumption of an infected food. Symptoms of botulism include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, and muscle weakness. The onset of symptoms usually begin 12 to 36 hours after consumption of a contaminated food, but can occur as early as 6 hours or as late as 10 days.

Foodborne botulism has historically been transmitted from home canned foods with a low acid content, such as asparagus, green beans, beets, and corn. However, botulinum toxin can be transmitted by other food sources that are not heated or cooked thoroughly. Heating foods or drinks to 176°F (equal to or greater than 80ºC) for 10 minutes can reduce the risk of disease (18). Although any food can be targeted, the most vulnerable foods include foods that are low in acid or have a higher pH. Foods commonly associated with botulism are garlic in oil, canned cheese sauce, chili peppers, tomatoes, carrot juice, and baked potatoes wrapped in foil. In Alaska, foodborne botulism is caused by fermented fish and other aquatic game foods (18).

Action

1. Do not handle, or serve, or consume potentially infected products. Take diet histories of infected individuals to determine if botulinum poison is foodborne botulism to determine which food(s) might be infected.
2. Save suspected food for testing by local health authorities.

Plague

Plague is a disease caused by *yersinia pestis*, which is a bacteria found in rodents and in fleas. A bioterrorism outbreak can be expected to be airborne causing pneumonic plague. An infected rodent transmits plague by infected fleas to humans. Mode of transmission does not involve food, however, once a person is infected, the bacteria can be transmitted to persons who come into close contact with infected persons. Symptoms include fever, weakness, rapid onset of pneumonia with shortness of breath, chest pain, cough, nausea, vomiting, and abdominal pain. Onset of symptoms can occur within 1 to 6 days (16).

Action

1. Avoid close contact with an infected individual.
   a. Do not allow food service personnel to deliver meal trays to resident/patient rooms unless protected by wearing a tightly fitted disposable surgical mask.

Smallpox

This is a disease caused by the *variola* virus. Smallpox is a serious disease and can be fatal. Smallpox is characterized by a rash that becomes raised bumps which spread throughout the entire body. It can be transmitted through direct contact with infected bodily fluids or contaminated objects, such as bedding and clothing, as well as contact with skin lesions. Another possible means of transmission is through exposure of aerosol release or droplets of smallpox. Symptoms first appear after 7 to 19 days of exposure. At this point, the infected person becomes contagious and may experience symptoms such as high fever, tiredness, cough, head and body aches, and vomiting (16).

Action

1. Isolate persons showing signs of infection.
2. Take airborne and contact precautions if any contact with patients/residents is necessary.
   a. Use gloves, gowns, and masks for any introduction with infected persons.
   b. Wash hands thoroughly with an antimicrobial agent before and/after contact.

Chemical Bioterrorism

Hazardous chemicals can be released and may result in harm to people's health and interruption in daily living and in the economy. The release of chemicals into the environment can be unintentional, such as in an industrial accident, or intentional, in the event that terrorists use chemicals with intent to kill or harm civilians. A list of potential hazardous chemicals can be found on the Center for Disease Control Chemical Agents Emergency Preparedness and Response Website at http://www.bt.cdc.gov/agent/agentlistchem.asp.

Categories classified by the action they produce (19):

- *Blister agents:* Produce blisters all over the body.
- *Blood agents:* Prevent oxygen from getting to tissue cells so organs shut down quickly.
- *Choking agents:* Attach to the respiratory system.
- *Caustic agents:* Chemicals that burn or corrode skin, eyes, and mucous membranes (lining of the nose, mouth, throat, and lungs) on contact.
- *Incapacitating agents:* Cause physical or mental incapacitation.
- *Nerve agents or nerve gases:* Disrupt proper nerve function.
- *Riot control agents (irritants):* Cause severe eye irritation and burning and pain on exposed skin.
- *Toxic alcohols:* Poisonous alcohols that can damage the heart, kidneys, and nervous system.
- *Vomiting agents:* Cause severe vomiting.

Action

1. Consult Safety Data Sheet (SDS) manual if industrial accident is suspected.
2. Leave a contaminated area. Turn off fans and ventilation prior to leaving if possible.
3. Close the door or section off the area to prevent others from entering. Seal doors if possible.
4. Cover mouth and nose and rinse eyes and exposed skin thoroughly with water if exposed to a harmful gas or chemical.
5. Remove contaminated clothing.
6. Avoid consumption of raw or cooked foods that may have been contaminated. If in doubt, dispose of the food.

Radiological Terrorism

Radiological terrorism refers to release of radioactive material into the environment as an act of terrorism. A release of radioactive materials can expose people and contaminate surrounding areas and personal property. Radioactive contamination and radiation exposure are two categories of radiological terrorism.

Radioactive contamination takes place when radioactive material is released into the environment contaminating air, water, surfaces, soil, plants, buildings, people, or animals. People can be contaminated externally in the form of dust, powder, or liquid affecting skin, hair, or clothing. Internal contamination can also occur in the event that radioactive material is swallowed or inhaled or is absorbed through the skin through an open wound (20).

People who are externally contaminated can contaminate other people or surfaces by contact. People who are internally contaminated can spread radioactive contamination through body fluids (blood, sweat, urine).

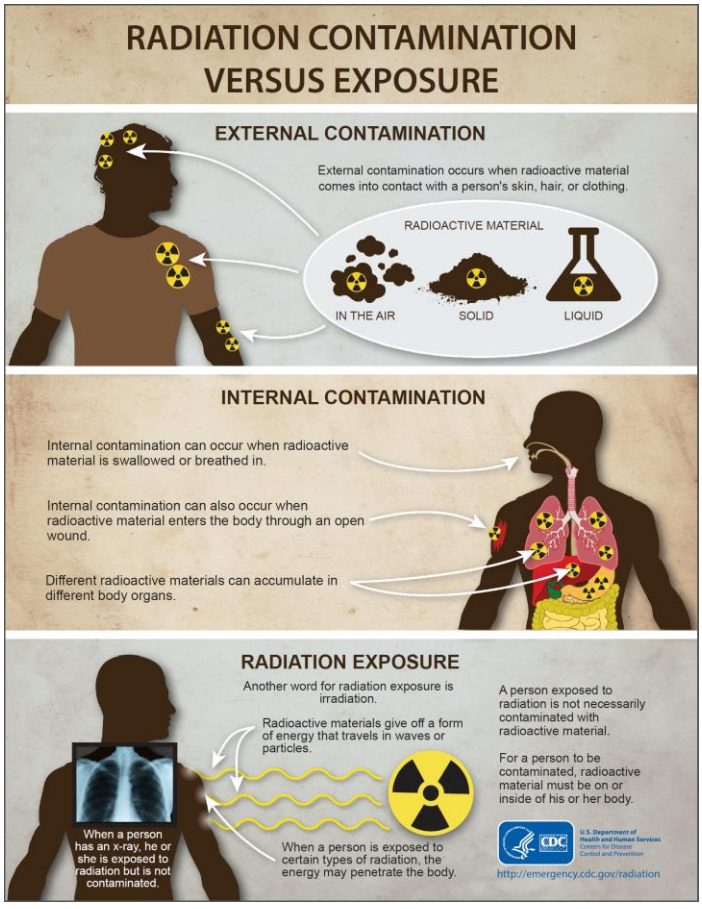
Food supplies will be safe for the most part, unless there was any unpackaged or open food or water that was left out and may have been exposed to radioactive dust. Refrain from drinking water from city supplies or wells until it has been tested and determined to be safe. Food inside cans and sealed containers will be safe to eat as long as the outside of the container is carefully washed before opening (20).

Action

1. If told to evacuate, act quickly and follow instructions of local officials and emergency coordinators.
2. Cover nose and mouth with a cloth when going outside.
3. Remove all contaminated layers of clothing and place in a plastic bag away from people.
4. Do not consume water or raw or cooked food that was left out and opened.

See the next page for additional information from the CDC.

Photo source: https://emergency.cdc.gov/radiation/pdf/infographic_contamination_versus_exposure.pdf .



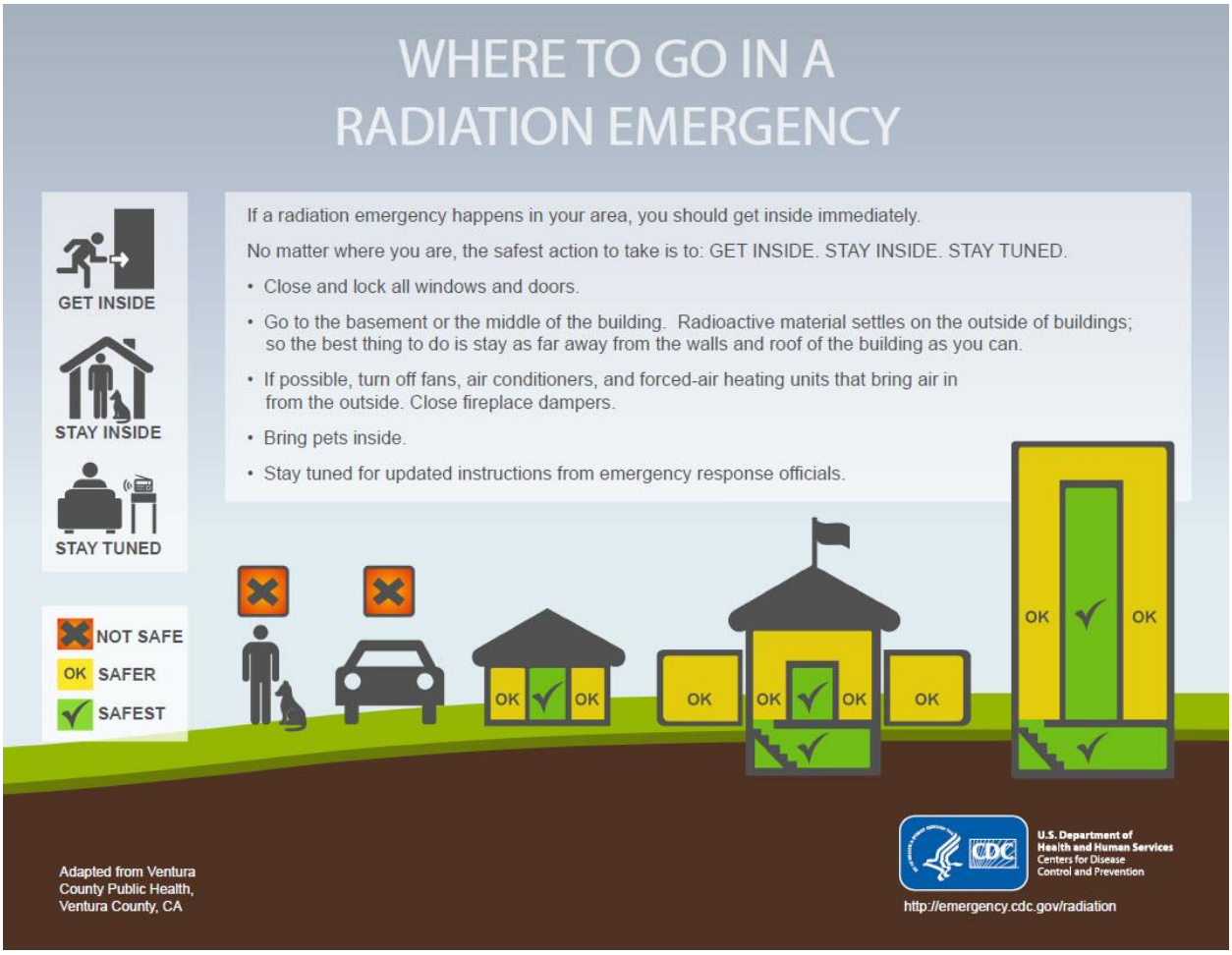


Photo source: https://emergency.cdc.gov/radiation/pdf/infographic_where_to_go.pdf .

How to Limit Radiation Contamination

Since radiation cannot be seen, smelled, felt, or tasted, people at the site of an incident will not know whether radioactive materials were involved. Take the following steps to limit your contamination.

1. Get out of the immediate area quickly. Go inside the nearest safe building or to an area as directed by law enforcement or health officials.
2. Remove the outer layer of clothing. This will reduce the external radiation contamination and decrease the risk of internal contamination. It will also reduce the length of exposure to radiation.
3. If possible, place the clothing in a plastic bag or leave it in an out-of-the-way area, such as the corner of a room. Keep people away from it to reduce their exposure to radiation. Keep cuts and abrasions covered when handling contaminated items to avoid getting radioactive material in them.
4. Wash all of the exposed body parts using lots of soap and lukewarm water to remove contamination. This process is called decontamination. Try to avoid spreading contamination to parts of the body that may not be contaminated, such as areas that were clothed.
5. After authorities determine that internal contamination may have occurred, they may recommend medication to reduce the radioactive material in your body.

Source: Radioactive Contamination and Radiation Exposure Fact Sheet (21).

Preparing for the Possibility of a Bioterrorist Attack:

1. Coordinate and practice evacuation and other emergency plans with all departments in the building or facility.
2. Conduct regularly scheduled training to educate and provide information to employees concerning the possibility of a terrorist attack.
   a. Identify needs.
   b. Develop preparation skills through drills or case scenarios.
   c. Have employees sign in at training sessions to record attendance.
3. Include bioterrorism preparedness and training during orientation of new employees.
4. Identify individuals as members of the emergency management team and outline individual responsibilities during an emergency situation.
5. Schedule drills in locations where the emergency management teams as well as the employees actually perform designated emergency functions.
6. Practice evacuation routes to designated shelters.
7. Create a plan to account for all personnel.
8. Evaluate and revise procedures to identify the areas where more training is needed.

Planning for Evacuees

The facility administrator and key staff must determine the organization's role in the context of community-wide emergency management. If the facility will be a local shelter, plans must be made to accommodate an influx of additional people into the building. Additional food, water and other supplies must be obtained to accommodate evacuees that may include patients/residents from other facilities, people from the community, rescue workers, employees, families, and pets.

Plans must also be made for staff support and family support so that workers can do their jobs knowing that their loved ones are safe.

Contingency Plans for Cooking During or After a Disaster

In most, but not all, emergencies, electricity should be available from the facility's back-up power system. If utilities are compromised, gas may not be available or back-up electrical power may be limited. If possible, use stove tops and ovens for cooking. If hoods are not functional, check with the maintenance department to determine if gas-powered ovens and stovetops should be used without ventilation. If gas equipment is unavailable, electric-powered equipment, including microwave ovens, can be used to heat foods to a safe temperature. If necessary, use electric stoves in the facility's therapy and/or activities departments, following temperature guidelines for cooking and holding as outlined in the charts on pages 83 and 84.

Federal regulations allow facilities to use outdoor grills for facility events assuming proper food safety guidelines are used (7). If necessary in an emergency, a facility's charcoal or gas-powered grills could be used to heat water and/or prepare food. Grills should always be used outside or on a covered patio, not inside a building or storage area, because fumes generated can be dangerous. Proper food handling guidelines, including cooking to a safe food temperature and keeping food out of the temperature danger zone (>41 to <135 degrees) for more than 4 hours, should be implemented and documented. Food temperatures should be checked during cooking, holding, and cooling. (Refer to Resource: Critical Temperatures for Safe Food Handling on page 85.)

Patient Preferences and Therapeutic Diets in Emergency Situations

According to the Academy of Nutrition and Dietetics, quality of life and nutritional status of older adults in post-acute care facilities can be enhanced by less restrictive and/or individualized diets (7). Federal regulations indicate that it is a resident's right to make choices about their care, including their meal choices (7). For these reasons, many skilled nursing facilities now provide "regular" or "general" diets for all of their residents, with preferences such as no added salt, unsweetened beverages, and reduced-sugar products noted on meal ID cards/tray tickets as individual preferences.

In emergency situations, it may be difficult to meet specific therapeutic guidelines. Portion control (which is one key component for managing carbohydrate and sodium content of meals) should be maintained. If possible, individual preferences should be honored for each person. However, providing safe food and water may take priority over other aspects of nutrition care, particularly in an extreme emergency.

Food and nutrition services staff should work with medical staff to identify and help manage individuals who might need specific food or fluid restrictions, even in the event of an extreme emergency. Food necessary to meet the needs of those individuals should be part of a facility's emergency food plan.

Mechanically Altered Diets in Emergency Situations

Individuals who are receiving mechanically altered diets and/or thickened liquids usually have trouble swallowing and have a medical diagnosis of dysphagia. Maintaining proper food texture and fluid consistency during an emergency situation is important for these people. Because power might be compromised, shelf-stable puree food (canned or aseptically packaged) should be part of the emergency food supply in every facility. Pre-

thickened liquids and/or thickening packets are also necessary emergency foods. All emergency products for individuals with dysphagia should be rotated into facility menus to assure they are used by their “use by” date.

Contingency Plans for Communication and Computer Systems

It is important to plan ahead for the possibility of loss of regular communication systems and computer hardware, software, and networks that are essential to facility operations. Loss of systems could occur as part of a natural or man-made disaster or in the event of a computer-hacking event.

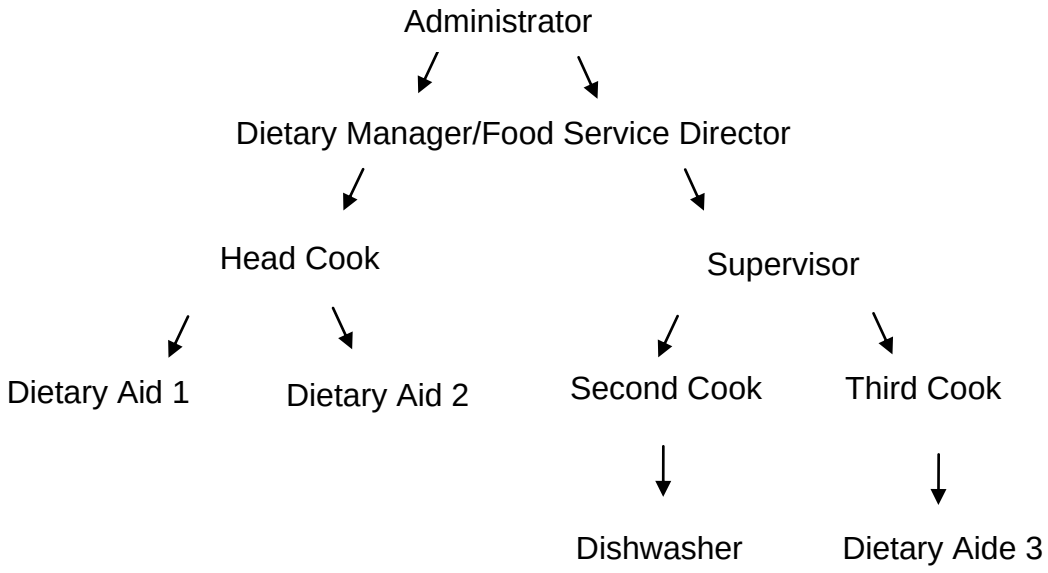
Communication Systems

Plan a backup communication system if phone lines are down. Cell phones are the first back up for phone systems. Text messaging may help to save batteries so that cell phones may be used longer. Email communication or use of social media like Facebook or Twitter messages may work effectively for some facilities.

Communication systems that rely on electronic devices are only effective if devices are charged. For that reason if a disaster threatens devices should be kept fully charged. Car chargers for cell phones and smart phones are useful as long as gasoline is available to keep cars running. If cell towers are down, or cell phone batteries run out, another back up plan must be in place.

Consider planning a phone or text messaging tree for emergency communications. The phone tree might start with the administrator calling the director of food and nutrition services who would in turn call the head cook who would in turn call the second cook and so forth. Phone trees are effective because they take the burden off of one person to make all the calls.

Sample Phone (or Text-Messaging) Tree



Computer Hardware/Software

Many facilities are dependent on computers for day to day operations of the food and nutrition services department. A back-up system must be in place, and must be tested on a regular basis to assure that it is working. Back-up systems may include the use of generators to generate the electricity needed to run the computer system, and/or paper back-up systems of menus, tray cards, food order guides, and other critical information. Some facilities or corporations automatically back up all computer systems; however additional copies of important information on external hard drives, flash drives, compact discs, (CDs) or the cloud are recommended. It is important to use the backup method recommended by administration to assure confidentiality of resident/patient data and/or sensitive facility information. Back-up drives and other systems must be moved to a safe and dry area to keep data safe during hurricanes, tornadoes or floods.

If there is advance notice of a pending or potential disaster, print out information critical to department functions prior to the disaster. Information such as patient/resident diet orders, texture modifications and fluid consistencies, food preferences, allergies/intolerances, ordered supplements, tube feedings, etc. will be essential to provide adequate care during an evacuation or following the disaster. Printed (“hard”) copies of emergency menus and spreadsheets and food order guides are also recommended. Hard copies of employee contact information and department emergency policies and procedures will also be needed.

Plan for Facility Pets

Pets are an important part of a facility and should not be overlooked in the event of an emergency. Below are a few things to keep in mind related to pets and disasters.

In Preparation for a Disaster:

- Coordinate with the person in charge of handling facility pets regarding food, water and care. This is particularly important if the food and nutrition services department orders and/or stores pet food.
- Keep an adequate supply of extra pet food on hand in case of emergency. A minimum 7 day supply is recommended. If pets have special diet food needs, a two to four week supply may be prudent.

During a Disaster:

- Pets should be brought inside, and kept in a safe place.
- A pet's behavior may change before, during, and after a disaster.
- Avoid allowing pets in kitchens, food preparation and dining areas during an emergency if at all possible.
- If staff and residents must evacuate, pets should also evacuate.
    - Coordinate with the person in charge of pets to take a week's supply of food and water, dishes, and other supplies (manual can opener, etc.) as appropriate.
    - The person in charge of pets should also carry written information on feeding schedules, special diet needs, and medications ordered for pets.
- Place pet supplies in accessible containers that are easy to carry (duffel bags or plastic carrying containers).
- The facility may be asked to shelter the pets that accompany people who are sheltering in the facility. Take a "pet census" and obtain additional food and supplies as needed.

For additional information on how to prepare and care for pets during a disaster, refer to the Resources Related to Pets on page 193.

Long-Term Care Facilities: Are You Ready for a Disaster?

The Centers for Medicare and Medicaid (CMS) services has created an emergency preparedness checklist that might be helpful for long term care facilities. This will help assure compliance to CMS regulations that are outlined on pages 16 and 17. Please see pages 18 thru 23 for the emergency preparedness checklist.

Basics of Planning for a Disaster

Each facility should have an emergency plan in place. There should also be emergency food and water supplies, emergency policies, procedures, and emergency menus. The remaining pages of this manual provide a wealth of information to help assure that a facility is prepared and can function as efficiently and effectively as possible in the event of a disaster.

Chapter 4: Employee Training: Sample Inservice Outlines

There are three inservice outlines on the following pages for use as preferred. Refer to Chapter 9: Policies and Procedures on pages 194-229 for more information on staff training.

Inservice 1: Dietary Disaster Plan Overview

Note: It may be helpful to involve facility maintenance and/or life safety department in this inservice.

Objectives

At the conclusion of the inservice, participants will be able to:

1. Understand and discuss possible emergency situations employees may encounter.
2. Know where to find the disaster plan, emergency food, water, and supplies.
3. Understand each individual's role in the event of a disaster.
4. Understand how to apply the facility's emergency/disaster plan to possible scenarios that have been identified.
5. Identify the facility's disaster menu plan for uninterrupted food service delivery and how to use perishable foods first.
6. Identify emergency contacts in case of a disaster.

Agenda

I. Introduction: What kinds of emergency situations might impact our facility?
   A. Discuss the possible situations that employees may face in attempting to carry out the responsibilities of their position.

II. What does it mean to the department?
   A. Discuss how food and nutrition services employees may be impacted by the situations identified.
      1. Food and nutrition services department's procedures for evacuation of the facility
      2. How to turn off water, and/or gas if needed
   B. Areas of impact
      1. Loss of utilities - gas, electric, water
      2. Emergency water and food supplies
      3. Emergency menus and food service procedures

III. How will staff respond?
   A. During the initial emergency
      1. Location of the emergency/disaster plan
      2. Brief review of overall emergency/disaster plan
      3. Discuss employee roles
      4. Discuss staffing levels, emergency contacts, phone tree
   B. Food service and delivery during the disaster
      1. Review disaster feeding plan and menus for 3 and 7 days
      2. Identify location of emergency food, water, and supplies
      3. Discuss inventory
      4. Discuss use of perishable foods

Materials Needed:

This book, copies of the emergency/disaster plan and disaster menus, location of supplies lists, emergency contact lists, policies, etc.

Inservice 2: Water Purification, Water Supplies

Objectives

At the conclusion of the inservice, participants will be able to:

1. Know where to find the emergency/disaster plan
2. Know where to find emergency sources of water
3. Understand safe versus unsafe water sources
4. Understand how to purify water using the following methods: boiling, purification tablets and bleach purification

Agenda

I. Introduction

A. Location of the emergency/disaster plan, emergency water, food and supplies.

II. Water requirements during an emergency/disaster (see pages 67-68)

A. Amount of water per person needed for drinking

B. Amount of water per person needed for general purposes

III. Location of water supplies

A. Water storage location for drinking water

B. Delivery sources of water for emergency use

C. Other sources of water

IV. Safety of water supplies (see pages 68-69)

A. Determining safety of drinking water (listen to local authorities; if in doubt, purify).

V. Methods of purification—review all methods based on the information on pages 70-72

A. Boiling method

B. Purification tablets

C. Bleach method

Materials Needed:

This book, copies of any additional pertinent facility emergency/disaster policies, location of water supplies, emergency contact lists for water/ice, information in this publication related to water sources, water purification, etc.

Inservice 3: Food Safety and Sanitation During a Disaster

Objectives

At the conclusion of the inservice, participants will be able to:

1. Know where to find the emergency/disaster plan.
2. Know how to keep food safe during a disaster.
3. Understand how to sanitize dishes during a disaster.
4. Understand how to wash and/or sanitize hands during a disaster.

Agenda

I. Introduction
   A. Location of the disaster plan, emergency water, food, and supplies

II. Review of food safety during a disaster (pages 74-86)

III. Review of sanitizing dishes during a disaster (page 88)

IV. Review of hand washing during a disaster (page 87)

Materials Needed:

This book, copies of any additional pertinent facility emergency/disaster policies, location of sanitizing supplies, information in this publication related to the pages noted above, etc.

Employee Training

Mock Disaster Drill

Scenario #1
The weather radio reports that a hurricane is approaching and predictions indicate it will hit your area in approximately 3 hours. You are beginning to prepare dinner for 150 residents/patients and the food you are about to prepare requires the use of the oven, stoves, etc. The lights are flickering on and off and the winds outside are blowing fiercely. Suddenly the electricity is gone. Dinner needs to be served in an hour and a half. What should you do?

Scenario #2
You have just finished cooking dinner using gas appliances. The electricity suddenly goes off, and the generator fails to kick in. How do you clean up the kitchen after the meal has been prepared and served? What should you do to plan for the next meal?

> **Suggestion:** Have the employees actually complete this exercise. Have them clean up (or partially clean up) after a meal without using the dishwasher. Make sure you have trained the employees on how to wash, rinse and sanitize using the three sink method.

Scenario #3
You are in the kitchen getting ready to serve the evening meal. A sudden explosion rocks through your facility. The supervisor has gone home for the day. What should you do?

Scenario #4
The water supply to your facility has been interrupted and once the water is back on, its safety is still in question. How can you assure safe drinking water for everyone?

Scenario #5
All utilities to your facility have been cut off. How do you plan an emergency menu to utilize the perishable foods on hand and still keep food safe?

> **Suggestion:** Do this drill on a day prior to a food delivery. Have staff plan the menu based on the perishable (and non-perishable) foods on hand.

Mock Disaster Drill Evaluation Form

Date of Mock Disaster Drill_____ **Time**_____

1. Describe the mock disaster.

2. Did the employees follow the appropriate facility policy?

3. If no, what areas did the employees fail to follow? List specifics.

4. What went well?

5. What were the causes for any problems?
   - ☐ Lack of understanding of the policy
   - ☐ Need for revision/modification of the policy
   - ☐ Employees did not take the drill seriously
   - ☐ Lack of necessary supplies on hand
   - ☐ Employee performance
   - ☐ Other:_____

6. What steps will be taken to address the identified problems?

Employee Signatures:

Signature: _____
Director of Food and Nutrition Services

Chapter 5: During A Disaster

Note: For detailed instructions on any of the following specific types of disasters, refer to Chapter 3: Disaster Planning and Preparedness on pages 25-56.

- Hurricanes, Flash Floods, and Tornados
- Winter Storms
- Terrorism

Coordination of Emergency and Disaster Plan

The building administrator or designee will notify the director of food and nutrition services or designee of the emergency status.

The director of food and nutrition services or designee will coordinate the functions of the department during an emergency. These functions may include, but are not limited to, the following:

1. Notifying staff that an emergency plan is in effect.
2. Assessing the situation and create a plan of action.
3. Seeking immediate medical attention for those who require it.
4. Identifying key staff and staffing needs to implement the emergency plan.
5. Delegating specific tasks to others to remain available for crisis management.
6. Assisting with needs of the residents/patients/guests such as moving them to safe areas and addressing immediate needs as directed by the facility administrator or designee.
7. Accessing emergency/disaster plan and list of emergency contacts and supplies.
8. Providing a list of the food/dining services' employee names and telephone numbers to be utilized if additional staff is needed.
9. Scheduling and supervising food and nutrition services personnel and volunteers as necessary to meet needs during the emergency.
10. Keeping accurate staffing records for payroll purposes.
11. Overseeing delivery of meals and/or snacks.

To Assure a Food and Water Supply in Emergency Situations

1. Notify vendors of emergency and outline any pressing needs for food, water, paper products, or cleaning supplies.
2. If advance notice is provided, freeze large containers of water to keep freezers, refrigerators and coolers cold and help protect existing food supply.
3. Request that staff members bring supplies for themselves if vendors are unable to make deliveries.
4. Plan for and prepare food, water, and snacks for evacuation, if applicable.
5. Identify the number of people that need to be fed. For healthcare facilities, a starting point is census plus 50 to 100% to cover staff, volunteers, family members, and those that might be sheltering in the facility (7).
6. Implement 3 to 7 day emergency menu plan (see pages 116 and 135). Try to maintain 3 well balanced meals a day with a menu as close to normal as possible.
7. Assure a safe water supply is available. If necessary, use stored water and/or water purification methods (see pages 70-72).

8. Maintain cold food at or below 41°F. If in doubt about any food's safety, throw it out.
9. Determine how to use the perishable food items on hand in coolers and freezers in the first and second day.
10. Use foods in order of their perishable qualities if power is compromised:
    - Food in refrigerators: May be good for up to 12 hours without electricity if doors remain closed as much as possible. However, it is essential to check food temperatures to ensure food safety.
    - Food in freezers: Probably will keep up to 2 to 3 days without electricity if doors remain closed as much as possible. Again, it is essential to check food temperatures to ensure food safety.
    - Canned, aseptically packaged, and dry foods: Use last.

See pages 76-79: When to Save and When to Throw it out.

Garbage/General Cleanliness

1. Manage removal of garbage from the kitchen and dining areas. The volume of garbage will increase when using disposable products to serve food and beverages.
2. Remove garbage promptly after each meal.
3. Assure that floors are kept clean and mopped in kitchen and dining areas.
4. Clean and sanitize food preparation surfaces, equipment, utensils, and dishware. Use paper, plastic and/or disposable dishware as necessary.
5. Inspect and sanitize cans before opening in the event of flooding or biological, chemical, or radioactive emergencies.
6. If possible, continue recycling and/or composting waste per facility policy.

Tips for Department Management

1. Remain calm.
2. Attempt to reassure employees and encourage them to contact loved ones to make sure they are safe.
3. Maintain a normal routine as much as possible given the emergency circumstances.
4. During the event, evaluate if the emergency plan is working effectively. Record successes/failures and change the plan as needed in the future.

Refer to Chapter 6: Disaster Preparedness Forms on pages 89-98 for useful tools that will be helpful during an emergency/disaster.

Evacuation Procedures

When the building must be evacuated, follow these procedures.

Assure Adequate Food and Hydration for Everyone Involved

1. If possible, serve a hot meal prior to evacuation.
2. Prepare sack lunches for all residents/patients, drivers, and staff to take to their destination (See Meals for Evacuation on page 106).
3. Arrange for enough water for the trip. Be sure each vehicle contains adequate food and water for each person in the vehicle.
4. Organize food and fluids in vehicles so they are easy to access.
5. If traffic is heavy or roads are impassable, travel time may be longer than expected.
    - Take more food and fluids than projected, in case of emergencies during travel.

Send Medical Information with Each Resident/Patient

1. Place resident/patient information in re-sealable plastic bags for protection and label with each person's name and pertinent information.
2. Diet and nutrition information for each individual should include the following (see Medical Nutrition Therapy Information on page 98):
    a. Pertinent information from diet cards/meal ID tickets: diet order, texture and consistency modifications, supplement orders, food allergies and intolerances, likes and dislikes, beverage preferences, meal and snack preferences, portion sizes, and special utensils. If the facility has an electronic tray card system, pull this information from the system.
    b. If possible, include clinical information such as: height and weight, calorie, protein, and fluid needs.
3. Provide 2 copies of diet cards/meal ID tickets for all meals (breakfast, lunch, dinner, and snacks).
4. A copy of the current diet list for all of the residents/patients should be sent to each destination so the sheltering facility will know the diet orders for each individual they shelter.
5. Take the cardex and/or back-up computer tray-card system. If possible, take the department's desktop computer's central processing unit or laptop computer.

To Assure a Successful Evacuation:

1. Use the buddy system to keep track of all evacuees.
2. After evacuation, account for all evacuees, staff, pets, and electronic equipment.

See Chapter 2: Regulations Related to Emergency Preparedness on pages 10-24 for more information on evacuations.

Service Outages

Combination Service Outages

Gas, electricity, or water could be unavailable individually or in combination during any natural or man-made disaster. Combine the instructions for gas, water, and electrical outages below to accommodate the needs of the facility.

No Gas Supply

- If range and conventional ovens in the kitchen use gas, use microwave ovens and electric stoves instead.
    - Use simple, plain foods that can be served cold or which need only minimal heating. Examples include sandwiches, canned soups, pasta with canned spaghetti sauce, and canned beef stew.
- If the facility water heater is heated with gas, hot water will be unavailable unless it is heated using electric appliances or on a gas or charcoal grill used outside of the building.
- If activity, therapy, or nursing areas have electric stoves or microwaves available, transfer supplies for cooking and serving, and prepare to serve food directly from these areas.
- Use outdoor charcoal or gas grills to prepare food if necessary.
- See Chapter 8: Emergency Menus and Recipes on pages 114-186 for disaster situations with no utilities available.

No Electrical Supply

- Most facilities have auxiliary power that should take over quickly.
- Should there be a delay in the auxiliary power supply, do not open refrigerator or freezer doors unless absolutely necessary until the power returns. Place blankets or towels along seals to keep cold air in.
- Keep an internal thermometer in freezers and coolers; with a power failure the external thermometers may not operate. Internal thermometers will help determine if food is safe to eat after an extended period without power.
- Enteral feeding pumps will function for a limited time once the pumps switch to battery back-up. Refer to the manufacturer's manual or contact the pump manufacturer or provider to determine how long the pumps will function on battery back-up mode. It may be necessary to provide bolus feedings to preserve a feeding pump's battery power. Make sure the needed gravity or bolus supplies are in the designated disaster supply area. Due to complications that may arise with enteral feedings, careful monitoring by all professional staff is necessary to avoid negative outcomes.

No Water Supply

Enough water should be available for cooking and drinking and to maintain each person's hydration. Water should not be rationed in an emergency unless absolutely necessary. Attempt to ascertain how long the water supply will be affected, and if

necessary and/or possible, negotiate a contract for additional water to be delivered by a vendor located in a nearby area.

Each facility should have an emergency supply of water as follows:

1. A minimum of a 3 day water supply per person should be available. A 7 day supply is preferable. Two quarts of fluid per day per person is essential for drinking water. An additional ½ gallon or more of water per day allows water for personal hygiene, cooking and other uses (22). More fluid may be needed in very hot climates: in medical facilities, 1 to 1½ gallons per person per day is reasonable. Bottled water should be stored in a designated area in a cool, dry space away from heat sources.
2. Sources of fluids for drinking include coffee and tea, fruit juices, canned soups and broths, ice cream and sherbet, fruit ice, gelatin, ice, and carbonated beverages. Some usual sources of fluids may not be available in emergency circumstances (i.e. electric machines for coffee, juice, and other beverages).
3. Bottled water may be used to:
    - Mix with nonfat dry milk: this should be mixed fresh for each meal (make only the amount that will be used for the meal).
    - Prepare instant coffee, tea, and powdered beverage mixes.
    - Dilute concentrated soups or condensed beverages.
4. Reduce the amount of salt used in cooking to avoid increased thirst sensation.
5. Individuals on high protein foods and supplements should be monitored to insure they consume adequate total fluids.

Sources of Water and Other Fluids

Advance Notice

If the facility has advance notice of a disaster (such as for a hurricane, snow storm, ice storm, local water repairs, etc.), fill clean, sanitized containers with water in advance of the potential disaster. The steam jacketed kettle, stock pots and other containers can help to keep a ready supply available. Fill large clean, sanitized containers with water and place in the freezer. These frozen containers can then be used to help maintain the cold temperatures in the refrigerators and freezers. If there is limited storage space available for water containers, collapsible plastic water containers are available that will take up less space during storage. An internet search using the term “collapsible water containers” will result in several options that can be easily stored until needed during an emergency.

If possible, assure tea urns, coffee pots, insulated pitchers, and thermal urns around the facility are full of a beverage prior to the emergency. Consider dispensing water or fluids like tea or juice into all available cups as if in preparation for meal service, so there is a ready supply after the emergency. Use nourishment room refrigerators if necessary to store pre-poured liquids for meal service.

Ice cube trays or ice machines can be used as a source of water. Bag ice and place in the freezers and coolers.

If possible, have a contract in place with a local vendor for water and/or ice delivery during a disaster.

Hot water tanks and boilers contain some emergency water. *Water from hot water tanks and boilers is not purified and should be used as all-purpose water, not drinking water.*

To obtain water from the hot water tank, ask for assistance from maintenance:

1. Be sure the electricity or gas is turned off.
2. Open the drain at the bottom of the tank.
3. Start the water flowing by turning off the water intake valve and turning on a hot-water faucet.
4. Do not turn on the gas or electricity when the tank is empty.

If water or sewage lines are broken, the maintenance department can also assist by shutting off the incoming water supply to stop contaminated water from entering the building.

In extreme cases, emergency outdoor water sources include:

- Rainwater
- Streams
- Rivers
- Ponds and lakes
- Natural springs

This water may be used for all purpose water if from a safe source.

Do not use this water if there is floating debris, if it has a negative odor, or if it is dark in color.

Water Purification

Even if utilities remain in operation, the water supply may need to be purified prior to use. Contaminated water can contain microorganisms that cause diseases such as dysentery, cholera, typhoid and hepatitis. It is essential to purify all water of questionable safety before using it for drinking, food preparation, or hygiene. Local authorities will usually announce bans on water consumption or the need to purify or boil water for a specific time period.

There are three basic ways to purify water:

1. Boiling
2. Purification tablets
3. Bleach purification

These measures will kill microbes but will not remove other contaminants such as heavy metals, salts, most other chemicals, and radioactive fallout.

Before purifying, let any suspended particles settle to the bottom, or strain them through layers of paper towel or clean cloth (22).

Boiling

Boiling is one of the safest and most common ways to purify water. Steps for purifying water using the boiling method include:

1. Pour water into an appropriate cooking container, placed on the stove top, and bring to a rolling boil.
2. Boil vigorously for one full minute.
3. To prevent evaporation, put a lid on the container after the water has been boiled to trap any evaporating steam.
4. Cool the water for 30 minutes to a safe handling temperature before transferring it into clean containers.
5. To improve the taste of the water, pour it from one container to another several times.

Note: A loss of utilities may result in not having a heat source available to boil the water.

Water Purification Tablets
Water purification tablets are available from a number of different supplier sources or can be purchased locally at most sporting goods stores, camping supply stores or drug stores. An internet search of "water purification tablets" will result in several sources. It is important to plan ahead and order in advance to ensure they are on hand when needed. These tablets release chlorine or iodine for purification. Follow the manufacturer's directions for use. Usually one tablet is enough for one quart of water. Double the dose for cloudy water.

Bleach Purification (23)
Liquid household bleach (5.25 to 6.0% sodium hypochlorite) can be used to purify water using the following steps:

1. Choose source of bleach carefully. Do not use color safe bleaches or bleaches with added cleaners, soaps or scents. Use bleach from an unopened or newly opened bottle because bleach's potency reduces over time. Note: Do not use other chemicals, such as iodine or water treatment products sold in camping or surplus stores that do not contain 5.25 or 6.0 percent sodium hypochlorite as the only active ingredient.
2. Before treating, let any suspended particles or dirt settle to the bottom or strain them through coffee filters or layers of clean cloth.
3. Measure bleach carefully, because over or under measuring may be harmful.
    a. Add 16 drops (1/8 teaspoon) of bleach per 1 gallon of water and mix well.
    b. Let stand for 30 minutes.
    c. The water should have a slight bleach odor. If it doesn't, then repeat the dosage and let stand another 15 minutes.
    d. If it still does not smell of chlorine, discard it and find another source of water.
4. Seal water containers tightly, label them clearly, and store in a cool, dark place.

Amount of Water	Amount of Bleach Needed
1 quart	4 drops*
1 gallon	16 drops (1/8 teaspoon)*
5 gallons	5/8 teaspoon

* A clean eyedropper is ideal for measuring the number of drops.

Other Purification Methods
While the 3 methods described on page 71 will remove only microbes from water, the following 2 purification methods will remove other contaminants.

- Distillation will remove microbes, heavy metals, salts, and most other chemicals.
- Filtering will also remove radioactive fallout. Water itself cannot become radioactive, but it can be contaminated by radioactive fallout. It is unsafe to drink water that contains radioactive fallout.

Distillation
Distillation involves boiling water and then collecting only the vapor that condenses back to water. The condensed vapor will not include salt and other impurities.

To distill, fill a pot halfway with water. Tie a cup to the handle on the pot's lid so that the cup will hang right-side-up when the lid is upside-down (make sure the cup is not dangling into the water) and boil the water for 20 minutes. The water that drips from the lid into the cup is distilled (24).

Filtering
Filtering can be used to remove particles from water. To make a fall out filter, punch holes in the bottom of a large bucket, and put a layer of gravel in the bucket about 1½ inches high. Cover the gravel with a towel cut in a circle slightly larger than the bucket. Cover the towel with soil, place the filter over a large container, and pour contaminated water through it. Then, disinfect the filtered water using one of the 3 methods previously described. Change the soil in your filter after every 50 quarts of water (23).

Emergency Contacts

An updated list of emergency contacts should be available at all times. This should include the cell phone number of all food vendor representatives and/or truck drivers. Fire and rescue squads may not be available right away, so be sure to have a list of churches, schools and vendors that may be willing to offer assistance.

1. In an emergency, staff will call 9-1-1 as needed for fire or police services.
2. The director of food and nutrition services may be reached by phoning _____. Calls are returned as quickly as possible.
3. The RDN may be reached by phoning _____. Calls are returned as quickly as possible.
4. American Red Cross – Local Chapter Number _____.
5. Food Service Supplier(s) _____.
6. Local Health Department _____.
7. State Health Department _____.
8. Additional emergency contacts (may include vendors/suppliers, local restaurants, professionals, or others who have agreed to assist in an emergency).

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

_____ _____

Also refer to the policy on Emergency Contact Information on page 204 in Chapter 9: Policies and Procedures.

Keeping Food Safe During and/or After a Disaster

When creating an emergency meal plan, it is important to consider how perishable food items on hand will be used. In the event that there is no power to refrigerators and/or freezers, use perishable food items on hand in the first day or two. Be sure to use refrigerated items, including dairy items, as soon as possible after the power goes out. If these items are left in the refrigerator and temperatures begin to rise, safety is not guaranteed beyond 4 hours (25). Food in freezers should remain frozen for 48 hours if it is full (25), 24 hours if it is half full (25).Freezers may stay cold (but will not remain frozen) for about 3 days if proper procedures are followed. ***It is essential to take food temperatures prior to using perishable foods and beverages to assure food safety.***

General Guidelines for Safety of Stored Foods (26)

1. **Refrigerators and Freezers:** If the proper procedures are followed, food in refrigerators and freezers can maintain a safe temperature for a longer period of time. The following measures should be taken:

   a. If advance notice is provided, freeze large containers of water to be used in the refrigerators, freezers and coolers.

   b. Refrigerators and freezers should remain closed as long as possible and should be opened only when a complete list of what is needed is available.

   c. Blankets or towels may be placed along seals to keep cold air in the refrigerator/freezer unit.

   d. When walk-in refrigerators or freezers must be accessed, open the door, enter, and then close the door. Use a flashlight to gather all supplies needed for the next couple of hours or to rearrange stock in the freezer, moving foods away from the door to the back where it may stay cold longer).

   e. Food in freezers should be packed so that items will remain frozen longer. If the freezer is not full, group packages so that they form an igloo to protect one another.

   f. In freezers, place meat, fish and poultry on a tray on one side of the freezer and on lower shelves to catch juices that may result from thawing.

   g. If power is out for more than 2 days, try to secure dry ice or block ice. Dry ice should not be handled with bare hands. Open the freezer door and allow excess carbon dioxide to vent before entering.

   h. When power fails, external temperature gauges may not function. If possible, use external gauges to monitor temperatures to avoid entering refrigerators and freezers. Keep a thermometer inside each refrigerator and freezer to use as a back-up. Monitor and record the temperature each time the refrigerator or freezer is entered and/or every 2 hours if using an external gauge. Cook any hazardous food that has been above 41°F for less than 4 hours and discard any hazardous food that has been above 41°F for more than 4 hours.

i. Many foods can be refrozen if ice crystals remain, but will have some loss of quality. Discard any foods that have an unusual odor, off color, odd texture or that feel warm to the touch.

j. **Do not taste food to determine if it is edible. If in doubt, throw it out.**

See charts on When to Save and When to Throw it Out on pages 76-79.

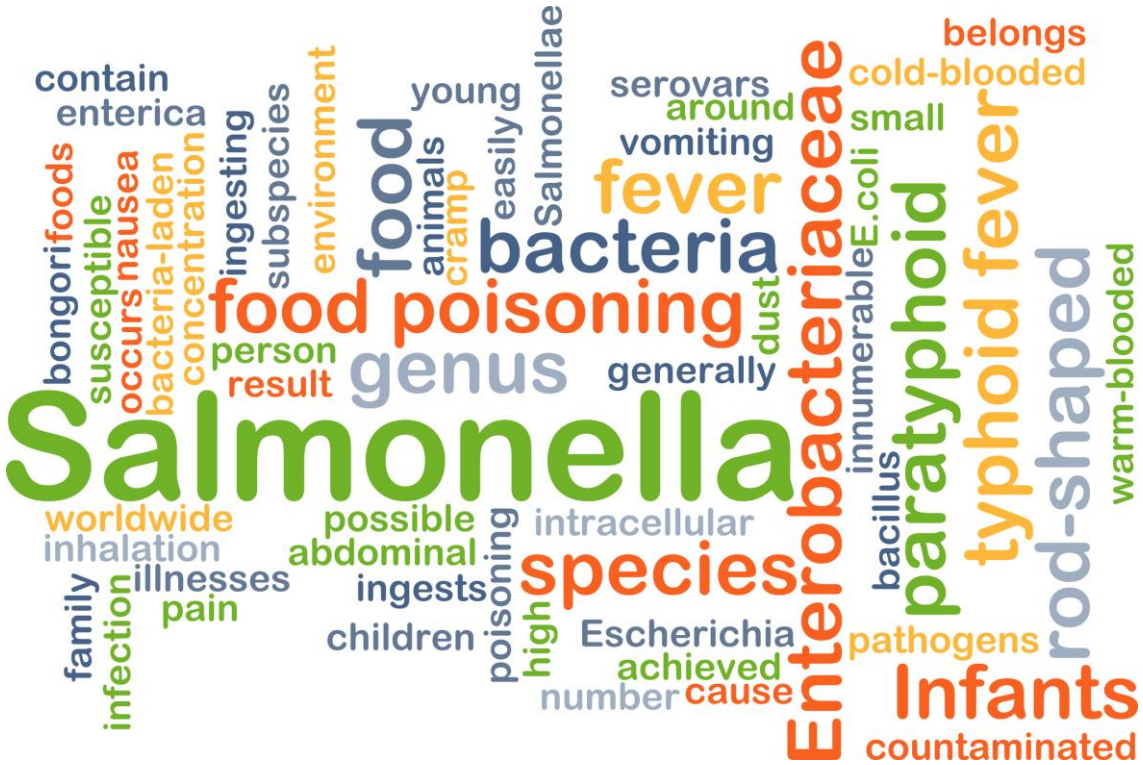
2. **Canned Goods:** Most canned goods may be used if they do not have dents, leaks, or bulges. Inspect cans closely for damage and sanitize before opening if dry storage area has been affected by the disaster.

3. **Aseptically Packaged Foods**: Can be used if they do not have leaks and are sanitized prior to opening.

4. **Potentially Contaminated Foods:** Discard food or supplies that have been in contact with floodwater; meat, poultry, fish, eggs, fresh produce; food supplies in cardboard boxes such as cereal, open containers and packages; spices and extracts, dented or bulging cans; flour, sugar, cereal, rice, coffee or other staples.

Information on food safety in the event of power outages and other disasters can be found in the list of resources on pages 227-229.

The charts on the following pages give guidance on when to save foods and when to throw them out. However, the best guidance is **"if in doubt, throw it out".**



Refrigerated Foods

When to Save and When to Throw It Out	
Food	**Held above 40ºF for Over 2 Hours***
Meat, Poultry, Seafood	Discard
Raw or leftover cooked meat, poultry, fish, or seafood; soy meat substitutes	
Thawing meat or poultry	Discard
Meat, tuna, shrimp, chicken, or egg salad	Discard
Gravy, stuffing, broth	Discard
Lunchmeats, hot dogs, bacon, sausage, dried beef	Discard
Pizza – with any topping	Discard
Canned hams labeled “Keep Refrigerated”	Discard
Canned meats and fish, opened	Discard
Cheese	Discard
Soft cheeses, blue/bleu, Roquefort, brie, Camembert, cottage, cream Edam, Monterey Jack, ricotta, mozzarella, Muenster, Neufchatel, Queso Blanco, Queso Fresco	
Hard cheeses: cheddar, Colby, Swiss, parmesan, provolone, Romano	Safe
Processed cheeses	Safe
Shredded cheeses	Discard
Low-fat cheeses	Discard
Grated parmesan, Romano, or combination (in can or jar)	Safe
Dairy	Discard
Milk, cream, sour cream buttermilk, evaporated milk, yogurt, eggnog, soy milk	
Butter, margarine	Safe
Baby formula, opened	Discard
Eggs	Discard
Fresh eggs, hard-cooked in shell, egg dishes, egg products	
Custards and puddings	Discard
Casseroles, Soups, Stews	Discard
Fruits	Discard
Fresh fruits, cut	
Fruit juices, opened	Safe
Canned fruits, opened	Safe

When to Save and When to Throw It Out	
Food	**Held above 40ºF for Over 2 Hours***
Fresh fruits, coconut, raisins, dried fruits, candied fruits, dates	Safe
Sauces, Spreads, Jams	Discard if above 50ºF for over 8 hours
Opened mayonnaise, tartar sauce, horseradish	
Peanut butter	Safe
Jelly, relish, taco sauce, mustard, catsup, olives, pickles	Safe
Worcestershire, soy, barbecue, Hoisin sauces	Safe
Fish sauces (oyster sauce)	Discard
Opened vinegar-based dressings	Safe
Opened creamy-based dressings	Discard
Spaghetti sauce, opened jar	Discard
Bread, Cakes, Cookies, Pasta, Grains	Safe
Bread, rolls, cakes, muffins, quick breads, tortillas	
Refrigerator biscuits, rolls, cookie dough	Discard
Cooked pasta, rice, potatoes	Discard
Pasta salads with mayonnaise or vinaigrette	Discard
Fresh pasta	Discard
Cheesecake	Discard
Breakfast foods - waffles, pancakes, bagels	Safe
Pies, Pastry	Discard
Pastries, cream filled	
Pies – custard, cheese filled, or chiffon; quiche	Discard
Pies, fruit	Safe
Vegetables	Safe
Fresh mushrooms, herbs, spices	
Greens, pre-cut, pre-washed, packaged	Discard
Vegetables, raw	Safe
Vegetables, cooked; tofu	Discard
Vegetable juice, opened	Discard
Baked potatoes	Discard
Commercial garlic in oil	Discard
Potato salad	Discard

Source: United States Department of Agriculture Food and Nutrition Inspection Service. Keeping Foods Safe During an Emergency. http://www.fsis.usda.gov/wps/wcm/connect/c91280f8-d8db-4ebe-99e9-a0f1aa7d466b/Keeping_Food_Safe_During_an_Emergency.pdf?MOD=AJPERES. Accessed April 20, 2018 (26).

Frozen Foods

When to Save and When to Throw it Out		
Food	**Still Contains Ice Crystals and Feels as Cold as if Refrigerated**	**Thawed. Held above 40ºF for over 2 hours***
Meat, Poultry, Seafood	Refreeze	Discard
Beef, veal, lamb, pork, and ground meats		
Poultry and ground poultry	Refreeze	Discard
Variety meats (liver, kidney, heart, chitterlings)	Refreeze	Discard
Casseroles, stews, soups	Refreeze	Discard
Fish, shellfish, breaded seafood products	Refreeze; however, there may be some texture and flavor loss	Discard
Dairy	Refreeze; may lose some texture	Discard
Milk		
Eggs (out of shell) and egg products	Refreeze	Discard
Ice cream, frozen yogurt	Discard	Discard
Cheese (soft and semi-soft)	Refreeze; may lose some texture	Discard
Hard cheeses	Refreeze	Refreeze
Shredded cheeses	Refreeze	Discard
Casseroles containing milk, cream, eggs, soft cheeses	Refreeze	Discard
Cheesecake	Refreeze	Discard
Fruits	Refreeze	Refreeze; discard if mold, yeasty smell, or sliminess develops
Juices		
Home or commercially packaged	Refreeze; will change texture and flavor	Refreeze; discard if mold, yeasty smell, or sliminess develops
Vegetables	Refreeze	Discard after held above 40ºF for 6 hours
Juices		
Home or commercially packaged or blanched	Refreeze; may suffer texture and flavor loss	Discard after held above 40ºF for 6 hours

When to Save and When to Throw it Out		
Food	**Still Contains Ice Crystals and Feels as Cold as if Refrigerated**	**Thawed. Held above 40ºF for over 2 hours***
Breads, Pastries	Refreeze	Refreeze
Breads, rolls, muffins, cakes (without custard fillings)		
Cakes, pies, pastries with custard or cheese filling	Refreeze	Discard
Pie crusts, commercial and homemade bread dough	Refreeze; some quality loss may occur	Refreeze; quality loss is considerable
Other	Refreeze	Discard
Casseroles – pasta, rice based		
Flour, cornmeal, nuts	Refreeze	Refreeze
Breakfast items – waffles, pancakes, bagels	Refreeze	Refreeze
Frozen meal, entrée, specialty items (pizza, sausage and biscuit, meat pie, convenience foods)	Refreeze	Discard

Source: United States Department of Agriculture Food and Nutrition Inspection Service. Keeping Foods Safe During an Emergency. Available at http://www.fsis.usda.gov/wps/wcm/connect/c91280f8-d8db-4ebe-99e9-a0f1aa7d466b/Keeping_Food_Safe_During_an_Emergency.pdf?MOD=AJPERES. Accessed April 19, 2018 (25).

***Note: The 2013 Federal Food Code uses 41°F or below as the safe temperature for cold foods.**

Develop a Plan to Use Foods in Order of Perishability

1. Plan menus to use perishable foods first. Utilize the following foods within the first 1 to 3 days (as long as they are held at safe temperatures):
    - All dairy products, such as milk, yogurt, and cheese.
    - All refrigerated or frozen meats, vegetables, and casseroles.
    - All frozen meats, vegetables, and other frozen foods.
    - All frozen supplemental foods and beverages, ice cream, or pudding.
    - All frozen and fresh muffins, bagels, and pastries.
    - All fresh fruit that tends to be perishable, especially bananas, pears, and peaches.
2. Use the information and "When to Save and When to Throw Out Charts" on the previous pages as a guide for safe time lines and when to discard foods.
3. If unsure how long food has been in the temperature danger zone, it is best to discard it. Foods that rise above 41°F must be cooked/reheated to an internal temperature of 165°F for 15 seconds or longer.
4. Try to maintain well balanced meals with consideration for therapeutic diets if possible. Therapeutic diets may need to be liberalized or temporarily discontinued during the disaster.
5. Recipes should require minimal preparation and handling.
6. Once all perishable food items have been used, follow the emergency meal plans using undamaged shelf-stable foods provided in Chapter 8: Emergency Menus and Recipes (pages 114-186). If necessary, repeat the cycle of menus provided.

Food Safety During a Disaster

Use Extra Precautions Regarding Sanitation and Food Safety

1. Separate clean areas from dirty areas.
2. Keep waste and garbage in covered and closed containers and remove from food preparation and storage areas as soon as possible.
3. If water supply is questionable, purify water prior to using for cooking or drinking. (Refer to Water Purification on pages 70-72.)
4. When in doubt, throw it out! Do not taste or serve any food that could be spoiled.
5. Minimize use of leftovers, as it may be difficult to assure that they are cooled appropriately and/or held at the correct temperature during utility outages.
6. Foods that need to be reheated should be heated to a minimum internal temperature of 165°F for at least 15 seconds.
7. In an extreme emergency, canned foods can be heated by placing an unopened can in boiling water and serving directly from the can to save labor and dishwashing. Other heating sources include gas stove, gas or charcoal grills, fireplace, sterno cans used for chafing dishes, and candles. Be sure to check internal temperature of the food (as outlined on pages 83-84) prior to serving to assure food safety.
8. Use disposable dishes and utensils when possible and/or necessary. Keep a 3 to 7 day supply available at all times and reorder as needed during an emergency that affects utilities.
9. If washing dishes by hand, use the 3-sink method:
   Sink 1 - Wash
   Sink 2 - Rinse
   Sink 3 –Sanitize

Food Preparation

1. Use an auxiliary source of heat for cooking on site, such as a portable propane grill or burner, or a charcoal grill.
2. If the kitchen is without power, use foods in the order of their perishability. Follow disaster menus, utilizing canned and dry foods after refrigerated and frozen foods have been used.
3. Clean hands and sanitize food preparation surfaces before preparing any foods.
4. Minimize use of leftovers, as it may be difficult to assure that they are cooled appropriately and/or held at the correct temperature.
5. Eat opened canned foods immediately. Opened canned fruits and juices may be used the next day if transferred into food safe plastic containers and stored at appropriate temperatures.
6. Store all non-perishable foods in a cool dry place.
7. If possible, use an emergency outlet to puree foods in a blender or food processor. Use the juice from canned fruits and vegetables to puree fruits and vegetables, and

broth or canned gravy to puree meats. Canned puree meats should be part of emergency supplies in the event that back-up power in not available.

8. Discard foods that have an unusual odor, off color, odd texture, or cold foods that feel warm to the touch. Do not taste food to determine if it is edible. If in doubt, throw it out!
9. Be sure the temperature of all cooked or reheated foods reaches 165°F for a minimum of 15 seconds.
10. Coffee can be made in a saucepan, on the grill or stove. Bring cold water to a boil. Place coffee packets or grounds in the water and allow it to steep. Pour the coffee into insulated pitchers using a strainer to remove grounds. If liquid coffee is available, mix with water and heat. Pour the hot coffee into insulated pitchers.
11. Dispose of all garbage promptly.

Cross Contamination

Take extra precautions to avoid cross contamination. Cross-contamination is more likely during a disaster than at other times because of the lack of water, compromised ability to heat and cool foods properly, and potential challenges preparing sanitizing solutions.

1. Sanitize work tables, knives, and utensils between uses using sanitizing solution and clean rags, if possible.
2. When washing dishes and utensils by hand, wash, rinse and sanitize them according to accepted procedures and air dry on a clean surface.
3. Follow proper hand washing techniques. See information on handwashing on page 87. Use proper sanitizing procedures for contaminated cans of food. (Also see Sanitizing Dishes During a Disaster on page 88 and Dishwashing without Electricity on Page 225).
   a. Cans:
      - Be sure the can is sealed with no bulges, dents, damaged seams or other damage that exposes the food to contaminants.
      - Label the contents on the can’s lid with indelible ink.
      - Remove the label and immerse the can for 15 minutes in a solution of 1 teaspoon chlorine bleach per quart of room temperature water.
      - Air dry before opening with a clean, sanitized can opener.

Summary Chart for Minimum Cooking Food Temperatures and Holding Times

Food	Minimum Temperature	Minimum Holding Time at the Specified Temperature
Raw Eggs prepared for immediate service **Commercially Raised Game Animals and Exotic Species of Game Animals** **Fish, Pork, and Meat** Not Otherwise Specified in this Chart or in ¶ 3-401.11(B)	**63°C (145°F)**	**15 seconds**
Raw Eggs not prepared for immediate service **Comminuted Commercially Raised Game Animals and Exotic Species of Game Animals** **Comminuted Fish and Meats** **Injected Meats** **Mechanically Tenderized Meats**	70°C (158°F) **68°C (155°F)** 66°C (150°F) 63°C (145°F)	< 1 second **15 seconds** 1 minute 3 minutes
Poultry **Baluts** **Stuffed Fish; Stuffed Meat;** **Stuffed Pasta;** **Stuffed Poultry; Stuffed Ratites** **Stuffing Containing Fish, Meat, Poultry, or Ratites** **Wild Game Animals**	**74°C (165°F)**	**15 seconds**
Food Cooked in A Microwave Oven	**74°C (165°F)**	**and hold for 2 minutes after removing from microwave oven**

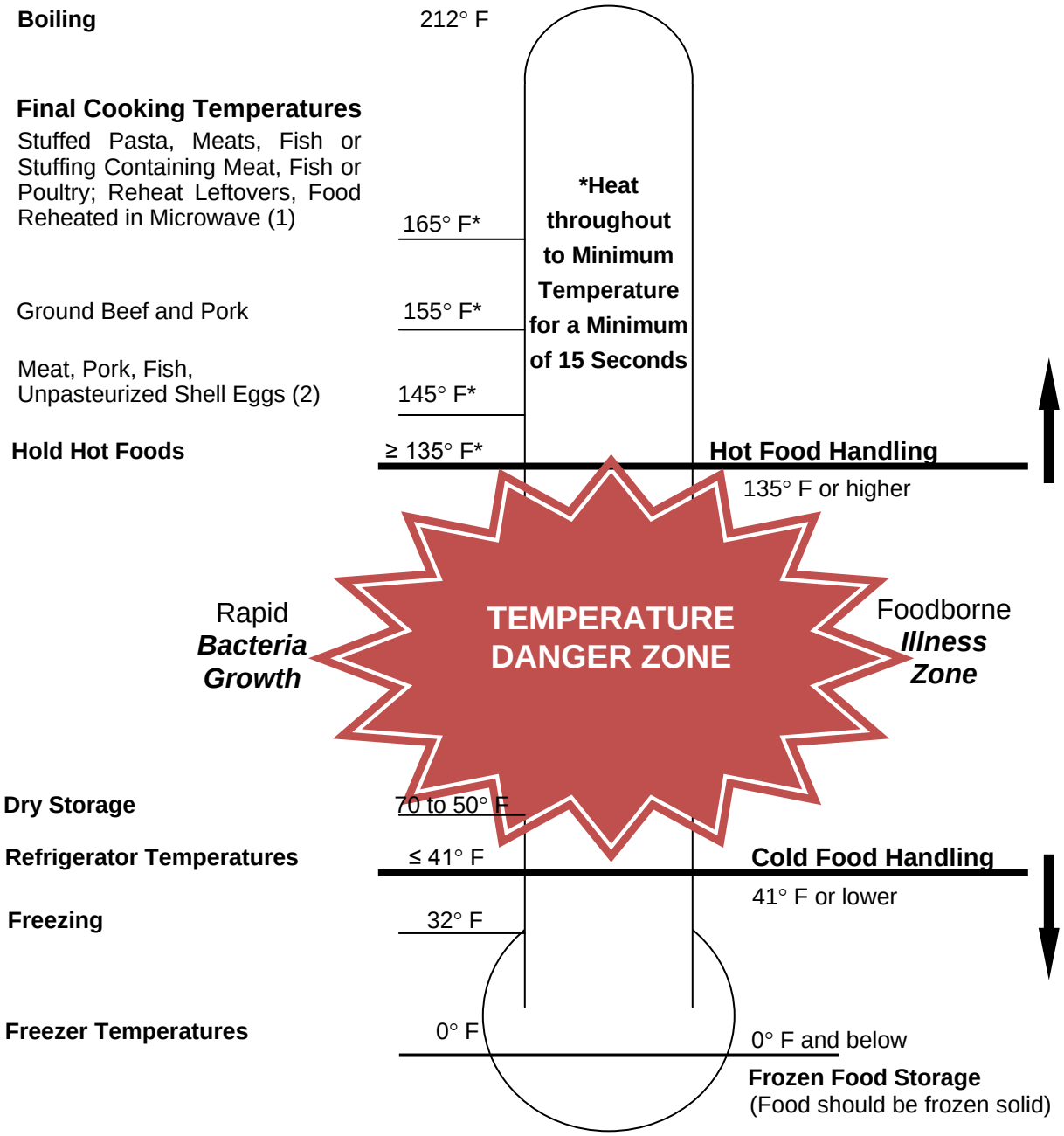
Source: Food Code 2013, U.S. Department of Health and Human Services, U.S. Public Health Service, Food and Drug Administration, College Park, MD 20740. Available at http://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf (27). Accessed April 20, 2018.

Summary Chart for Minimum Food Temperatures and Holding Times for Reheating Foods for Hot Holding

Food	Minimum Temperature	Minimum Holding Time at the Specified Temperature	Maximum Time to Reach Minimum Temperature
¶ 3-403.11(A) and (D) Food that is cooked, cooled, and reheated	74°C (165°F)	15 seconds	2 hours
¶ 3-403.11(B) and (D) Food that is reheated in a microwave oven	74°C (165°F)	and hold for 2 minutes after reheating	2 hours
¶ 3-403.11(C) and (D) Food that is taken from a commercially processed, hermetically sealed container or intact package	57°C (135°F)	No time specified	2 hours
Roasts: Option A ¶ 3-403.11(E) Unsliced portions of meat roasts cooked as specified under ¶ 3-401.11(B)	Same oven parameters and minimum time and temperature conditions as specified under ¶ 3-401.11(B)	Same oven parameters and minimum time and temperature conditions as specified under ¶ 3-401.11(B)	Not applicable
Roasts: Option B ¶ 3-403.11(E) Unsliced portions of meat roasts cooked as specified under ¶ 3-401.11(B)	74°C (165°F)	15 seconds	2 hours

Source: Food Code 2013, U.S. Department of Health and Human Services, U.S. Public Health Service, Food and Drug Administration, College Park, MD 20740. Available at http://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf (27). Accessed April 20, 2018.

Resource: Critical Temperatures for Safe Food Handling



(1) Microwave cooking and reheating:

- When cooking temperature control for safety (TCS) foods in the microwave, rotate and stir foods during the cooking process so that all parts of the food are heated to a temperature of at least 165° F.
- Allow food to stand covered for at least 2 minutes after cooking so the food is heated throughout.

(2) Unpasteurized shell eggs that have been cooked to order should be served and eaten immediately.

Cooling Foods During a Disaster

If freezers and coolers are not operating, it is advisable to dispose of hot leftovers and avoid pre-cooking of foods to be reheated for later service. Without power, proper cooling procedures may not be possible and opening of freezers and coolers to check cooling temperatures of hot foods for later service could jeopardize the safety of all food under cold storage.

If freezers and coolers are operational, foods can be cooled for later service following standard food safety guidelines. Temperature control for safety (TCS) foods are especially vulnerable to food borne illness and include milk and dairy products, unpasteurized eggs, meat, poultry, fish, shellfish, cooked rice, beans, and vegetables, baked potatoes, sliced melons and cut tomatoes, soy proteins, sprouts and sprout seeds, and untreated garlic and oil mixtures.

Safe Cooling of Foods (27)

To cool TCS foods safely, cool from 135 º F to 41ºF or lower within 6 hours.

- First, cook food from 135ºF to 70ºF within two hours
- Then, cool to 41ºF or lower in the next 4 hours.

If food has not reached 70ºF within 2 hours, it must be thrown out or reheated and cooled again.

Safe cooling methods include:

- Place food in shallow pans, preferably stainless steel instead of plastic.
- Cut large chunks of meat into smaller pieces.
- Place containers of food in an ice water bath (a clean sink or large pot filled with ice water.
- Use an ice paddle to stir food periodically.

More information on safe cooling of food can be found at http://www.extension.umn.edu/food/food-safety/food-service-industry/prep-storage/what-is-the-risk-cooling-hot-food/.

Hand-Washing/Sanitizing

Even if a facility is experiencing an emergency, it is important that the food and nutrition services employees continue to follow procedures for hand washing and sanitizing.

- If gloves are used, change them frequently and wash hands before putting on new gloves.
- If water supply is not contaminated, use standard handwashing procedures.
- If water is contaminated, workers should wash their hands with water that has been boiled and then cooled. Set-up a hand washing station for two employees to use at a time:
    - One person pours water over the other person's hands; this person soaps the hands while the other pours water over the hands to rinse them. Hands should not be placed in the container of water for washing or rinsing. Instant hand cleaners/sanitizers that do not require water may be used in between hand washing.

Refer to the Policy and Procedure on Hand Washing During an Disaster on page 224.

Sanitizing Dishes During a Disaster

If the facility does not have electricity and cannot use the dishwasher, staff should use disposable items for food service if possible. However, items needed to prepare food in large quantities will need to be washed and sanitized.

A three-compartment sink can be used for cleaning and sanitizing cookware and bake-ware. In an extreme emergency, all dishes, flatware, and glassware can be cleaned and sanitized using this method. Establish a three-basin set-up for ware washing.

If tap water is contaminated or unavailable, utilize clean all-purpose water supplies (not drinking water).

Be sure to avoid cross-contamination between dirty dishes and clean dishes.

Refer to the Policy and Procedure on Dishwashing without Electricity on page 225.

Chapter 6: Disaster Preparedness Forms

Location of Needed Items and Information During a Disaster

Item	Location of Item or Information	Responsible Person	Cellular Phone Number
Keys to storage areas			
Fire extinguisher			
Main power switch			
Fuse or breaker boxes			
Standard first aid kit			
Disaster manual			
Cellular phone			
Keys to storerooms, freezers, coolers			
Emergency generators			
Contracted local vendor for a generator			
Fans			
Air conditioning units			
Flashlights, candles, lanterns, matches			
Weather radio, portable, battery operated			
Battery operated clocks			
Extra batteries			
Blankets			
Toolbox: adjustable wrench to turn off gas, crow bar, hammer, screwdrivers, heavy tape			

Attach a basic floor plan for the kitchen and storeroom.

Copy this form onto brightly colored paper and place a copy of the completed form in an area where staff can utilize it in case of emergency.

Location of Needed Items and Information During a Disaster (continued)

Item	Location of Item or Information	Responsible Person	Cellular Phone Number
Extra water			
Contract with local vendor for water			
Contract with local vendor for ice			
Menus for emergencies			
Non-electric can openers and other kitchen tools (egg beaters, whisks, heating elements, battery operated equipment)			
Contract for additional food and supplies to be delivered			
Location of custodial supplies			
Trash handling trash, cleaning restrooms, and common areas			

Copy this form onto brightly colored paper and place a copy of the completed form in an area where staff can utilize it in case of emergency.

Disaster Responsibilities and Assignment Form

Done	Duties	Responsible Person
X	**Prior to Disaster:**	
	Recruit experienced staff and/or volunteers (i.e. from restaurants, schools, Red Cross, churches) to serve during an emergency	
	Train staff and/or volunteers (including disaster drills)	
	Assign responsibilities of staff, volunteers	
	Maintain backup computer files for department, through the facility's mainframe system, and/or on portable media (DVD's, thumb drives), as per facility protocols	
	Purchase emergency water, food and supplies (see Sample Letter of Intent for Provision of Emergency Supplies on page 95)	
	Storage and rotation of emergency water, food and supplies (3 to 7 days of supplies including cleaning supplies)	
	Plan emergency menus	
	Contract with a generator supply company to provide electricity as needed	
	Plan for mobile feeding if kitchen/food/supplies are damaged beyond use	
	Meet with the director of local Red Cross and develop written agreement to specify responsibilities/expectations	
	Maintain a list of emergency contact information for key personnel, county emergency manager, Red Cross, vendors (cell numbers whenever available)—verify list at least annually. See page 73 for form	
	Document location of keys to doors, coolers, freezers, storage areas. See page 90 for form.	

Source: Dorner, B. Policy & Procedure Manual for Nutrition and Food Service in Healthcare Facilities, Becky Dorner & Associates, Inc., Dunedin, FL. 2017 Edition. Available at http://www.beckydorner.com/products/59 (28).

General Disaster Supplies

The following items are necessary for emergency use and should be kept on hand at all times within the facility:

- Master contact list of employee and key community contacts.
- Emergency cell phone, battery operated charger.

Keep an adequate supply of the following items on hand. This supply of items used daily should last at least 7 days at all times.

Amount	Items Needed – Food Safety/Sanitation
	Thermometers
	Alcohol swabs
	Hand sanitizer
	Hand soap
	Hand sanitizing wipes
	Bleach (recommended 5.25% concentration of hypochlorite without soap or additives)
	Water purification tablets
	Dish soap
	Sanitizer
	Food handling gloves
	Aluminum foil
	Plastic wrap
	Plastic food bags (sandwich, quart, gallon size)
	Paper towels
	Towels and dish rags
	Rubber gloves
	Sanitizing solution
	Dish soap
	Large plastic bags for trash
	Clean up supplies – broom, shovel, buckets, rags, mops

Source: Dorner, B. Policy & Procedure Manual for Nutrition and Food Service in Healthcare Facilities, Becky Dorner & Associates, Inc., Dunedin, FL. 2016 Edition. Available at http://www.beckydorner.com/products/59 (28).

General Disaster Supplies (continued)

Amount	Food Preparation/Service
	Hard copies of emergency menus
	Styrofoam or plastic take out containers for food
	Foil pans for cooking and serving
	Straws
	Coolers
	Manual can opener
	Egg beater or whisk
	Potato masher
	Battery operated equipment (heating elements, whisks, etc.)
	Barbeque grill—portable, outdoor grill
	Charcoal
	Lighter fluid
	Sterno fuel and containers
Amount	**Emergency Supplies**
	Fire extinguisher
	First aid kit and first aid book
	Weather radio, portable
	Portable flashlights and headlamp flashlights
	Battery-operated lanterns
	Extra batteries
	Blankets
	Adjustable wrench to turn off gas
	Tool box: hammer, screw drivers, crowbar, adjustable wrenches, etc.
	Heavy tape
	Matches in water proof container
	Battery operated clocks

Source: Dorner, B. Policy & Procedure Manual for Nutrition and Food Service in Healthcare Facilities, Becky Dorner & Associates, Inc., Dunedin, FL. 2016 Edition. Available at http://www.beckydorner.com/products/59 (28).

Sample Letter of Intent for Provision of Emergency Supplies

To: (Facility, address, phone, contact person)

From: (Food service vendor)

This letter of intent will document **(food service vendor's name)** commitment to your *facility*, to service your account during an emergency situation.

In case of emergency or natural disaster that disrupts the normal operation of the food and nutrition services department of your facility, we will make every attempt to satisfy the needs of your facility by delivering food, water and supplies as soon as local authorities allow for safe travel to the affected area. (This may not be your normal delivery day).

Should we be unable to service your account, we will do our best to make arrangements with another food vendor to deliver food, water and supplies as soon as local authorities allow travel into the affected area and until we are capable of resuming normal operations. Your facility agrees to pay a normal and reasonable fee for all goods and services rendered.

As much advance notice as possible should be provided by the facility so the facility's needs can be met. This includes specific requests for amounts and types of food, water, paper products, and other products as designated by your facility. The facility should supply a list of potential emergency food supply needs in advance so we can prepare for a potential emergency.

This shipment will depend upon road conditions, availability of vehicles, products and supplies. Civil Defense, Federal, State, County or City authorities may control supplies and products. Hospitals, short and long term care nursing facilities, correctional facilities and/or public service utility entities may receive priority support at the direction of the authorities.

We will make terms and conditions of this statement and agreement known to all/any partners who might have to respond and make such information, as contact names and phone numbers, available to assure that the necessary goods and services will be reasonably available at any time.

This letter of intent will be valid as long as the prime vendor agreement between **(food service vendor's name)** and_____ continues. If the prime vendor relationship is terminated, this agreement automatically terminates as well.

Accepted by	**Accepted by:**
_____	_____
Food Service Vendor	Facility Representative
_____	_____
Date	Date

Sample Emergency Contact Information Form

Name	Title	Cell Phone Number	Home Phone Number

See page 73 for additional emergency contacts.

Emergency Refrigeration and Freezer Temperature Monitoring Form

Check every two hours (using external gauge) or each time the unit is entered (using internal thermometer).

Date	2 hr*	4 hr*	6 hr*	8 hr*	10 hr*	12 hr*	14 hr*	16 hr*	18 hr*
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									

*Or record time entered if using internal thermometer

Source: Adapted with permission from Eckstein, LE, editor. *Emergency Management for the Healthcare Professional*. Waterloo, IA: Dietetics in Health Care Communities Dietetic Practice Group of the Academy of Nutrition and Dietetics, 2012.

Emergency/Disaster Plan for Food and Dining Services

Medical Nutrition Therapy Information

<table>
<tr><td colspan="2">Name:_____ Gender: M F DOB: _____

Advanced Directives for Nutrition/Hydration:

Contact Info for Family or Guardian (name/phone/cell phone):</td></tr>
<tr><td>Diet Order: Reg / No Added Salt / LCS / Mech Soft / Puree / Modified Renal Diet

Food allergies/ intolerances:</td><td>Supplement orders:</td></tr>
<tr><td colspan="2">Alternate Feeding Orders (Tube feeding, TPN if applicable):</td></tr>
<tr><td colspan="2">Feeding ability: Self fed / Needs assistance / Needs to be fed / Needs adaptive equipment to feed self</td></tr>
<tr><td colspan="2">Mental Status: Alert / Confused / Unable to communicate</td></tr>
<tr><td colspan="2">Skin Condition: Intact / Wounds present

Ambulation: Ambulatory / Wheelchair / Confined to bed

Weight: _____(pounds) _____ (date)

Weight History:</td></tr>
<tr><td colspan="2">Nutrition Risk Factors (circle all that apply): Malnutrition / Dehydration / Swallowing problems / Chewing problems / Refusal of foods/ fluids / Cultural food issues
Other:</td></tr>
<tr><td colspan="2">Additional Notes:</td></tr>
</table>

Signature: _____ Date: _____

Place a copy of this form in an area where staff can utilize it in an emergency.

Chapter 7: Emergency Food and Water Supplies

Emergency Food and Water Supplies

Emergency Meal Planning

Each facility should maintain a three (3) to seven (7) day emergency supply of food and water in-house at all times. The emergency supply should be stored in a specific area and clearly marked “emergency use only”. Emergency foods should be rotated into the regular menu every six months (or used by “use by” date on packaging) to assure a safe and fresh supply of emergency foods. Other than this routine rotation into the menu cycle, emergency foods should not be used unless an emergency plan has been initiated.

With advance notice of a pending disaster, refrigerated foods can be placed in the freezer so they stay cold longer. Be sure all foods are stored above potential flood lines (26).

Block ice or dry ice placed in the refrigerators will prolong cold temperatures. Fifty pounds of dry ice should be enough to hold the temperature of an 18 cubic foot refrigerator for 2 days (26).

When creating an emergency meal plan, take into consideration how to use the perishable food items that are on hand. For the first and second day, use the perishable food items in your coolers and freezers. Use refrigerated items including dairy items as soon as possible after the power goes out. If refrigerator temperatures begin to rise, food safety is not guaranteed beyond 4 hours.

Develop a Plan to use Foods in Order of Perishability

1. Perishable fresh foods

   Use the following foods within the first 1 to 3 days:

   - Refrigerated or frozen meats, vegetables, and casseroles.
   - Dairy products, such as milk, yogurt, and cheese.
   - Frozen meats, vegetables, and other frozen foods.
   - Frozen supplemental beverages, puddings or ice cream.
   - Frozen and fresh muffins, bagels, and pastries.
   - Fresh fruit that tends to be perishable, especially bananas, pears, and peaches.

2. Food in refrigerators: Should be safe for 4 hours without electricity if doors to the unit remain closed, and may be safe longer if refrigerator doors are kept closed. Only open units when a complete list of what is needed is available. Place blankets or towels around the seals to keep cold air in the units. To be safe, check each internal temperature with a thermometer. Internal temperature should be 41°F or lower to assure food safety.

3. Food in freezers: A full freezer should hold temperatures for about 48 hours or 24 hours if half full (26). Food will begin to thaw but may still remain below 41°F for up to 3 days. The amount of time food will remain usable is dependent on a number of factors:

- Amount of food in the freezer (the fuller the freezer is, the longer food will remain frozen).
- Types of food (meats stay frozen longer than bread for example).
- Temperature freezer was operating at before power failure (freezer operating at -10°F will remain frozen longer than a freezer operating at 0°F).

4. Canned, aseptically packaged, and dry foods that are not damaged. Do not use canned foods that are crushed or swollen. Do not use dry foods if packages are damaged and food may be contaminated. If necessary, sanitize cans before opening.

5. Refrigerated or frozen foods that rise above 41ºF must be cooked and/or reheated to an internal temperature of 165ºF for 15 seconds or longer.

6. Special menus may need to be planned to use up perishable food items first. Try to maintain well balanced meals with consideration for special diets. Therapeutic diets may need to be liberalized during an emergency situation.

7. Recipes should require minimal preparation and handling.

Once perishable food items have been used, follow prepared emergency meal plans. See pages 116-134 for suggested emergency menu patterns, portion sizes, and sample emergency meal plans for 3 days that assumes there are no utilities available. The facility should have the required items in stock for a minimum of three days. Seven days is recommended because food vendors may also be impacted by the emergency and therefore unable to deliver on their regular schedule. If necessary, repeat the cycle of menus provided depending on emergency circumstances.

Pages 135-186 outline a 7 day sample emergency meal plan that assumes cooking ability. Customization of the following emergency meal plans may be necessary to make use of the available stock and perishable food items on hand.

Important Note:
Food and nutrition services staff should work with medical staff to identify and help manage individuals who might need therapeutic diets, fluid restrictions, mechanically altered diets, or thickened liquids in all situations, including extreme emergencies.

Emergency menus may not be nutritionally adequate depending on the disaster circumstances and utility outages.

Utilize nutritional supplements as needed.

Non-Perishable Foods

Food service suppliers have a variety of canned foods in stock that might be available in emergency circumstances. The following is a list of foods that are easily inventoried and generally have a long shelf life, but others might be available to be purchased. These foods can be easily incorporated into menu or snack schedules. Be sure to follow inventory rotation and monitor expiration dates. Keep a manual can opener with the canned goods supply. See pages 111, 126, 127 and 138 for guidance on amount of food and supplies to have on hand for 3 and 7 day menus.

Canned Goods

Canned Meats, Poultry, Fish Chicken Deviled ham Ham Peanut butter Salmon Tuna Vienna sausage	**Canned Beans** Baked Black Butter Cannelloni Chick Peas Kidney Navy	**Pureed Foods** Chicken Fruits Meats Vegetables	**Canned or Aseptically Packaged Nutritional Supplements** Milkshakes Puddings
Canned Fruit Applesauce Apple slices Fruit cocktail Mandarin oranges Peaches Pears Pineapple	**Canned Pie Filling** Apple Blueberry Cherry Peach	**Canned Prepared Foods** Cheese sauce Chicken & dumplings Chili Ravioli Stew	**Soups** Chicken noodle Cream of celery Cream of chicken Cream of mushroom Cream of tomato Vegetable Vegetable beef
Canned Vegetables Corn German potato salad Green beans Peas Pickled vegetables Potatoes Spaghetti sauce Three bean salad Tomatoes Tomato sauce	**Canned Pudding** Chocolate Lemon Vanilla	**Broths** Beef Chicken Vegetable (Canned or aseptic packs)	**Fruit Juices** Apple Apricot nectar Cranberry Grape Orange Pear nectar Prune (Canned or aseptic packs)
Condiments Chocolate syrup Jam and jelly Maple syrup Mayonnaise Mustard Salad dressing	**Canned Milk** Evaporated milk Sweetened /condensed	**Beverages** Fruit punch Iced tea Other beverage drinks Soda pop	**Bottled Water** 16 or 20 ounces 1 Gallon 5 Gallon 50 Gallon drums Larger containers as needed

Emergency/Disaster Plan for Food and Dining Services

Shelf Stable Items

Convenience Foods	**Supplements/ Proteins**	**Therapeutic Items**	***Condiments**
Instant mashed potatoes Instant mashed sweet potatoes Instant pudding Powdered cheese sauce mix Refried Beans Soy Protein	Egg whites, dried Instant breakfast mix Milkshake mix	Modified food starch or gel thickener Sweetener	Coffee creamer Honey Jelly Ketchup Mustard Salt and pepper Sugar
Crackers/Chips	**Snacks**	**Soup**	**Coffee/Tea**
Butter crackers Cheese puffs Graham crackers Potato chips Saltine crackers	Cereal/snack bars Cheese crackers Granola bars Peanut butter crackers	Bouillon Dried soup mix Soup base	Instant coffee Tea bags
Starches	**Cookies**	**Thickened Beverages**	**Beverages**
Pasta Noodles Rice	Chocolate chip Filled cookies Shortbread cookies Sugar cookies Vanilla wafers	Thickened juice Thickened milk Thickened water	Large and small aseptic packs of juice Powdered beverage mixes (regular and sugar free): Fruit flavored iced tea or punch
Milk	**Cereal**	**Nuts and Seeds**	**Dried Fruit**
Pasteurized nonfat dry milk Canned evaporated milk Shelf stable milk	Dry (bulk or in single serve containers) Hot (cream of rice, cream of wheat, grits oatmeal)	Almonds Mixed nuts Peanut butter Peanuts Walnuts	Apples Apricots Bananas Cranberries Prunes or Raisins

* Consider individual portion packs
**Shelf stable aseptic packages of milk may be available from food service suppliers. These may be packed in individual portion sizes. They are shelf stable for approximately 8 months and include an expiration date.

Semi Perishable Foods

Bread Items	Produce
Bread Buns/Rolls Pita bread Muffins/ English muffins Parmesan cheese	Potatoes Onions Apples

Source: Dorner, B. Policy & Procedure Manual: Food and Nutrition Guidelines for Health Care, Becky Dorner & Associates, Inc., Dunedin, FL. 2017 Edition. http://www.beckydorner.com/products/59 (28).

Emergency Plan Special Diets Conversion Table

In an emergency it is important to adhere to texture and consistency modifications, food allergies, and food intolerances. Adaptive feeding equipment should be used as ordered for patients, if possible. Therapeutic diets should be adhered and/or liberalized as outlined in the table below. In extreme emergency situations, therapeutic menus may be difficult to adhere to. In some cases a regular diet may be needed until the emergency situation is abated. For individuals with diabetes, follow diet restrictions whenever possible. If necessary, insulin or other meds might need adjustments if the emergency situation is not short-term. For sodium restricted diets, remove salt packets. For mechanical soft diets, provide foods that can be chewed or spread easily. For pureed diets, provide pureed food. An emergency supply of canned pureed foods should be kept on hand.

Original Order	Diet During Disaster
Sodium Restricted • 1 gram Na • 2 gram Na • 3 to 5 gram Na • No added salt • Any other sodium restrictions	**No Added Salt** (No salt at table)
Diabetic • Carbohydrate Controlled • Consistent Carbohydrate	**Carbohydrate Controlled or Consistent Carbohydrate** (No sugar at table, Provide sugar substitute and sugar free foods if available)
Renal Diets 2 Gm Na, 2 Gm K, 60g Pro Potassium Restricted Sodium Restricted Protein Restricted Any other Renal Diet	**Modified Renal Diet** (No added salt; no prunes, prune juice, orange juice, oranges, potatoes or bananas; ½ c milk limit daily, Limit protein for pre-dialysis if necessary)
Consistency Alterations Mechanical soft Ground Chopped National Dysphagia Diet Level 3	**Mechanical Soft**
Puree National Dysphagia Diet Level 1 National Dysphagia Diet Level 2	**Puree**

*The use of canned evaporated milk or reconstituted powdered dry milk is allowed. For reconstituted canned evaporated or powdered milk, juices, soups or beverages, be sure to follow the water purification procedure on pages 70-72 if the water supply is unsafe for drinking.

Source: Dorner, B. Policy & Procedure Manual: Food and Nutrition Guidelines for Health Care, Becky Dorner & Associates, Inc., Dunedin, FL. 2017 Edition. Available at http://www.beckydorner.com/products/59 (28).

Meals for Evacuation

In the event of evacuation, pack a portable meal for everyone being evacuated, including staff and volunteers. Use perishable stock on hand.

Sample Menu:

- Sandwich with 2-3 ounces meat/cheese on whole wheat bread.
- Fresh fruit or ¾ cup canned fruit (pre-portioned into disposable cups with lids or commercially portioned).
- ¾ cup cold vegetable salad pre-portioned into foam cups.
- Baked goods (use fresh cakes or cookies, individually wrapped or packaged dessert items).
- 8 ounce carton of milk, at least one per person.

Tips for Meals During Evacuation

- Use perishable stock on hand. If time allows, pre-portion salads, fruits, and desserts into individual portions.
- Keep cold foods cold using insulated coolers during transport.
- Take enough bottled water and other bottled or canned beverages to have available in case of difficult travel or medical emergencies during transport.
- Include individually portioned snack items (crackers, puddings, cookies).
- Include plastic eating utensils (if needed), paper napkins, paper towels, and hand sanitizer.
- Pack enough meals and beverages in each vehicle used for transport to support all the people in the vehicle.
- Do not pack all food and beverage in one vehicle if several vehicles are traveling together.

Suggested Emergency Menu Pattern

Meal	Diets				
	Regular	**Mechanical Soft**	**Puree**	**Carbohydrate Controlled or Consistent Carbohydrate**	**Carbohydrate Controlled or Consistent Carbohydrate Puree**
Breakfast	Juice, 6 oz Cereal, 1 serving Starch, Bread or Other, 1 serving Milk or Nutrition Supplement, 8 oz Coffee/Tea	Juice, 6 oz Soft Cereal, 1 serving Soft Starch, Bread or Other, 1 serving Milk or Nutrition Supplement, 8 oz Coffee/Tea	Juice, 6 oz Smooth Hot Cereal, 1 c Pureed Starch, Bread or Other, 1 serving Milk or Nutrition Supplement 8 oz Coffee/Tea	*Juice, 6 oz *Cereal, 1 serving *Starch, Bread or Other 1 serving Milk or SF Nutrition Supplement 8 oz *Coffee/Tea	*Juice, 6 oz *Smooth Hot Cereal, 1c *Pureed Starch, Bread or Other, 1 serving Milk or SF Nutrition Supplement, 8 oz *Coffee/Tea
Lunch	Protein Source, 2-3 oz equivalent Starch, 1 serving Starchy Vegetable, ¾ c Vegetable, ¾ c Fruit, ¾ c Water, 8 oz	Ground Protein Source, 2-3 oz equivalent Soft Starch, 1 serving Soft Starchy Veg, ¾ c Soft Vegetable, ¾ c Soft Fruit, ¾ c Water, 8 oz	Pu Protein Source, 2-3 oz equivalent Pu Starch, 1 serving Pu Starchy Veg, ¾ c Pu Vegetable, ¾ c Pu Fruit, ¾ c Water, 8 oz	Protein Source 2-3 oz equivalent *Starch, 1 serving Starchy Vegetable, ¾ c *Vegetable ¾ c *Fruit, ¾ c Water, 8 oz	Pu Protein Source 2-3 oz equivalent *Pu Starch, 1 serving Pu Starchy Veg, ¾ c *Pu Vegetable, ¾ c *Pu Fruit, ¾ c Water, 8 oz
Dinner	Protein Source 2-3 oz equivalent Starch, 1 serving Starchy Vegetable, ¾ c Vegetable, ¾ c Fruit, ¾ c Water, 8 oz Milk, 8 oz or Nutrition Supplement, 6-8 oz	Ground Protein Source, 2-3 oz equivalent Soft Starch, 1 serving Soft Starchy Veg, ¾ c Soft Vegetable, ¾ c Soft Fruit, ¾ c Water, 8 oz Milk, 8 oz or Nutr Supplement, 6-8 oz	Pu Protein Source, 2-3 oz equivalent Pu Starch, 2 servings Pu Vegetable, ¾ c Pu Fruit, ¾ c Water, 8 oz Milk, 8 oz or Nutrition Supplement, 6-8 oz	Protein Source 2-3 oz equivalent *Starch, 1 servings Starchy veg, ¾ c *Vegetable ¾ c *Fruit, ¾ c Water, 8 oz Milk, 8 oz or SF Nutr Supplement, 6-8 oz	Pu Protein Source 2-3 oz equivalent *Pu Starch, 1 serving Pu Starchy Veg, ¾ c *Pu Vegetable, ¾ c *Pu Fruit, ¾ c Water, 8 oz Milk, 8 oz or SF Nutrition Supplement, 6-8 oz
Snack	Starch, 1 serving	Soft Starch, 1 serving	Pu Starch, 1 serving	*Starch, 1 serving	*Pu Starch, 1 serving
	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or SF Nutr Supplement, 6-8 oz	Milk, 8 oz or SF Nutrition Supplement, 6-8 oz

SF = Sugar Free Pu = Pureed *Low in Simple Sugars **Note: All liquids offered must be thickened to the ordered consistency**

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Sample Menu Shell

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
BREAKFAST							
LUNCH							
SNACK							
DINNER							
HS							

Sample 3 Day Menu Shell

BREAKFAST			
LUNCH			
SNACK			
DINNER			
HS			

Suggested Serving Sizes for Starch Portions for Diabetic Diets

1 serving = approximately 15 grams carbohydrates

Portions for Diabetic Diets (Carbohydrate Controlled or Consistent Carbohydrate)		Regular Portions	
Bread	1 slice	Bread	1 slice
Cold Cereal (no added sugar)	1 oz	Cold Cereal	1 oz
Hot Cereal (no added sugar)	6 oz	Hot Cereal	6 oz
Crackers	6	Crackers	6
Rice	1/3 cup	Rice	1/2 cup
Noodles	1/2 cup	Noodles	1/2 cup
Coffee Cake (no frosting or sugar topping)	2 x 2 “	Coffee Cake	2 x 2 “ squares
Muffin	1 small	Muffin	1 medium
Plain Cookie	2 small	Cookies	2 medium
Graham Crackers	2-2” squares	Graham Crackers	4 - 2” squares
Roll	1 small	Roll	1 medium
Pudding, sugar free	1/2 cup	Pudding	1/2 cup
Vegetable Soup	1 cup	Vegetable Soup	1 cup
Noodle Soup	1 cup	Noodle Soup	1 cup

Source: Dorner, B. Policy & Procedure Manual: Food and Nutrition Guidelines for Health Care, Becky Dorner & Associates, Inc., Dunedin, FL. 2017 Edition. Available at http://www.beckydorner.com/products/59 (28).

Sample Emergency Paper Supplies

Possible Emergency Supplies for 3 Days

PAPER SUPPLIES	Quantity (each)	No. of Meals/Snacks	Number of People/ Amount Needed 50	100	150	Custom
Cups and lids – Hot, 8 oz	2	9	900	1800	2700	
Cups and lids – Cold, 10 oz	1	12	600	1200	1800	
Plastic spoons	1	9	450	900	1350	
Plastic forks	1	9	450	900	1350	
Plastic knives	1	6	300	600	900	
Plates 9-10”	1	9	450	900	1350	
Plates 5”	1	6	300	600	900	
4 ounce cups with lids	1	9	450	900	1350	
8 ounce bowls	1	9	450	900	1350	
Napkins	1	12	600	1200	1800	
Straws	1	12	600	1200	1800	

Possible Emergency Supplies for 7 Days

PAPER SUPPLIES	Quantity (each)	No. of Meals	Number of People/ Amount Needed 50	100	150	Custom
Cups and lids – Hot, 8 oz	2	21	2100	4200	6300	
Cups and lids – Cold, 10 oz	1	24	1200	2400	3600	
Plastic spoons	1	21	1050	2100	3150	
Plastic forks	1	21	1050	2100	3150	
Plastic knives	1	21	1050	2100	3150	
Plates 9-10”	1	21	1050	2100	3150	
Plates 5”	1	18	900	1800	2700	
4 ounce cups with lids	1	21	1050	2100	3150	
8 ounce bowls	1	18	900	1800	2700	
Napkins	1	24	1200	2400	3600	
Straws	1	24	1200	2400	3600	

Equipment Note: A manual can opener must be available.

Note: These products should be kept separately from others and dated and marked “FOR EMERGENCY USE ONLY”.

Emergency Water Supply

Suggested Water Requirements

Type of Water	Amount Needed	Formula	Example (7 day supply) for 100 People
Drinking Water	2 quarts (0.5 gallon) per person per day**	# of people* X 0.5** gallons X 3 days (or 7 days) = gallons of drinking water needed	100 people X 0.5 gallon X 7 days = 350 gallons of drinking water
All-purpose Water	1 gallon per person per day	# of people* X 1 gallon X 3 days (or 7 days) = gallons of all-purpose water needed	100 people X 1 gallon X 7 days = 700 gallons of all-purpose water

*Include residents/patients, staff, visitors, evacuees and rescue workers as appropriate in estimate of water needed. Include nursing needs as necessary (medication pass, etc.). A good estimate is number of residents/patients plus 50 to 100%.
**Hot climates can double the amount of fluid needed for drinking. If located in a hot climate area, increase the amount of drinking water to 1 gallon per person per day. Adjust the amount of all-purpose water accordingly as well. (Again, add extra as noted above in *.)

Note: Please check state regulations for specific quantities of water required.

Use of Stored Water Supplies

1. Bottled or distilled water for emergency purposes should be stored and labeled "FOR EMERGENCY USE ONLY".

2. The nursing department may want to designate a specific amount for nursing procedures such as flushes, sterile dressing uses, or any other nursing procedure needing distilled or sterile water.

3. Staff should be instructed not to use the emergency water supply for any purpose other than an emergency situation.

4. During an emergency, staff will be provided with bottled or canned beverages for drinking.

Keeping Water Supplies Fresh

1. Rotate or discard water according to the manufacturer's expiration date on the container, then replace emergency water accordingly. Bottled water is expensive so a written plan to use, rotate and replace the water should be part of the disaster plan.

Preparing/Using Water Containers

1. Use food grade water storage containers made specifically for water storage.

2. Clean and sanitize containers prior to use.

3. Fill water containers with tap water from a source that has been commercially treated with chlorine from a water utility.
   - If the water is from a source not treated with chlorine (i.e. well water), add 2 drops nonscented household chlorine bleach to each 1 gallon of water being careful not to contaminate the inside of the cup.

4. Tightly seal the container (being careful not to contaminate the inside of the cup) and store for later use.

5. Date the outside of the container clearly.

6. Store in a cool dark place.

Source:
Federal Emergency Management Agency. Ready.gov Web site. Water. Updated 4/9/14. http://www.ready.gov/water (22). Accessed April 19, 2018.

How to Turn Off the Main Water Valves
Water already inside the facility will need to be protected from contamination in the event of broken water or sewage lines, or if local officials advise there is a problem. To close the incoming water source, locate the incoming valve and turn it to the closed position. Be sure key staff members know how to perform this important procedure.

1. To use the water in the pipes, let air into the plumbing by turning on the faucet at the highest level. A small amount of water will trickle out. Then obtain water from the lowest faucet in the facility.

2. To use the water in the hot-water tank, ask for assistance from the maintenance department as needed.
   - Be sure the electricity or gas is off.
   - Open the drain at the bottom of the tank.
   - Start the water flowing by turning off the water intake valve at the tank and turning on the hot water faucet.
   - Do not turn on the gas or electricity when the tank is empty.
   - Refill the tank before turning the gas or electricity back on. If the gas is turned off, a professional will need to turn it back on.

Chapter 8: Emergency Menus and Recipes

Note: During a disaster, foods that appear on the emergency menus may not be available in every situation. The menus provided are meant to provide a guide, and will need to be adjusted depending on the circumstances. In some situations, the recommended nutritional guidelines of the USDA (MyPlate) or other recognized menu guides may not be met. It is particularly difficult to meet fruit recommendations (2 cups per day) and vegetable recommendations (2½ cups per day) without having fresh fruit and vegetables available, especially for individuals who cannot consume large volumes of food at one sitting.

3 Day Emergency Meal Plan: No Utilities

Use Foods in Order of Perishability

1. Perishable fresh foods

   Utilize the following foods within the first 1 to 3 days:

   - Refrigerated or frozen meats, vegetables, and casseroles.
   - Dairy products, such as milk, yogurt, and cheese.
   - Frozen meats, vegetables, and other frozen foods.
   - Frozen supplemental beverages, puddings or ice cream.
   - Frozen and fresh muffins, bagels, and pastries.
   - Fresh fruit that tends to be perishable, especially bananas, pears, and peaches.

2. Food in refrigerators should be safe for up to 4 hours without electricity if doors to the unit remain closed. Foods may be safe longer if food temperatures remain at 41°F or below. Only open the refrigerator units when a complete list of what is needed is available. Place blankets or towels around the seals to keep cold air in the units. To be safe, check each internal temperature with a thermometer. Internal temperature should be 41°F or lower to assure safety.
3. Food in freezers. The amount of time food will remain usable is dependent on a number of factors:

   - Amount of food in the freezer (the fuller the freezer is, the longer food will remain frozen).
   - Types of food (meats stay frozen longer than bread for example).
   - Temperature freezer was operating at before power failure (freezer operating at -10°F will remain frozen longer than a freezer operating at 0°F).

4. Canned and dry foods that are not damaged. Do not use canned foods that are crushed or swollen; do not use dry foods if packages are damaged and food may be contaminated. If necessary, sanitize cans before opening.
5. Refrigerated or frozen foods that rise above 41ºF must be cooked/ reheated to an internal temperature of 165ºF for 15 seconds or longer.

Plan emergency menus to use up perishable food items first. Try to maintain well balanced meals with consideration for special diets. Therapeutic diets should be liberalized during the disaster. Recipes should require minimal preparation and handling.

Once perishable food items have been used, follow the emergency meal plans provided. See the recipe section of this manual on pages 131-134 and 146-186 for recipes for foods on sample menus. If necessary, repeat the cycle of menus provided.

Suggested Emergency Menu Pattern

Meal	Diets				
	Regular	**Mechanical Soft**	**Puree**	**Carb Controlled**	**Carb Controlled Puree**
Breakfast	Juice, 6 oz	Juice, 6 oz	Juice, 6 oz	*Juice, 6 oz	*Juice, 6 oz
	Cereal, 1 serving	Soft Cereal, 1 serving	Smooth Hot Cereal, 1 c	*Cereal, 1 serving	*Smooth Hot Cereal, 1 c
	Starch, Bread or Other, 1 serving	Soft Starch, Bread or Other, 1 serving	Pureed Starch, Bread or Other, 1 serving	*Starch, Bread or Other, 1 serving	*Pureed Starch, Bread or Other, 1 serving
	Milk or Instant Breakfast, 8 oz	Milk or Instant Breakfast, 8 oz	Milk or Instant Breakfast, 8 oz	Milk or SF Instant Breakfast, 8 oz	Milk or SF Instant Breakfast, 8 oz
	Coffee/Tea	Coffee/Tea	Coffee/Tea	*Coffee/Tea	*Coffee/Tea
Lunch	Protein Source, 2-3 oz equivalent	Grd Protein Source, 2-3 oz equivalent	Pureed Protein Source, 2-3 oz equivalent	Protein Source 2-3 oz equivalent	Pureed Protein Source 2-3 oz equivalent
	Starchy Vegetable, ¾ c	Starchy Vegetable ¾ c	Pureed Starchy Vegetable ¾ c	*Starchy Vegetable ¾ c	*Pu Starchy vegetable ¾ c
	Vegetable, ¾ c	Soft Vegetable, ¾ c	Pureed Vegetable, ¾ c	*Vegetable, ¾ c	*Pureed Vegetable, ¾ c
	Starch, 1 serving	Soft Starch, 1 serving	Pureed Starch, 1 serving	*Starch, 1 serving	*Pu Starch, 1 serving
	Fruit, 1 serving	Soft Fruit, 1 serving	Pureed Fruit, 1 serving	*Fruit, 1 serving	*Pureed Fruit, 1 serving
	Water, 8 oz	Water, 8 oz	Water, 8 oz	Water, 8 oz	Water, 8 oz
Dinner	Protein Source, 2-3 oz equivalent	Grd Protein Source, 2-3 oz equivalent	Pureed Protein Source, 2-3 oz equivalent	Protein Source 2-3 oz equivalent	Pureed Protein Source 2-3 oz equivalent
	Starchy Vegetable, ¾ c	Starch Vegetable, ¾ c	Pu Starchy Vegetable, ¾ c	*Starchy Veg, ¾ c**	*Pu Starchy Veg, ¾ c**
	Vegetable, ¾ c	Soft Vegetable, ¾ c	Pureed Veg, ¾ c	*Vegetable ¾ c**	*Pu Vegetable ¾ c**
	Starch, 1 serving	Soft Starch, 1 serving	Pureed Starch, 1 serving	*Starch, 1 serving	*Pu Starch, 1 serving
	Fruit, 1 serving	Soft Fruit, 1 serving	Pureed Fruit, 1 serving	*Fruit, 1 serving	*Pureed Fruit, 1 serving
	Water, 8 oz	Water, 8 oz	Water, 8 oz	Water, 8 oz	Water, 8 oz
	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or SF Nutr Supplement, 6-8 oz	Milk, 8 oz or SF Nutr Supplement, 6-8 oz
Snack	Starch, 1 serving	Soft Starch, 1 serving	Pureed Starch, 1 serving	*Starch, 1 serving	*Pu Starch, 1 serving
	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or Nutrition Supplement, 6-8 oz	Milk, 8 oz or SF Nutr Supplement, 6-8 oz	Milk, 8 oz or SF Nutr Supplement, 6-8 oz

*Low in Simple Sugars

**American Diabetes Association recommends ½ cup portions of vegetables. ChooseMyPlate guidelines suggest a minimum of 2½ cups vegetables per day. Portion sizes listed reflect meeting ChooseMyPlate Guidelines.

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate Guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Sample 7 Day Menu Shell

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
BREAKFAST							
LUNCH							
SNACK							
DINNER							
HS							

Sample 3 Day Menu Shell

BREAKFAST			
LUNCH			
SNACK			
DINNER			
HS			

Sample 3 Day *Puree Diet* Emergency Meal Plan

DAY 1	DAY 2	DAY 3
BREAKFAST Hot cereal, double portion Applesauce, smooth Cottage cheese, pureed if possible Assorted juices* Milk*	**BREAKFAST** Hot cereal, double portion Canned pureed pineapple Yogurt, smooth, if possible Assorted juices* Milk*	**BREAKFAST** Hot cereal, double portion Canned pureed peaches Instant breakfast* Assorted juices* Milk*
LUNCH Canned pureed beef Canned pureed green beans Canned pureed pears Water* Instant breakfast*	**LUNCH** Canned pureed beef stew V-8 Juice Instant mashed potatoes Pureed canned peaches Pureed bread mix Water* Instant breakfast *	**LUNCH** Canned pureed chicken Canned pureed pears Canned pureed beets Canned pureed peas Read to eat pudding Water* Instant breakfast *
DINNER Canned pureed chicken Canned pureed peaches Canned pureed peas Assorted beverages* Nutritional supplement	**DINNER** Canned pureed chicken Canned pureed green beans Instant mashed potatoes Ready to eat pudding Assorted beverages* Nutritional supplement	**DINNER** Canned pureed beef Canned pureed corn Canned pureed spinach Applesauce, smooth Assorted beverages* Nutritional supplement
SNACKS Nutritional supplement Ready to eat pudding	**SNACKS** Nutritional supplement Applesauce	**SNACKS** Nutritional supplement Water*

Notes: Menu may not be adequate in nutrients for all residents/patients. Menus average approximately 1800 to 2000 calories, 75 to 85 grams protein daily. Utilize nutritional supplements when needed.

For patients with diabetes, use low sugar products if indicated or preferred by the individual. Remove salt packets for sodium-restricted diets if indicated or preferred by the individual. For pureed diets, provide pureed food and thickened liquids as ordered. An emergency supply of canned pureed foods should be kept on hand. Follow manufacturer's instructions when using thickeners and/or use pre-thickened liquids.

*Utilize safe water supplies for reconstituted canned evaporated or pasteurized non-fat powdered milk, juices, soups or beverages. Follow the Water Purification Procedure on pages 70-72 if the water supply is unsafe for drinking. The use of canned evaporated milk or reconstituted powdered dry milk is appropriate once fresh milk supplies have been depleted.

Suggested Serving Sizes for Starches for Diabetic Diets

1 serving = approximately 15 grams carbohydrates)

Carbohydrate Controlled Portions (for Diabetes)		Regular Portions	
Bread	1 slice	Bread	1 slice
Cold Cereal (no added sugar)	1 oz	Cold Cereal	1 oz
Hot Cereal (no added sugar)	6 oz	Hot Cereal	6 oz
Crackers	6	Crackers	6
Rice	1/3 cup	Rice	1/2 cup
Noodles	1/2 cup	Noodles	1/2 cup
Coffee Cake (no frosting or sugar topping)	2 x 2” squares	Coffee Cake	2 x 2”
Muffin	1 small	Muffin	1 medium
Plain Cookie	2 small	Cookies	2 medium
Graham Crackers	2 - 2” squares	Graham Crackers	4 - 2” squares
Roll	1 small	Roll	1 medium
Pudding, sugar free	1/2 cup	Pudding	1/2 cup
Vegetable Soup	1 cup	Vegetable Soup	1 cup
Noodle Soup	1 cup	Noodle Soup	1 cup

Source: Dorner, B. Policy & Procedure Manual: Food and Nutrition Guidelines for Health Care, Becky Dorner & Associates, Inc., Dunedin, FL. 2017 Edition. Available at http://www.beckydorner.com/products/59 (28).

Menu and Recipes for 3 Day Emergency with No Utilities

- Menu Notes
- Sample Emergency Supplies
- Sample Emergency Supplies for Puree Diet
- 3 Day Emergency Meal Plan (No Utilities)
- Deviled Ham Sandwich
- Chicken Salad Sandwich
- Peanut Butter and Jelly Sandwich
- Tuna Salad Sandwich
- Note: Also see General Recipes for more ideas

Menu Notes for 3 Day Emergency Meal Plan: Assumes No Utilities are Available

During a disaster, foods that appear on the emergency menus may not be available in every situation. The menus provided are meant as guides, and will need to be adjusted during times of disaster. In some situations, the nutritional guidelines USDA (ChooseMyPlate) or other recognized menu guides ***may not be met***. It is particularly difficult to meet fruit recommendations (2 cups per day) and vegetable recommendations (2½ cups per day) without having fresh fruits and vegetables available, especially for individuals who cannot consume large volumes of food at one sitting. Each facility should make substitutions as needed to maximize food intake for residents/patients and to use perishable stock on hand before spoilage.

When no utilities are available, it can be challenging to provide a nutritionally-balanced menu each day, particularly when a priority is to make use of perishable items before they spoil. Below are some ways to make use of refrigerated or frozen foods without utilizing utilities. Be sure to check temperatures (should be below 41°F) prior to serving.

- Thaw pre-cooked meat such as ham; slice into portions using a sharp knife and serve.
- Use prepared refrigerated sandwich spreads (chicken salad, tuna salad, egg salad) at the first meal after losing utilities.
- Use cold leftovers such as coleslaw, gelatin salad, and tossed salad at first meal after losing utilities.
- Use frozen desserts (ice cream sherbet, frozen pies, etc.) at first meal after losing utilities.
- Use fresh milk at first meal after losing utilities and within 3 hours if possible*.
- Use supply of fresh and/or frozen oral nutritional supplements (commercial shakes, etc.) as soon as possible after losing utilities.
- Combine fresh and frozen fruit to make a fruit salad; dress with yogurt or whipped cream.
- Use fresh vegetables (cucumbers, tomatoes, lettuce, etc.) at the first meal after losing utilities if safe water is available to wash vegetables before serving.
- Use instant mashed potatoes, if a safe water source and source of heat is available to prepare potatoes. Milk or canned broth can also be used. If a heat source is available, cook frozen vegetables.

Emergency menus may not be adequate in nutrients for all residents/patients. Regular menus average approximately 1800 to 2000 calories, 75 to 85 grams protein daily. Utilize nutritional supplements when needed. Liberalize diets as appropriate or necessary:

- **Patients with diabetes:** Use low sugar products when indicated or preferred by the individual.

- **Patients on sodium-restrictions:** Remove salt packets and/or salt shakers if indicated or preferred by the individual.
- **Mechanical soft diets:** Provide soft moist foods that can be chewed easily.
- **Pureed diets:** Provide pureed food. An emergency supply of canned pureed foods and a manual can opener should be kept on hand in the event of a loss or power or emergency power that does not extend to all outlets in the kitchen.

*Use fresh milk as soon as possible after losing power, or move milk to a freezer to maintain a temperature of 41°F or lower to keep milk safe. Use canned evaporated milk or reconstituted powdered dry milk once fresh milk supplies have been used or spoiled.

Note: Utilize safe water supplies for reconstituted canned evaporated or pasteurized non-fat powdered milk, juices, soups or beverages.

Follow the water purification procedure on pages 70-72 if the water supply is unsafe for drinking.

Providing variety can also be challenging without utilities. Make menu substitutions on the menus as needed to use perishables and increase variety based on stock available in-house.

Emergency Food and Water Supplies for 3 Days

Sample Menu Supply List *(See separate list for pureed food items needed)*			**Number Of People/ Amount Needed**			
Menu Items	**Portion Size**	**No. of Meals Per 3 Days**	**50**	**100**	**150**	**Custom**
Drinking water/per person/day All purpose water/person/day	0.5 Gallon 1 Gallon	N/A	75 150	150 300	225 450	
*+Assorted juices,6-8 oz. cans or aseptically packaged	6-8 oz	3 Meals	150	300	450	
*+Assorted beverages, canned, bottled, or aseptically packaged	8 oz portions	3 Meals	150	300	450	
*+Instant breakfast, cans/aseptic pk	8-10 oz	3 Meals	150	300	450	
Bread, loaves (20 slices/loaf)	2 slices	6 Meals	30	60	90	
Crackers, pounds	4	3 Meals	4	8	12	
*Muffins, dozen, frozen	1	1 Meal	4.25	8 ½	12.5	
*Doughnuts, frozen	1	1 Meal	4.25	8 ½	12.5	
Cereal bars	1	2 Meals/snack	100	200	300	
Hard cooked eggs, dozens	1	2 Meals	8.3	17	25	
Cottage cheese, pounds	1/4 cup	1 Meal	5	10	15	
Hot cereal, bulk, pounds	6 oz	3 Meals	6	12	18	
Dry cereal, individual boxes	1 oz	3 Meals	150	300	450	
Chicken soup, 50 oz. can	6 oz (3/4 cup)	1 Meal	7	12.5	19	
Chili, canned, No. 10 can	6 oz (3/4 cup)	1 Meal	4	7	10	
Tomato soup, 50 oz. can	6 oz (3/4 cup)	1 Meal	7	12.5	19	
Deviled ham, No. 5 squat (4.25#)	2-3 oz	2 Meals	4	6	10	
Cheese, pounds	2 oz	1 Meal	6.25	12.5	18.75	
Tuna, canned, No. 5 squat (4.25#)	3 oz	1 Meal	3	6	9	
Cheese puffs, pounds	1 oz	2 Meals	6.5	13	20	
Hull-less popcorn, pounds	1 oz	1 Meal	3.25	6.5	10	
Three bean salad, No. 10 can	3/4 cup	1 Meal	3	6	9	
Pickled beets, No. 10 can	3/4 cup	1 Meal	3	6	9	
*Applesauce, No. 10 can	3/4 cup	1 Meal	3	6	9	
*Cookies, pounds	2 (1 oz)	1 Snack	4	7	10	
*Canned fruit, No. 10 can	1/2 cup	6 Meals	18	36	54	
*Pudding, ready to eat, No. 10 can	1/2 cup	1 Snack	3	6	9	
Peanut butter, 5# jar	2 Tbs	2 Meals	2	3.5	5	
**Evaporated milk, canned, 12 oz.	8 oz	3 Meals	50	100	150	
*+Nutritional supplement, single svg	6-8 oz	3 Meals	150	300	450	

A manual can opener must be available.
+ Shelf stable
*Use low sugar products if indicated or preferred for individuals with diabetes.
** Fluid amount is reconstituted. May substitute reconstituted powdered milk.
These products should be kept separately from others and dated and marked “FOR EMERGENCY USE ONLY”. All food items should be dated.
Rotate emergency supplies at least every 6 months or as needed based on expiration dates.

Emergency Food and Water Supplies for 3 Days for *Pureed Diets*

Sample Menu Supply List *(See separate list for pureed food items needed)*			**Number Of People/ Amount Needed**			
Menu Items	**Portion Size**	**Number of Meals Per Day**	**5**	**10**	**15**	**Custom**
Drinking water/per person/day All purpose water/person/day	0.5 Gallon 1 Gallon	N/A	7.5 15	15 30	22.5 45	
*Assorted juices, individual cans/box	6-8 oz	3 Meals	15	30	45	
Hot cereal, bulk, pounds	6 oz	3 Meals	0.5	1.5	2	
*Yogurt, smooth, pounds	1/2 cup	1 Meal	1.5	2.5	4	
*Applesauce, No. 10 can	3/4 cup (6 oz)	1 Meal/ 1 snack	0.75	1.5	2.25	
*Instant breakfast, cans/aseptic pk	8-10 oz	4 Meals	20	40	60	
Canned pureed beef, 15-16 oz. can	#8 scoop	2 Meals	4	7	10	
Canned pureed chicken, 15-16 oz. can	#8 scoop	3 Meals	5	10	15	
Canned pureed beef stew, 15-16 oz. can	#8 scoop	1 Meal	2	4	5	
Canned pureed corn, 15-16 oz. can	#8 + # 16 scoop	1 Meal	3	5	8	
Canned pureed green beans, 15-16 oz. can	#8 + # 16 scoop	2 Meals	6	10	16	
Canned pureed peas, 15-16 oz. can	#8 + #16 scoop	2 Meals	6	10	16	
*Canned pureed pears, No. 10 can	#8 + # 16 scoop	2 Meals	1	2	3	
*Canned pureed peaches, No. 10 can	#8 + #16 scoop	3 Meals	1	1.5	3	
*Canned pureed pineapple, No. 10 can	#8+ #16 scoop	1 Meal	1	1.5	3	
Canned pureed spinach, 15-16 oz can	#8 + # 16 scoop	1 Meal	3	5	8	
Instant mashed potatoes,	#8 + #16 scoop	2 Meals				
*Assorted beverages, can/aseptic pk	8 oz	3 Meals	15	30	45	
*Pudding, ready to eat, No. 10 can	1/2 cup	2 Meals/1 snack	1	1.5	2	
Puree bread mix, pounds	#8 scoop	2 Meals	1	1.5	2	
**Evaporated milk, canned, 12 oz.	8 oz	3 Meals	5	10	15	
*Nutritional supplement, single serving can or package	6-8 oz	3 Meals & 3 snacks	30	60	90	
Thickening packets for thickened liquids+						

A manual can opener must be available.
*Use low sugar items if indicated or preferred for individuals with diabetes.
**Fluid amount is reconstituted. May substitute reconstituted powdered milk.
+ Amount will vary depending on manufacturer's instructions for thickening.
These products should be kept separately from others and dated and marked "FOR EMERGENCY USE ONLY". All food items should be dated, kept for six months, then used and replenished.
Rotate emergency supplies at least every 6 months

Emergency/Disaster Plan for Food and Dining Services

Day 1 Emergency Meal Plan - No Utilities

	REGULAR/NO ADDED SALT		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Muffin	1	Soft Muffin, No Nuts	1	Hot Cereal	1 c	*Muffin or Toast	1	Cream of Wheat	1 c
	Dry Cereal	¾ c	Dry Cereal (soft)	¾ c	None		Dry Cereal	¾ c		
	Cottage Cheese (if available)	½ c	Cottage Cheese (if available)	½ c	Yogurt (smooth) (if available)	½ c	Cottage Cheese (if available)	½ c	*Yogurt (smooth) (if available)	½ c
	Bananas (if available) or Canned Fruit	¾ c	Bananas (if available) or Canned Fruit	¾ c	Applesauce, Smooth	¾ c	Bananas (if available) or SF Canned Fruit	¾ c	SF Applesauce, (smooth)	¾ c
	Instant Breakfast	8 oz	Instant Breakfast	8 oz	Instant Breakfast	8 oz	SF Instant Breakfast	8 oz	SF Instant Breakfast	8 oz
LUNCH	Canned Deviled Ham Spread	3 oz	Canned Deviled Ham Spread	3 oz	Pureed Canned Beef	#8s	Canned Deviled Ham Spread	3 oz	Pu Canned Beef	#8s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Canned 3 Bean Salad	¾ c	Canned 3 Bean Salad	¾ c	Pu Cnd Green Beans	#8+16s	Canned 3 Bean Salad	¾ c	Pu Cnd Green Beans	#8+16s
	Vegetable salad	¾ c	Soft Vegetable Salad	¾ c	Pu Canned Corn	#8+16s	Vegetable Salad	¾ c	Pu Canned Corn	#8+16s
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pureed Canned Pears	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Pears	#8+16s
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
DINNER	Canned Chicken Salad	3 oz	Canned Chicken Salad, (soft)	3 oz	Pureed Canned Chicken	#8s	Canned Chicken Salad	3 oz	Pu Canned Chicken	#8s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Cheese Puffs	1oz	Cheese Puffs	1 oz	Pu Canned Peaches	#8+16s	Cheese Puffs	1 oz	SF Pu Canned	#8+16s
	Canned Pickled Beets	¾ c	Canned Pickled Beets	¾ c	Pu Canned Beets	#8+16s	Canned Pickled Beets	¾ c	Pureed Canned Beets	#8+16s
	Mashed Potatoes	¾ c	Mashed Potatoes	¾ c	Mashed Potatoes	#8+16s	Mashed Potatoes	¾ c	Mashed Potatoes	¾ c
	Assorted Beverages	8 oz	Assorted Beverages	8 oz	Assorted Beverages	8 oz	SF Asst Beverages	8 oz	SF Asst Beverages	8 oz
	Nutritional Supplement	6-8 oz	Nutritional Supplement	6-8 oz	Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz
HS	Cereal Bar	1	Cereal Bar (soft)	1	Ready to Eat Pudding	½ c	Cereal Bar	1	SF Ready to Eat Pudding	6-8 oz
	Water	8 oz	Water	8 oz	Nutritional Supplement	8 oz	Water	8	SF Shelf Stable Supplement	½ c

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 2 Emergency Meal Plan - No Utilities

	REGULAR/NO ADDED SALT		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Assorted Dry Cereals	¾ c	Assorted Dry Cereals	¾ c	Hot Cereal (if able)	1 c	*Assorted Dry Cereals	¾ c	*Hot Cereal (if able)	1 c
	Donuts	1	Donuts (soft, no nuts)	1						
	Canned Fruit	¾ c	Canned Fruit (soft)	¾ c	Pu Canned Pineapple	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Pineapple	#8+16s
	Instant Breakfast	8 oz	Instant Breakfast	8 oz	Instant Breakfast	8 oz	SF Instant Breakfast	8 oz	SF Instant Breakfast	8 oz
LUNCH	Creamy Peanut Butter	2 Tbs	Canned Beef Stew	6 oz	Pu Canned Beef Stew	#8s	Creamy Peanut Butter	2 Tbs	Pu Canned Beef Stew	#8s
	Jelly	1 Tbs					SF Jelly	1 Tbs		
	Bread	2 sl					Bread	2 sl		
	Cheese Puffs	1 oz			V-8 Juice	6 oz	Cheese Puffs	1 oz	V-8 Juice	6 oz
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Peaches	#8+16s	SF Canned Fruit	¾ c	SF Pu Cnd Peaches	#8+16s
	Assorted Cookies	2	Assorted Cookies (no nuts or chips)	2	Pureed Bread Mix	#8s	Graham Crackers	2	Pureed Bread Mix	#8s
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	4 oz	Milk	8 oz
DINNER	Tuna Salad	3 oz	Tuna Salad	3 oz	Pu Canned Chicken	#8s	Tuna Salad	3 oz	Pu Canned Chicken	#8s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Canned Bean Salad	¾ c	Canned Bean Salad	¾ c	Cnd Pu Green Beans	#8+16s	Canned Bean Salad	¾ c	Pu Cnd Green Beans	#8+16s
	Canned Fruit	¾ c	Canned Fruit	¾ c	Applesauce	¾ c	SF Canned Fruit	¾ c	SF Applesauce	#8+16s
					V-8 Juice	6 oz				
	Assorted Beverages	8 oz	Assorted Beverages	8 oz	Assorted Beverages	8 oz	SF Assorted Beverages	8 oz	SF Asstd Beverages	8 oz
	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz
HS	Cookies	2	Cookies (soft)	2	Ready to Eat Pudding	½ c	*Plain Cookies	2	SF Ready to Eat Pudding	6-8 oz
	Water	8 oz	Water	8 oz	Nutr Supplement	6-8 oz	Water	8 oz	SF Nutr Supplement	½ c

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 3 Emergency Meal Plan - No Utilities

	REGULAR/NO ADDED SALT		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juices	6 oz	Assorted Juices	6 oz	Assorted Juices	6 oz	*Assorted Juices	6 oz	*Assorted Juices	6 oz
	Cereal Bar	1	Cereal Bar (soft)	1	Hot Cereal	8 oz	*Cereal Bar	1	*Hot Cereal	8 oz
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Peaches	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Peaches	#8+16s
	Assorted Dry Cereals	¾ c	Assorted Dry Cereals	¾ c	Pureed Bread	#8s	Assorted Dry Cereals Unsweetened	¾ c	SF Supplement	8 oz
	Instant Breakfast	8 oz	Instant Breakfast	8 oz	Instant Breakfast	8 oz	Instant Breakfast	8 oz	SF Instant Breakfast	8 oz
LUNCH	Peanut Butter	2 Tbs	Pu Canned Chicken	#8s	Pu Canned Chicken	#8s	Peanut Butter	2Tbs	Pureed Canned Chicken	#8s
	Jelly	1 Tbs	Pureed Canned Peas	#8s	Pureed Canned Peas	#8s	SF Jelly	1Tbs	Pureed Canned Peas	#8s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Pears	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Pears	#8+16s
	Ready to Eat Pudding	½ c	Ready to Eat Pudding	½ c	Ready to Eat Pudding	½ c	SF Ready to Eat Pudding	½ c	SF Ready to Eat Pudding	½ c
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
DINNER	Deviled Ham Salad	3 oz	Deviled Ham Salad	3 oz	Pureed Canned Beef	#8s	Deviled Ham Salad	3 oz	Pureed Canned Beef	#8s
	Bread	2 sl	Bread	2 sl	Pureed Canned Corn	#8s	Bread	2 sl	Pureed Canned Corn	#8s
	Applesauce	¾ c	Applesauce	¾ c	Applesauce (smooth)	#8+16s	SF Applesauce	¾ c	SF Applesauce (smooth)	#8+16s
	Cheese Puffs	1 oz	Cheese Puffs	1 oz	Pureed Bread Mix	#8s	Cheese Puffs	1 oz	SF Pureed Bread Mix	#8s
	Assorted Cookies	2	Cookies (soft, no nuts)	2			Plain Cookies	2		
	Assorted Beverages	8 oz	Assorted Beverages	8 oz	Assorted Beverages	8 oz	SF Asstd Beverages	8 oz	SF Asstd Beverages	8 oz
	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz
	Cookies	2	Cookies, soft, no nuts	2	Nutr Supplement	6-8 oz	Graham Crackers	4	SF Nutr Supplement	6-8 oz
	Juice	6 oz	Juice	6 oz	Juice	6 oz	*Juice	6 oz	*Juice	6 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Deviled Ham Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Deviled ham spread, canned	cup	3	7	14	28	42	
Bread	slices	20	50	100	200	300	

Portion: 1 sandwich (3 oz deviled ham on 2 slices bread)

DIRECTIONS:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Portion and spread onto bread to make sandwiches.
3. Cover and store leftovers at less than or equal to 41ºF.

Calories	269.28	Cholesterol, mg	21	Calcium, mg	103.04
Protein, grams	12.77	Fiber, grams	3.84	Iron, mg	1.58
Carbohydrates, grams	27.93	Vitamin A, IU	1.92	Potassium, mg	162.56
Fat, grams	10.88	Vitamin C, mg	0	Sodium, mg	579.21

Chicken Salad Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Chicken, canned, boned, diced	lb	1 1/4	31/4	6 1/4	12 1/2	18 3/4	
**Eggs, hard cooked	whole	2	5	9	18	27	
*Celery, diced	cup	1/2	1 1/4	2 1/3	4 2/3	7	
*Onions, minced	Tbs	1/3	1	1 2/3	3 1/3	5	
Salt	tsp	1/2	1 1/4	2 5/8	5 1/4	7 7/8	
*White pepper	tsp	Dash	1/2	7/8	1 3/4	2 5/8	
Salad Dressing, Mayonnaise	cup	3/4	1 3/4	3 1/2	7	10 1/2	
*Lemon juice	tsp	5/8	1 1/2	3 1/8	6 1/4	9 3/8	
*Lettuce leaves	each	10	25	50	100	150	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (3 oz chicken on 2 slices bread)
**Only if available, properly cooked, cooled and stored.
***Optional

Directions:
Note: Prepare vegetables on clean cutting board away from beef, poultry, fish, and eggs. Prepare eggs on separate cutting board to prevent cross contamination.

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Peel and dice eggs.
3. Combine all ingredients.
4. Mix lightly.
5. Chill at less than or equal to 41ºF.
6. Wash lettuce leaves and drain well.
7. Serve a 3 oz portion of chicken salad between 2 slices white bread with lettuce leaf.
8. Cut diagonally.
9. Cover and store leftovers at equal to or less than 41ºF.

Calories	399.35	Cholesterol, mg	74.7	Calcium, mg	88.13
Protein, grams	21.65	Fiber, grams	4.75	Iron, mg	2.4
Carbohydrates,grams	38.87	Vitamin A, IU	2182.88	Potassium, mg	709.72
Fat, grams	20.85	Vitamin C, mg	11.95	Sodium, mg	683.23

Peanut Butter and Jelly Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Peanut butter, creamy	cup	1 1/3	3 1/4	6 1/2	13	19	
Jelly	cup	2/3	1 2/3	3 1/4	6 1/2	9 1/2	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (2 Tbs peanut butter, 1Tbs jelly on 2 slices of bread

Directions:

1. Start with clean hands, equipment, and work surface.
2. To assemble, spread 2 tablespoons peanut butter on 1 slice of bread.
3. Spread 1 tablespoon jelly on 2nd slice of bread.
4. Put two slices of bread together so that peanut butter and jelly match.
5. Repeat to create desired number of sandwiches. Hold at less than or equal to 41ºF until service.
6. Cover and store leftovers at less than or equal to 41ºF.

Calories	415.75	Cholesterol, mg	0	Calcium, mg	122.66
Protein, grams	15.36	Fiber, grams	5.97	Iron, mg	2.35
Carbohydrates, grams	50.43	Vitamin A, IU	3.00	Potassium, mg	372.75
Fat, grams	15.82	Vitamin C, mg	0.19	Sodium, mg	457.32

Tuna Salad Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Tuna, canned in water, flakes	lb	1 1/4	3	6	12	18	
**Eggs, hard cooked	whole	2	5	9	18	27	
*Celery, chopped	cup	1/2	1 1/4	2 1/3	4 2/3	7	
*Onion, minced	cup	1 Tbs	2 Tbs	1/4	1/2	3/4	
*Pickle relish, drained	cup	3 Tbs	1/2	1	2	3	
Salad Dressing, Mayonnaise	cup	2/3	1 1/2	3 1/4	6 1/2	9 3/4	
*Lettuce Leaf	each	10	25	50	100	150	
Bread	slice	20	50	100	200	300	

Portion: (3 oz tuna on 2 slices bread)
****Only if available, properly cooked, cooled and stored
*Optional

Directions:
Note: Prepare vegetables on separate cutting board to prevent cross contamination. Prepare eggs on separate cutting board to prevent cross contamination.

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Peel and dice eggs.
3. Add vegetables, relish and eggs to tuna. Mix lightly.
4. Add mayonnaise to tuna mixture. Mix lightly to blend.
5. Chill at less than or equal to 41ºF.
6. Wash lettuce leaves and drain well.
7. Serve a 3 oz portion of tuna salad between 2 slices white bread with lettuce leaf.
8. Cut diagonally.
9. Cover and store leftovers at less than or equal to 41ºF.

Calories	375.19	Cholesterol, mg	54.84	Calcium, mg	175.51
Protein, grams	20.65	Fiber, grams	6.47	Iron, mg	4.92
Carbohydrates, grams	43.04	Vitamin A, IU	2206.9	Potassium, mg	788.29
Fat, grams	16.94	Vitamin C, mg	11.94	Sodium, mg	619.84

7 Day Emergency Meal Plan: Assumes Cooking Ability

Menu Notes for 7 Day Emergency Meal Plan: Assumes Cooking Ability

During a disaster, foods that appear on the emergency menus may not be available in every situation. The menus provided are meant as guides, and will need to be adjusted during emergencies. In some situations, the recommended nutritional guidelines of the USDA (ChooseMyPlate) or other recognized menu guides ***may not be met***. It is particularly difficult to meet fruits recommendations (2 cups per day) and vegetable recommendations (2½ cups per day) without having fresh fruits and vegetables available, especially for individuals who cannot consume large volumes of food at one sitting. With the ability to cook, especially with a safe water supply, options for good nutrition and menu variety are increased. Each facility should make substitutions as needed to maximize food intake for patients/residents and to use perishable stock on hand before spoilage.

Below are some ways to make use of refrigerated or frozen foods. Be sure temperatures are **at or below 41ºF** prior to serving.

- Thaw pre-cooked meat such as ham; slice into portions using a sharp knife and serve.
- Use prepared refrigerated sandwich spreads (chicken salad, tuna salad, egg salad) for the first meal or two after losing utilities.
- Use cold leftovers such as coleslaw, gelatin salad, and tossed salad at first meal or two after losing utilities.
- Use frozen desserts (ice cream sherbet, frozen pies, etc.) at first meal after losing utilities.
- Use fresh milk at first meal after losing utilities (assuming the temperature is at or below 41ºF).
- Use supply of fresh and/or frozen oral nutritional supplements (commercial shakes, etc.) as soon as possible after losing utilities.
- Combine fresh and frozen fruit to make a fruit salad; dress with yogurt or whipped cream.
- Use fresh vegetables (cucumbers, tomatoes, lettuce, etc.) at the first meal or two after losing utilities if a safe water source is available to wash vegetables before serving.
- If a heat source and a safe source of water is available:
    - Cook frozen vegetables.
    - Cook refrigerated and/or frozen meats.
    - Use milk to make cream soups, especially if milk is close to its expiration date.
    - Bake frozen bread and/or rolls.
    - Make instant mashed potatoes, Use milk or canned broth to prepare potatoes if necessary.
    - Cook fresh vegetables that require refrigeration. Prepare hot cereals such as oatmeal.

- Prepare hot beverages (coffee, tea, hot chocolate).
- Use cheese in casseroles or grilled cheese sandwiches.
- Use fresh and frozen egg supply; for breakfast meals and egg casseroles, and hard boil fresh eggs for later use (assure refrigeration is available for appropriate cool-down).

Emergency menus may not be adequate in nutrients for all residents/patients. Regular menus average approximately 1800 to 2000 calories, 75 to 85 grams protein daily. Utilize oral nutritional supplements when needed. Liberalize diets as appropriate:

- **Patients with diabetes:** Use low sugar products when indicated or preferred by an individual.
- **Patients on sodium-restricted diets:** Remove salt packets as indicated or preferred by an individual.
- **Mechanical soft diets:** Provide soft moist foods that can be chewed easily.
- **Pureed diets:** Provide pureed foods at the proper temperatures. (An emergency supply of canned pureed foods and a manual can opener should be kept on hand).

*Use fresh milk as soon as possible after losing power, or move milk to a freezer to maintain a temperature of 41°F or lower to keep milk safe. Use canned evaporated milk or reconstituted powdered dry milk once fresh milk supplies have been used or spoiled.

Note: Utilize safe water supplies for reconstituted canned evaporated or pasteurized non-fat powdered milk, juices, soups or beverages.

Follow the water purification procedure outlined on pages 70-72 if the water supply is unsafe for drinking.

Providing variety can also be challenging without utilities. Make menu substitutions on the following menus as needed to use perishables and increase variety based on stock available in-house.

The recipes on the following pages may or may not be useful depending on what you have on hand in the facility. Some food items in the sample menus may not be available. In case a facility is without electricity, food should be used in the following order:

1. Use perishable food and foods from the refrigerator.
2. Use food from the freezer.
3. Begin to use non-perishable foods and staples
4. Substitute fresh and frozen vegetables and fruits for canned in the 7-day menus to use perishable supply as quickly as possible.
5. If possible, use existing perishable stock to make home-made soups and stews rather than using canned products

Emergency/Disaster Plan for Food and Dining Services

Sample Emergency Food and Water Supplies for 7 Days

Sample Menu Supply List *(See separate list for pureed food items needed)*			**Number of People/ Amount Needed**			
Menu Items	**Portion Size**	**No. of Meals Per Day**	**50**	**100**	**150**	**Custom**
Drinking water/per person/day All purpose water/person/day	0.5 Gallon 1 Gallon	N/A	175 350	350 700	525 1050	
*+Assorted juices, 6-8 oz. cans or aseptically packaged	6-8 oz	7 Meals	350	700	1050	
*+Assorted beverages, canned, bottled or aseptically packaged	6-8 oz portions	7 Meals	350	700	1050	
*Instant breakfast, cans/aseptic pk	8-10 oz	7 Meals	350	700	1050	
Bread, loaves (20 slices/loaf)	2 slices	14 Meals	30	60	90	
Crackers, pounds	4	7 Meals	10	19	28	
*Muffins, dozen	1	3 Meals	13	26	38	
*Doughnuts	1	2 Meals	9	17	25	
*Cereal bars	1	5 Meals/snacks	250	500	750	
Hard cooked eggs, dozens	1	4 Meals	8.3	17	25	
Cottage cheese, pounds	1/4 cup	3 Meals	15	30	45	
Hot cereal, bulk, pounds	6 oz	7 Meals	14	28	42	
*Dry cereal, individual boxes	1 oz	7 Meals	350	700	1050	
Chicken soup, 50 oz. can	6 oz (3/4 cup)	3 Meals	21	38	57	
Chili, canned, No. 10 can	6 oz (3/4 cup)	2 Meals	8	14	20	
Tomato soup, 50 oz. can	6 oz (3/4 cup)	2 Meals	21	38	57	
Deviled ham, No. 5 squat (4.25#)	2-3 oz.	5 Meals	7.5	15	22.5	
Cheese, pounds	2 oz	3 Meals	19	38	57	
Tuna, canned, No. 5 squat (4.25#)	3 oz	2 Meals	6	12	18	
Cheese puffs, pounds	1 oz	5 Meals	17	33	50	
Hull-less popcorn, pounds	1 oz	2 Meals	7	13	20	
Three bean salad, No. 10 can	3/4 cup	2 Meals	6	12	18	
Corn, No 10 can	3/4 cup	2 Meals	6	12	18	
Carrots, No 10 can	3/4 cup	1 meal	3	6	9	
Pickled beets, No. 10 can	3/4 cup	3 Meals	9	18	27	
Applesauce, No. 10 can	3/4 cup	2 Meals	6	12	18	
*Cookies, pounds	2 (1 oz)	2 Snacks	8	14	20	
*Canned fruit, No. 10 can	1/2 cup	14 Meals	42	84	126	
*Pudding, ready to eat, No. 10 can	1/2 cup	2 Snacks	6	12	18	
Peanut butter, 5# jar	2 Tbsp	4 Meals	4	7	10	
**Evaporated milk, canned, 12 oz.	8 oz reconstituted	7 Meals	117	234	350	
*Nutritional supplement, single svg	6-8 oz	7 Meals	350	700	1050	

A manual can opener must be available.

* Use low sugar items if indicated or preferred for patients with diabetes. **May substitute reconstituted powdered milk.

These products should be kept separately from others and dated and marked “FOR EMERGENCY USE ONLY”. All food items should be dated. **Rotate emergency supplies at least every 6 months.**

Emergency/Disaster Plan for Food and Dining Services

Day 1 Emergency Meal Plan – Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
	Fruit Juice	6 oz	Fruit Juice	6 oz	Fruit Juice	6 oz	*Fruit Juice	6 oz	*Fruit Juice	6 oz
	Hot Cereal	6 oz	Hot Cereal	6 oz	Hot Cereal	8 oz	*Hot Cereal	6 oz	*Hot Cereal	8 oz
	Egg & Cheese Bake	2x2"	Egg & Cheese Bake	2x2"	Pu Egg & Cheese Bake	#8s	Egg & Cheese Bake	2x2"	Pu Egg & Cheese Bake	2x2"
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Chili Con Carne	6 oz	Chili Con Carne, Soft	6 oz	Pureed Chili Con Carne, w/Bread	2-#8	Chili Con Carne	6 oz	Pureed Chili Con Carne w/Bread	2-#8s
	Crackers	4	Crackers	4			Crackers	4		
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pureed Canned Fruit	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Fruit	#8+16s
	Bread/Margarine	1/1	Bread/Margarine	1/1	Pureed Canned Veg	#8s	Bread/Margarine	1/1	Pureed Canned Veg	#8s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Canned Veg Soup	6 oz	Canned Veg Soup	6 oz	Pu Canned Veg Soup	6 oz	Canned Veg Soup	6 oz	Pu Canned Veg Soup	6 oz
	Crackers	4	Crackers	4			Crackers	4		
	Egg Salad	3 oz	Egg Salad, Soft	3 oz	Pureed Egg Salad w/Bread	#6s	Egg Salad	3 oz	Egg Salad w/Bread	#6s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Canned Fruit	¾ c	Canned Fruit	¾ c	Canned Fruit	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Fruit	#8+16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
HS	Cookies	2	Cookies	2	Pudding	4 oz	*Cookies, plain	2	SF Pudding	4 oz
	Fruit Juice	6 oz	Fruit Juice	6 oz	Fruit Juice	6 oz	*Fruit Juice	6 oz	*Fruit Juice	6 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 2 Emergency Meal Plan - Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Cold Cereal	1 oz	Cold Cereal	1 oz	Hot Cereal	8 oz	*Cold Cereal	1 oz	*Hot Cereal	8 oz
	Banana	½	Banana	½	Pureed Banana	#6s	Banana	½	Pureed Banana	#6s
	Potato Egg Bake	3x3”	Potato Egg Bake	3x3”	Pu Potato Egg Bake	#8s	Potato Egg Bake	3x3”	Pu Potato Egg Bake	#8s
	Bread w/margarine/jelly	1/1/1	Bread w/margarine/jelly	1/1/1			Bread w/marg/SF jelly	1/1/1		
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Cream Soup	6 oz	Canned Cream Soup	6 oz	Pu Cream Soup	6 oz	Canned Cream Soup	6 oz	Pureed Cream Soup	6 oz
	Chicken Salad	#8s	Chicken Salad, Soft	#8s	Pu Chicken Salad		Chicken Salad	#8s	Pu Chicken Salad	
	Bread	2 sl	Bread	2 sl	w/Bread	#6s	Bread	2 sl	w/Bread	#6s
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Fruit	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Fruit	#8+16s
	Cookies	2	Cookies, Soft, no nuts	2	Pureed Cookies	#16s	Lorna Doones	2	Pu Lorna Doones	#16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Beef/Vegetable Stew	8 oz	Beef/Veg Stew, Soft	8 oz	Pu Beef/Veg Stew		Beef /Vegetable Stew	8 oz	Pu Beef/Veg Stew	
	Rolls/butter	1/1	Rolls/butter	1/1	w/Bread	2-#8	Rolls/butter	1/1	w/Bread	2-#8s
	Canned Corn	¾ c	Soft Canned Corn	¾ c	Pu Canned Corn	#8+16s	Canned Corn	#8+16s	Pu Canned Corn	#8+16s
	Canned Pudding	½ c	Canned Pudding	½ c	Pudding	4 oz	SF Pudding	½ c	SF Pudding	4 oz
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
HS	Cookies	2	Cookies, soft, no nuts	2	Milkshake	6-8oz	Vanilla Wafers	5	SF Milkshake	6-8 oz
	Fruit Juice	6 oz	Fruit Juice	6 oz	Fruit Juice	6 oz	*Fruit Juice	6 oz	*Fruit Juice	6 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 3 Emergency Meal Plan - Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Hot Cereal	6 oz	Hot Cereal	6 oz	Hot Cereal	8 oz	*Hot Cereal	6 oz	*Hot Cereal	8 oz
	Muffin/marg/jelly	1/1/1	Muffin/marg/jelly	1/1/1	Pu Muffin/marg/jelly	#12s	*Muffin/marg/ SF jelly	1/1/1	*Pu Muf/marg/SF jelly	#12s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Veg Soup	6 oz	Canned Veg Soup	6 oz	Pureed Veg Soup	6 oz	Canned Veg Soup	6 oz	Pureed Veg Soup	6 oz
	Peanut Butter/Jelly Sandwich (Bread)	2T/1T 2 sl	Pu Peanut Butter/Jelly Sandwich	#8s	Pu Peanut Butter/ Jelly Sandwich	#8s	Peanut Butter/SF Jelly Sandwich	2/1T 2 sl	Pu Peanut Butter & SF Jelly Sandwich	#8s
	Potato Chips	1 oz	Cheese Puffs	1 oz	None		Potato Chips	1 oz	None	
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Fruit	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned Fruit	#8+16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Macaroni and Cheese	1 c	Macaroni and Cheese	1 c	Pu Mac and Cheese	#6 s	Macaroni and Cheese	1 c	Pu Mac and Cheese	# 6s
	Stewed Tomatoes	1 c	Stewed Tomatoes	1 c	Pu Stewed Tomatoes	#8+16s	Stewed Tomatoes	1 c	Pu Stewed Tomatoes	#8+16s
	Canned Carrots	¾ c	Soft Canned Carrots	¾ c	Pu Canned Carrots W/Bread/margarine	#8+16s	Canned Carrots	¾ c	Pu Canned Carrots W/Bread/margarine	#8+16s
	Bread/margarine	1/1	Bread/margarine	1/1			Bread/margarine	1/1		
	Cookies	2	Cookies (soft, no nuts)	2	Pureed Cookies	#16s	SF Cookies	2	SF Pureed Cookies	#16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
HS	Pudding	½ c	Pudding	½ c	Pudding	½ c	SF Pudding	½ c	SF Pudding	½ c
	Fruit Juice	6 oz	Fruit Juice	6 oz	Fruit Juice	6 oz	*Fruit Juice	6 oz	*Fruit Juice	6 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 4 Emergency Meal Plan - Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Cold Cereal	1 oz	Cold Cereal	1 oz	Hot Cereal	8 oz	*Cold Cereal	1 oz	*Hot Cereal	8 oz
	Toast/Margarine/Jelly	1/1/1	Toast/Margarine/Jelly	1/1/1	Pu Bread/Marg/Jelly	#8s	Toast/Marg/SFJelly	1/1/1	Pu Bread/Marg/SFJelly	#8s
	Canned Fruit	½ c	Canned Fruit	½ c	Pu Canned Fruit	#8s	SF Canned Fruit	½ c	SF Pu Canned Fruit	#8s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	4 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Vegetable Soup	6 oz	Canned Veg Soup	6 oz	Pu Canned Veg	6 oz	Canned Veg Soup	6 oz	Pu Canned Veg Soup	6 oz
	Crackers	6	Crackers	6			Crackers	6		
	Tuna Salad	#12s	Tuna Salad, Soft	#12s	Pureed Tuna Salad		Tuna Salad	#12S	Pureed Tuna Salad	
	Bread	2 sl	Bread	2 sl	w/Bread	# 6s	Bread	2 sl	w/Bread	# 6s
	Fruit Cocktail	¾ c	Fruit Cocktail	¾ c	Pu Fruit Cocktail	#8+16s	SF Fruit Cocktail	¾ c	SF Pu Fruit Cocktail	# 8+16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Turkey Broccoli Casserole	6 oz	Turkey Broccoli Casserole	6 oz	Pureed Broccoli Casserole	#6 s	Turkey Broccoli Casserole	6 oz	Pureed Turkey Broccoli Casserole	#6s
	Canned Three Bean Salad	¾ c	Canned Three Bean Salad	¾ c	Pu Three Bean Salad	#8s	Canned Three Bean Salad	¾ c	Pureed Three Bean Salad	#8s
	Roll/margarine	1/1	Roll/margarine	1/1	Pu Roll/margarine	#16s	Roll/margarine	1/1	Pureed Roll/margarine	#16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
HS	Instant Breakfast	6-8 oz	Instant Breakfast	6-8 oz	Instant Breakfast	6-8 oz	SF Instant Breakfast	6-8 oz	SF Instant Breakfast	6-8 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 5 Emergency Meal Plan - Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Hot Cereal	6 oz	Hot Cereal	6 oz	Hot Cereal	8 oz	*Hot Cereal	6 oz	*Hot Cereal	8 oz
	Coffeecake w/margarine	1/1	Coffeecake w/margarine	1/1	Pu Coffeecake w/marg	#12	Toast w/margarine/SF j	1/1	Pu Coffeecake w/marg	#12
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Cream Soup	6 oz	Canned Cream Soup	6 oz	Pu Cnd Crm Soup	6 oz	Canned Cream Soup	6 oz	Pu Cnd Cream Soup	6 oz
	Turkey & Cheese (Sandwich)	3 oz	Turkey & Cheese (Sandwich)	3 oz	Pureed Turkey & Cheese w/Bread	#6s	Turkey & Cheese (Sandwich)	3 oz	Pureed Turkey & Cheese w/Bread	#6s
	Bread	2 sl	Bread	2 sl			Bread	2 sl		
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Fruit	#8+16s	SF Canned Fruit	3/4c	SF Pu Canned Fruit	#8+16
	Cookies	2	Cookies (soft)	2	Pureed Cookies	#16	Vanilla Wafers	5	Pu Vanilla Wafers	#16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Chicken Noodle Casserole	6 oz	Chicken Noodle Casserole, Soft	6 oz	Pu Chicken Noodle Casserole	2-#8s	Chicken Noodle Casserole	6 oz	Pureed Chicken Noodle Casserole	2-#8s
	Canned Pickled Beets	¾ c	Canned Pickled Beets	¾ c	Pu Cnd Pkld Beets	#8+16s	Canned Pickled Beets	3/4c	Pu Cnd Pkld Beets	#8+16
	Roll/margarine	1/1	Roll/margarine	1/1	Pu Roll/margarine	#16s	Roll/margarine	1/1	Pu Roll/margarine	#16s
	Pudding	½ c	Pudding	½ c	Pudding	½ c	SF Pudding	½ c	SF Pudding	½ c
	Juice	6 oz	Juice	6 oz	Juice	6 oz	*Juice	6 oz	*Juice	6 oz
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
HS	Nutr Supplement	6-8 oz	Nutr Supplement	6-8oz	Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 6 Emergency Meal Plan – Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Cold Cereal	1 oz	Cold Cereal (soft)	1 oz	Hot Cereal	8 oz	SF Cold Cereal	1 oz	*Hot Cereal	8 oz
	Donut	1	Donut (no nuts)	1	Pureed Donut	#12s	*Plain Donut	1	*Pu Plain Donut	#12s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	4 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Beef Veg Soup	6 oz	Canned Beef Veg Soup	6 oz	Pu Beef Veg Soup	6 oz	Canned Beef Veg Soup	6 oz	Pu Beef Veg Soup	6 oz
	Crackers	4 oz	Crackers	4			Crackers	4		
	Ham & Cheese Sandwich	3 oz	Ham & Cheese Sandwich	3 oz	Pu Ham & Cheese		Ham & Cheese Sandwich	3 oz	Pu Ham & Cheese	
	Bread	2 sl	Bread	2 sl	w/Bread	#6 s	Bread	2 sl	w/Bread	# 6s
	Canned Fruit	¾ c	Fruit	¾ c	Pureed Fruit	#8+16	SF Fruit	3/4 c	SF Pureed Fruit	# 8+16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Hot Dog on Bun	1/1	Ground Hot Dog on Bun	1/1	Pu Hot Dog on Bun	#8 s	Hot Dog on Bun	1/1	Pu Hot Dog on Bun	#8s
	Catsup/mustard	1/1	Catsup/mustard	1/1	Catsup/mustard	1/1	Catsup/mustard	1/1	Catsup/mustard	1/1
	Baked Beans	¾ c	Baked Beans	¾ c c	Pu Baked Beans	#8+16	Baked Beans	¾ c	Pu Baked Beans	#8s
	Canned Corn	¾ c	Soft Canned Corn	¾ c	Pu Corn	¾ c	Canned Corn	¾ c	Pu Canned Corn	¾ c
	Canned Pudding	½ c	Canned Pudding	½ c	Canned Pudding	½ c	SF Canned Pudding	½ c	SF Canned Pudding	½ c
	Cookies	2	Cookies (soft, no nuts)	2	Pureed Cookies	#16 s	Vanilla Wafers	5	Pu Vanilla Wafers	#16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
HS	Cereal Bar	1	Cereal Bar	1	Pu PB & J Sandwich	#8 s	*Cereal Bar	1	Pureed PB & SF Jelly	# 8s
	Juice	6 oz	Juice	6 oz	Juice	6 oz	*Juice	6 oz	*Juice	6 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Emergency/Disaster Plan for Food and Dining Services

Day 7 Emergency Meal Plan - Assumes Cooking Ability

	REGULAR/NAS		MECHANICAL SOFT		PUREE		CARBOHYDRATE CONTROLLED		CARBOHYDRATE CONTROLLED PUREE	
BREAKFAST	Assorted Juice	6 oz	Assorted Juice	6 oz	Assorted Juice	6 oz	*Assorted Juice	6 oz	*Assorted Juice	6 oz
	Cold Cereal	6 oz	Cold Cereal (soft)	6 oz	Hot Cereal	8 oz	*Cold Cereal	6 oz	*Hot Cereal	8 oz
	Banana	½	Banana	½	Pureed Banana	#12s	Banana	½	Pureed Banana	#12s
	Yogurt	½ c	Yogurt	½ c	Smooth Yogurt	1 c	SF Yogurt	½ c	Smooth SF Yogurt	1 c
	Toast/Margarine	1/1	Toast/Margarine	1/1	Pureed Bread	#8s	Toast/Margarine	1/1	Pureed Bread	#8s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
LUNCH	Canned Cream Soup	6 oz	Canned Cream Soup	6 oz	Pureed Cream Soup	6 oz	Canned Cream Soup	6 oz	Pu Cream Soup	6 oz
	Crackers	4	Crackers	4			Crackers	4		
	Peanut Butter/Jelly Sandwich (Bread)	2T/1 2 sl	Pu Peanut Butter/Jelly Sandwich (Bread)	#8s	Pu Peanut Butter & Jelly Sandwich	#8s	Peanut Butter/SF Jelly Sandwich (Bread)	2T/1T 2 sl	Pu Peanut Butter & Jelly Sandwich	#8s
	Canned Fruit	¾ c	Canned Fruit	¾ c	Pu Canned Fruit	#8+16s	SF Canned Fruit	¾ c	SF Pu Canned	#8+16s
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz	Water	8 oz
DINNER	Canned Ravioli	1 c	Canned Ravioli	1 c	Pu Canned Ravioli	2-#8	Canned Ravioli	1 c	Pu Canned Ravioli	2-#8
	Green Beans	¾ c	Green Beans	¾ c	Pu Green Beans	# 8+16s	Green Beans	¾ c	Pu Green Beans	# 8+16s
	Roll/margarine	1/1	Roll/margarine	1/1	Pu Roll/margarine	#16s	Roll/margarine	1/1	Pu Roll/margarine	#16s
	Pudding	½ c	Pudding	½ c	Pudding	½ c	SF Pudding	½ c	SF Prep Pudding	½ c
	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz	Milk	8 oz
	Fruit Juice	6 oz	Fruit Juice	6 oz	*SF Fruit Juice	6 oz	Fruit Juice	6 oz	*Fruit Juice	6 oz
HS	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz	SF Nutr Supplement	6-8 oz

SF = Sugar Free CCHO = Consistent Carbohydrate Pu = Pureed *Low in Simple Sugars Note: All liquids offered must be thickened to the ordered consistency

Note: Goal is a minimum of 2½ cups of vegetables and 2 cups fruit daily as per ChooseMyPlate guidelines if possible.

Recipes Used in 7 Day Emergency Menus

Recipes that Correspond with 7 Day Emergency Menus

- Egg and Cheese Bake
- Beefy Chili
- Egg Salad Sandwich
- Potato Egg Bake
- Chicken Salad Sandwich
- Easy Beef Stew
- Peanut Butter and Jelly Sandwich
- Macaroni and Cheese
- Tuna Salad Sandwich
- Turkey Broccoli Casserole
- Turkey and Cheese Sandwich
- Chicken and Noodles
- Ham and Cheese Sandwich
- Hot Dog on a Bun
- Baked Beans

Egg and Cheese Bake

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Cheddar cheese, shredded	lb	1	1 1/4	4 1/2	9	13 1/2	
Eggs, beaten	whole	7	18	35	70	105	
Milk, 2%	gallon	2 1/2c	1 qt + 1 1/3 c	2 qt + 3 c	1 gal + 1 qt +3 c	2 gal + 2 c	

Portion: 2" x 2"

Directions:

1. Start with clean hands, equipment and work surface.
2. Grease 12 x 20 x 2" baking pans.
3. Combine eggs and milk.
4. Mix shredded cheese into egg mixture.
5. Pour into greased baking pans.
6. Bake at 350ºF for 1 hour 15 minutes until mixture reaches a minimum internal temperature of 165ºF for 15 seconds.
7. Put into 2" x 2" portions.
8. Hold at greater than or equal to 135ºF until service.
9. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	236.69	Cholesterol,mg	158.59	Calcium, mg	374.31
Protein, grams	15.03	Fiber, grams	0.000	Iron, mg	0.60
Carbohydrates, grams	4.18	Vitamin A, IU	778.69	Potassium, mg	151.77
Fat, grams	15.77	Vitamin C, mg	0.11	Sodium, mg	336.35

Beefy Chili

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Ground beef	lb	1	2 1/4	4 1/2	9	13 1/2	
Onions, chopped	cups	1/4	1/2	1	2	3	
Tomato soup, condensed	50 oz can	1/2	1 1/4	2 1/2	5	7 1/2	
Water	gallon	1/8	1/4	1/2	1	1 1/2	
Chili powder	cups	3/16	1/3	2/3	1 1/3	2	
*Ground cumin	Tbs	1/4	1/2	1	2	3	
Kidney beans, canned, drained	qt	2/3 c	3/4 qt + 2/3 c	1 1/2 qt + 2/3 c	3 qt + 2/3 c	4 1/2 qt + 2/3 c	
Cheddar cheese, shredded	lb	3/16	3/8	3/4	1 1/2	2 1/4	

Portion: 3/4 cup

*Optional

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Cook beef and onions in large saucepot until beef is browned. Drain fat.
3. Add soup, water, chili powder, cumin and beans. Simmer 20 minutes.
4. Top each serving with 1 tablespoon of cheese.
5. Hold at greater than or equal to 135ºF until service.
6. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	214.53	Cholesterol,mg	35.72	Calcium, mg	69.84
Protein, grams	11.35	Fiber, grams	2.29	Iron, mg	1.84
Carbohydrates, grams	17.53	Vitamin A, IU	841.87	Potassium, mg	208.56
Fat, grams	9.35	Vitamin C, mg	4.24	Sodium, mg	497.82

Egg Salad Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Eggs, hard cooked	whole	14	37	75	150	108	
Salad Dressing, Mayonnaise	cup	2/3	1 1/2	3	6	7 1/2	
*Pickle relish, drained	cup	3 Tbs	1/2	1	2	3	
Salt	tsp	3/8	1	2	4	6	
Pepper	tsp	dash	1/8	1/4	1/2	3/4	
*Pimento, chopped	oz	3/4	2	4	8	12	
*Onion juice	tsp	1/5	1/2	1	2	3	
*Lettuce leaf	each	10	25	50	100	150	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (3 oz egg salad, 2 slices bread)
*Optional

Directions:
1. Start with clean hands, equipment and work surface.
2. Peel eggs and chop coarsely on clean cutting board away from fruits and vegetables.
3. Combine mayonnaise, pickle relish, salt, pepper, onion juice, and pimiento and add to eggs. Mix lightly.
4. Chill at less than or equal to 41ºF.
5. Wash lettuce leaves and drain well.
6. Serve a 3 oz portion of egg salad between 2 slices white bread with lettuce leaf.
7. Cut diagonally.
8. Cover and store leftovers at less than or equal to 41ºF.

Calories	349.96	Cholesterol, mg	228.88	Calcium, mg	123.30
Protein, grams	13.24	Fiber, grams	2.27	Iron, mg	3.10
Carbohydrates, grams	32.52	Vitamin A, IU	612.24	Potassium, mg	222.92
Fat, grams	17.01	Vitamin C, mg	3.27	Sodium, mg	579.93

Potato Egg Bake

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Hashed brown potatoes, frozen	lb	.50	1 1/4	2.5	5	7.5	
Cheddar cheese, shredded	lb	.50	1 ¼	2.5	5	7.5	
Eggs, whole liquid	quart	2 cups	1 ¼	2.5	5	7.5	
Milk	quart	2 1/2 c	1 1/2	3	6	9	
Dry mustard	Tbs	1 tsp	3/4	1 1/2	3	4 1/2	

Portion: 3" x 3"

Directions:

1. Start with clean hands, equipment and work surface.
2. Thaw frozen hashed browns.
3. Cover bottom of greased 12 x 20 x 2" pans (one pan for each 24 servings), with hashed browns. Pans should be well covered.
4. Spread shredded cheese over potatoes.
5. Combine egg, milk, and mustard.
6. Pour over mixture in pans, 2 1/2 quart per pan.
7. May be mixed, covered and refrigerated overnight.
8. Bake uncovered at 325ºF for 1 hour or until bake reaches a minimum internal temperature of 165ºF for 15 seconds.
9. If browning too fast, cover with foil.
10. Hold at greater than or equal to 135ºF until service.
11. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	222.43	Cholesterol, mg	204.45	Calcium, mg	282.19
Protein, grams	14.93	Fiber, grams	0.74	Iron, mg	1.05
Carbohydrates, grams	10.83	Vitamin A, IU	517.58	Potassium, mg	288.88
Fat, grams	12.38	Vitamin C, mg	2.11	Sodium, mg	239.11

Chicken Salad Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Chicken, canned, boned, diced	lb	1 1/4	31/4	6 1/4	12 1/2	18 3/4	
**Eggs, hard cooked	whole	2	5	9	18	27	
*Celery, diced	cup	1/2	1 1/4	2 1/3	4 2/3	7	
*Onions, minced	Tbs	1/3	1	1 2/3	3 1/3	5	
Salt	tsp	1/2	1 1/4	2 5/8	5 1/4	7 7/8	
*White pepper	tsp	Dash	1/2	7/8	1 3/4	2 5/8	
Salad Dressing, Mayonnaise	cup	3/4	1 3/4	3 1/2	7	10 1/2	
*Lemon juice	tsp	5/8	1 1/2	3 1/8	6 1/4	9 3/8	
*Lettuce leaves	each	10	25	50	100	150	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (3 oz chicken on 2 slices bread)
**Only if available, properly cooked, cooled and stored.
***Optional

Directions:
Note: Prepare vegetables on clean cutting board away from beef, poultry, fish, and eggs. Prepare eggs on separate cutting board to prevent cross contamination.

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Peel and dice eggs.
3. Combine all ingredients.
4. Mix lightly.
5. Chill at less than or equal to 41ºF.
6. Wash lettuce leaves and drain well.
7. Serve a 3 oz portion of chicken salad between 2 slices white bread with lettuce leaf.
8. Cut diagonally.
9. Cover and store leftovers at equal to or less than 41ºF.

Calories	399.35	Cholesterol, mg	74.7	Calcium, mg	88.13
Protein, grams	21.65	Fiber, grams	4.75	Iron, mg	2.4
Carbohydrates, grams	38.87	Vitamin A, IU	2182.88	Potassium, mg	709.72
Fat, grams	20.85	Vitamin C, mg	11.95	Sodium, mg	683.23

Easy Beef Stew

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Oil, vegetable	cup	½ Tbs	1 Tbs	2 Tbs	1/4	1/2	
Onion, chopped	quart	1/8	5/16	2/3	1 1/4	1 7/8	
Beef chuck roast, cooked, cut into 1“ cubes	lb	2 1/2	6 1/4	12 1/2	25	37 1/2	
Carrots, canned, drained	quart	3/8	1 1/4	1 7/8	3 3/4	5 2/3	
Tomatoes, canned, diced, undrained	gallon	1/8	5/16	2/3	1 1/4	1 7/8	
Vegetable beef soup, condensed	50 oz can	1/2	1 1/4	2 1/2	5	7 1/2	
V8 100% vegetable juice	cups	1/4	2/3	1 1/4	2 1/2	3 3/4	
Pepper	tsp	dash	1/4	1/2	2	3	

Portion: 8 oz

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Heat oil in large saucepot. Add onions and cook until tender. Add beef, carrots and tomatoes (with juice). Add soup, vegetable juice and pepper.
3. Heat until internal temperature is 165ºF or higher for 15 seconds.
4. Hold at greater than or equal to 135ºF until service.
5. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	210.52	Cholesterol, mg	75.41	Calcium, mg	48.27
Protein, grams	28.42	Fiber, grams	2.59	Iron, mg	3.46
Carbohydrates, grams	9.43	Vitamin A, IU	4807.07	Potassium, mg	660.98
Fat, grams	6.76	Vitamin C, mg	9.86	Sodium, mg	704.02

Peanut Butter and Jelly Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Peanut butter, creamy	cup	1 1/3	3 1/4	6 1/2	13	19	
Jelly	cup	2/3	1 2/3	3 1/4	6 1/2	9 1/2	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (2 Tbs peanut butter, 1Tbs jelly on 2 slices of bread

Directions:

1. Start with clean hands, equipment, and work surface.
2. To assemble, spread 2 tablespoons peanut butter on 1 slice of bread.
3. Spread 1 tablespoon jelly on 2nd slice of bread.
4. Put two slices of bread together so that peanut butter and jelly match.
5. Repeat to create desired number of sandwiches. Hold at less than or equal to 41ºF until service.
6. Cover and store leftovers at less than or equal to 41ºF.

Calories	415.75	Cholesterol, mg	0	Calcium, mg	122.66
Protein, grams	15.36	Fiber, grams	5.97	Iron, mg	2.35
Carbohydrates, grams	50.43	Vitamin A, IU	3.00	Potassium, mg	372.75
Fat, grams	15.82	Vitamin C, mg	0.19	Sodium, mg	457.32

Macaroni and Cheese

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Cheese sauce	gal	1/2	1	2	4	6	
Cheddar cheese, shredded	lb	1	2 1/2	5	9 1/2	14 1/4	
Elbow macaroni, cooked and drained	lb AP	2	4 3/4	9 1/2	19	28 2/3	
Bread crumbs	cups	1 1/4	3 1/3	6 1/2	13	19 2/3	
Margarine, melted	oz	3	7 1/4	14 1/3	1 3/4 lb	2 2/3 lb	

Portion: 1 cup

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Pour cheese sauce in saucepot. Heat to a boil over medium-high heat, stirring occasionally.
3. Add cheese, stirring until well blended and smooth. Do not allow sauce to boil.
4. Add cooked macaroni to sauce. Scale into greased 12 x 20 x 2” hotel pans, 12 lb per pan for 25 servings. Mix bread crumbs and butter. Sprinkle on top.
5. Bake at 350ºF until heated through and the surface is crisp, approximately 30 minutes or until bake reaches a minimum internal temperature of 165ºF for 15 seconds.
6. Hold at greater than or equal to 135ºF or above until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	709.76	Cholesterol,mg	89.43	Calcium, mg	637.68
Protein, grams	27.78	Fiber, grams	3.06	Iron, mg	2.27
Carbohydrates, grams	50.29	Vitamin A, IU	1044.86	Potassium, mg	151.22
Fat, grams	40.21	Vitamin C, mg	0.65	Sodium, mg	1784.39

Stewed Tomatoes

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Tomatoes, diced	#10 can	2/3	2	4	8	12	
Sugar	cup	1/8	3/4	1.5	3	4.5	
Salt and pepper blend	Tbs	2/3	2	4	8	12	
Onion, minced	cup	1/2	1	2	4	6	
Margarine	cup	3 1/3 Tbs	1/2	1	2	3	
Cornstarch	cup	3 1/3 Tbs	1/2	1	2	3	
Water	cup	1/2	1	2	4	6	

Portion: 1 cup

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Sauté onions lightly in margarine.
3. Combine all ingredients except for cornstarch and water.
4. Heat to boiling. Do not scorch.
5. Mix cornstarch and water together until smooth. Pour into boiling tomatoes while stirring.
6. Hold at greater than or equal to 135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	90.10	Cholesterol, mg	0	Calcium, mg	42.73
Protein, grams	1.16	Fiber, grams	2.33	Iron, mg	0.06
Carbohydrates, grams	11.10	Vitamin A, IU	3.16	Potassium, mg	325.01
Fat, grams	3.52	Vitamin C, mg	16.94	Sodium, mg	72.24

Tuna Salad Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Tuna, canned in water, flakes	lb	1 1/4	3	6	12	18	
**Eggs, hard cooked	whole	2	5	9	18	27	
*Celery, chopped	cup	1/2	1 1/4	2 1/3	4 2/3	7	
*Onion, minced	cup	1 Tbs	2 Tbs	1/4	1/2	3/4	
*Pickle relish, drained	cup	3 Tbs	1/2	1	2	3	
Salad Dressing, Mayonnaise	cup	2/3	1 1/2	3 1/4	6 1/2	9 3/4	
*Lettuce Leaf	each	10	25	50	100	150	
Bread	slice	20	50	100	200	300	

Portion: (3 oz tuna on 2 slices bread)
****Only if available, properly cooked, cooled and stored
*Optional

Directions:
Note: Prepare vegetables on separate cutting board to prevent cross contamination. Prepare eggs on separate cutting board to prevent cross contamination.

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Peel and dice eggs.
3. Add vegetables, relish and eggs to tuna. Mix lightly.
4. Add mayonnaise to tuna mixture. Mix lightly to blend.
5. Chill at less than or equal to 41ºF.
6. Wash lettuce leaves and drain well.
7. Serve a 3 oz portion of tuna salad between 2 slices white bread with lettuce leaf.
8. Cut diagonally.
9. Cover and store leftovers at less than or equal to 41ºF.

Calories	375.19	Cholesterol, mg	54.84	Calcium, mg	175.51
Protein, grams	20.65	Fiber, grams	6.47	Iron, mg	4.92
Carbohydrates, grams	43.04	Vitamin A, IU	2206.9	Potassium, mg	788.29
Fat, grams	16.94	Vitamin C, mg	11.94	Sodium, mg	619.84

Turkey Broccoli Casserole

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Broccoli, frozen	lb	2	5	10	20	30	
Turkey breast or Turkey roll, cooked	lb	1	2.5	5	10	15	
Cheese sauce, canned	cup	1 1/3	3 1/2	7	14	21	
Celery soup, canned, condensed	cup	2/3	1 2/3	3 1/3	6 2/3	10	
Margarine, melted	cup	3 Tbs	1/2	1	2	3	

Portion: 6 oz

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Slice turkey in 3 oz portions.
3. Cook or steam broccoli until tender
4. Put 1/2 cup broccoli in the middle of the turkey slice.
5. Roll up, tuck the edges.
6. Arrange portions in 12 x 20 x 2” steam table pans.
7. Combine cheese sauce, cream of celery soup and margarine.
8. Heat and ladle over turkey rolls.
9. Bake at 375ºF for 30 minutes or until casserole reaches a minimum internal temperature of 165ºF for 15 seconds.
10. Hold at greater than or equal to 135ºF until service.
11. Dispose of leftovers, or if power is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	193.49	Cholesterol, mg	36.45	Calcium, mg	111.45
Protein, grams	13.51	Fiber, grams	2.99	Iron, mg	1.32
Carbohydrates, grams	9.28	Vitamin A, IU	1068.89	Potassium, mg	278.03
Fat, grams	11.02	Vitamin C, mg	36.55	Sodium, mg	615.48

Turkey and Cheese Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Turkey, sliced	lb	2	5	10	20	30	
Cheese, sliced	each	10	25	50	100	150	
*Tomato, slices	lb	1 1/3	3 1/2	7	14	21	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (2 oz turkey, 1 oz cheese, 2 slices bread)

*Optional

Directions:

1. Start with clean hands, equipment, and work surface.
2. Slice tomatoes on clean cutting board away from beef, poultry, fish and eggs.
3. Top one slice of bread with 2 oz of turkey, 1 oz of cheese and tomato slice.
4. Top with remaining slices of bread. Hold at less than or equal 41ºF until service.
5. Cover and store leftovers at less than or equal 41ºF.

Calories	319.48	Cholesterol, mg	58.00	Calcium, mg	301.40
Protein, grams	26.96	Fiber, grams	2.26	Iron, mg	3.70
Carbohydrates,grams	33.27	Vitamin A, IU	696.79	Potassium, mg	518.16
Fat, grams	7.74	Vitamin C, mg	7.92	Sodium, mg	1694.04

Chicken and Noodles

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Chicken, cooked	lb	1 1/4	3	6	12	18	
Noodles	lb	1/2	1	2 1/3	4 2/3	7	
Margarine	cup	1/4	2/3	1 1/3	2 2/3	4	
*Onions, chopped	cup	1 Tbs	2 1/2 Tbs	1/3	2/3	1	
Flour	cup	3 Tbs	2/3	1 3/8	2 3/4	4 1/8	
Salt	Tbs	1/2 tsp	1/2	1	2	3	
Poultry seasoning	Tbs	1/2 tsp	1/2	1	2	3	
Chicken stock	quart	1/2	1 1/4	2 1/2	5	7 1/2	
*Celery, chopped	cup	2 Tbs	1/4	1/2	1	1 1/2	
Cream of chicken soup	51 oz cans	12 3/4 oz	25 oz	1	2	3	

Portion: 6 oz (Note: Average portion contains approximately 2 oz cooked chicken)
*Optional

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Chop onions and celery on clean cutting board away from beef, poultry, fish and eggs. Set aside. Cut chicken into 1/2 inch pieces. Cook noodles according to package directions.
3. Melt margarine in large kettle. Add onions and celery, sauté until tender. Add flour, salt and poultry seasoning to onions. Stir until blended. Cook 5 minutes. Add stock or milk gradually, stirring constantly with wire whip. Cook until thickened.
4. Combine chicken, cooked noodles, sauce and cream of chicken soup.
5. Scale into 12 x 20 x 2" counter pans, 11 lb. 12 oz per pan. Bake at 350ºF for 30 minutes or until mixture reaches a minimum internal temperature of 165ºF for 15 seconds.
6. Hold at greater than or equal to 135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	226.84	Cholesterol, mg	59.93	Calcium, mg	18.50
Protein, grams	19.57	Fiber, grams	0.38	Iron, mg	1.56
Carbohydrates, grams	10.69	Vitamin A, IU	109.59	Potassium, mg	254.97
Fat, grams	10.24	Vitamin C, mg	0.12	Sodium, mg	427.30

Ham and Cheese Sandwich

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Ham, wafer sliced	lb	2/3	1 1/2	3	6	9	
Cheese, sliced	lb	1 1/4	3 1/8	6 1/4	12 1/2	18 3/4	
Bread	slice	20	50	100	200	300	

Portion: 1 sandwich (2 oz cheese, 1 oz ham, 2 slices bread)

Directions:

1. Start with clean hands, equipment, and work surface.
2. Place 2 oz of cheese and 1 oz of ham between two slices of bread.
3. Hold at less than or equal to 41ºF until service.
4. Cover and store leftovers at less than or equal to 41ºF.

Calories	422.02	Cholesterol, mg	68.63	Calcium, mg	103.04
Protein, grams	25.13	Fiber, grams	3.84	Iron, mg	1.77
Carbohydrates, grams	30.77	Vitamin A, IU	1.92	Potassium, mg	162.56
Fat, grams	21.09	Vitamin C, mg	0	Sodium, mg	1494.19

Hot Dog on a Bun

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Hot Dogs, beef	each	1 1/2	3 1/8	6 1/4	12 1/2	19	
Buns	each	20	50	100	200	300	

Portion: 1 hot dog on 1 bun

Directions:

1. Start with clean hands, equipment and work surface.
2. Steam hot dogs in baking pans until they reach a minimum internal temperature of 155ºF for 15 seconds. Hold at greater than or equal to 135ºF.
3. Portion 1 hot dog in bun.
4. Serve with sides of ketchup, mustard, and relish.
5. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	284.47	Cholesterol, mg	30	Calcium, mg	69.40
Protein, grams	10.71	Fiber, grams	0.87	Iron, mg	2.37
Carbohydrates, grams	25.16	Vitamin A, IU	51.57	Potassium, mg	58.80
Fat, grams	16.62	Vitamin C, mg	0.63	Sodium, mg	778.09

Baked Beans

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pork & Beans	#10 can	1/2	1 1/4	2 1/3	4 2/3	7	
Brown Sugar, packed	cup	2 Tbs	6 Tbs	3/4	1 1/2	2 1/4	
Mustard	Tbs	1/3	1/2	1	2	3	
*Catsup	cup	1/2	1 1/4	2 1/2	5	7 1/2	
Onions, chopped	cup	1/4	1/2	1	2	3	

Portion: 1/2 cup

*Optional

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Chop onions.
3. Pour pork and beans in baking pans.
4. Mix remaining ingredients, stir into beans.
5. Bake uncovered in oven for 2 hours or until a minimum internal temperature of 165ºF is reached for 15 seconds.
6. Hold at greater than or equal to 135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	154.55	Cholesterol, mg	10.72	Calcium, mg	88.46
Protein, grams	7.92	Fiber, grams	6.19	Iron, mg	4.99
Carbohydrates, grams	31.34	Vitamin A, IU	129.92	Potassium, mg	459.65
Fat, grams	1.12	Vitamin C, mg	4.72	Sodium, mg	670.16

General Recipes

The following recipes require minimal cooking and preparation. They are provided for use in the facility depending on the availability of products in house. These recipes may be followed to help use perishable foods on hand or utilize the staples on your shelves. Use these recipes as guides. Use whatever ingredients you have available for each recipe.

When using packaged or prepared food items, remember to follow the instructions on the packages for appropriate preparation and serving sizes.

Recipes:

- Beefy Macaroni Casserole
- Chicken, Barbeque
- Chicken and Broccoli Casserole
- Chicken Tenders
- Meatloaf
- Pork Chops, Baked
- Pork Chops, Barbeque
- Pork Roast
- Roast Beef Sandwich, Open Faced
- Tuna Noodle Casserole
- Turkey, Roasted
- Noodles, Buttered
- Pasta
- Potatoes, Baked
- Potatoes, Mashed
- Potato Wedges
- Potatoes, Sweet – Baked
- Vegetables, Mixed
- Fruit

Beefy Macaroni Casserole

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Elbow macaroni	lb	2/3	1 1/2	3	6	9	
Ground beef, lean	lb	1 3/4	4 1/2	9	18	27	
Onions, chopped	lb	3/8	7/8	1 3/4	3 1/2	5 1/4	
Tomato soup, condensed	Cans (50 oz)	1/2	1 1/4	2 1/2	5	7 1/2	
Water	oz	6	15	30	60	90	
Worcestershire sauce	oz	1 3/4	4 1/2	9	18	27	
Prepared mustard	cup	1/8	1/4	1/2	1	1 1/2	
Pepper	Tbs	1/8	1/4	1/2	1	1 1/2	

Portion: 1 cup

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Cook macaroni without adding salt and drain. Set aside.
3. In a large soup pot, cook beef and onions. Cook until internal temperature is 165ºF or higher for 15 seconds and beef is brown stirring to separate meat. Drain fat.
4. Add soup, water, Worcestershire sauce, mustard, pepper and macaroni. Heat until internal temperature 165 or higher for 15 seconds, stirring often.
5. Hold at greater than or equal to 135ºF until service.
6. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	307.18	Cholesterol, mg	56.36	Calcium, mg	37.18
Protein, grams	16.69	Fiber, grams	1.83	Iron, mg	2.74
Carbohydrates,grams	22.54	Vitamin A, IU	303.97	Potassium, mg	695.58
Fat, grams	14.06	Vitamin C, mg	10.36	Sodium, mg	405.20

Chicken, Barbecue

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Chicken breast, boneless, skinless	3 oz pieces	10	25	50	100	150	
Barbeque sauce, bottled	cup	1	2.5	5	10	15	

Portion: 3 oz

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening.
2. Place chicken on hot barbecue grill.
3. Baste with barbecue sauce.
4. Turn chicken every 10 minutes.
5. Baste with additional barbeque sauce.
6. Cook until chicken reaches a minimum internal temperature of 165ºF for 15 seconds.
7. Hold at greater than or equal to 135ºF until service.
8. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Note: Purchase barbecue sauce of choice.

Calories	143.00	Cholesterol, mg	60.00	Calcium, mg	8.25
Protein, grams	19.21	Fiber, grams	0.23	Iron, mg	0.52
Carbohydrates, grams	10.19	Vitamin A, IU	56.00	Potassium, mg	338.01
Fat, grams	2.06	Vitamin C, mg	0.15	Sodium, mg	296.76

Chicken and Broccoli Casserole

Ingredients	Measurement	SERVINGS					
		10	25	50	100	150	Custom Serving
Frozen broccoli cuts	pounds	1 1/2	3 3/4	7 1/2	15	22 1/2	
Corkscrew macaroni, uncooked	pounds, AP	2/3	1 1/2	3	6	9	
Cream of mushroom soup, condensed, 98% fat free	cans (50 oz)	1/2	1	2	4	6	
Milk, 2% fat	gallon	1/8	3/8	3/4	1 1/2	2 1/4	
Cooked chicken, diced, 100% white	pounds	1 1/4	3 1/8	6 1/4	12 1/2	18 3/4	

Portion: 1 1/4 cup

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Cook broccoli according to package directions. Drain.
3. Cook macaroni according to package directions. Rinse and drain.
4. In large saucepot, combine soup and milk. Heat to boiling stirring constantly.
5. Add chicken, broccoli and macaroni. Stir well. Heat until internal temperature 165ºF or higher for 15 seconds, stirring often.
6. Hold at greater than or equal to 135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	252.75	Cholesterol, mg	54.09	Calcium, mg	95.99
Protein, grams	22.70	Fiber, grams	3.08	Iron, mg	1.62
Carbohydrates, grams	19.88	Vitamin A, IU	809.79	Potassium, mg	356.43
Fat, grams	8.33	Vitamin C, mg	27.37	Sodium, mg	567.61

Chicken Tenders

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Chicken tenders, breast meat, w/o bone or skin, purchased frozen	pieces	30	75	150	300	450	

Portion: 3 pieces

Directions:

1. Start with clean hands, equipment and work surface.
2. Cook chicken tenders according to package directions. Center should reach a minimum internal temperature of 165ºF for 15 seconds.
3. Hold at greater than or equal to 135ºF until service.
4. Serve with sides of honey mustard, barbeque sauce, or preferred condiment.
5. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	200.07	Cholesterol, mg	31.59	Calcium, mg	0
Protein, grams	15.8	Fiber, grams	1.05	Iron, mg	0
Carbohydrates, grams	12.64	Vitamin A, IU	0	Potassium, mg	0
Fat, grams	9.48	Vitamin C, mg	0	Sodium, mg	505.44

Meatloaf

Ingredients	Measurement	SERVINGS 10	25	50	100	150	Custom Serving
Ground beef, 80% lean	lb	2 1/2	6	12	24	36	
Breadcrumbs, soft	cup	1 cup + 2 Tbs	3	6	12	18	
Milk	cup	10 T	1 1/2	3	6	9	
Eggs	whole	2	5	9	18	27	
Onions, chopped	cup	2 Tbs	1/3	2/3	1 1/3	2	
Salt	Tbs	1 tsp	2 tsp	1 1/2	3	4 1/2	
Black pepper	tsp	Dash	1/2	1	2	3	

Portion: 3 oz

Directions:

1. Start with clean hands, equipment and work surface.
2. Chop onions on clean cutting board away from beef, poultry, fish and eggs.
3. Mix all ingredients on low speed until blended, using flat beater. Do not over mix.
4. Press meat mixture into 5 x 9” pans – 3 lb 4 oz per pan.
5. Bake at 325ºF for 1 1/2 hours.
6. Meatloaf may also be made in a 12 x 20 x 4” pan. Press mixture into pan. Divide into 2 loaves (per 50 servings). Increase baking time to 2 hours. Meatloaf should reach an internal temperature of 165ºF for 15 seconds.
7. Hold at greater than or equal to 135ºF until service.
8. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	353.93	Cholesterol, mg	107.89	Calcium, mg	66.50
Protein, grams	22.06	Fiber, grams	0.70	Iron, mg	2.97
Carbohydrates, grams	11.29	Vitamin A, IU	80.66	Potassium, mg	354.21
Fat, grams	20.15	Vitamin C, mg	0.07	Sodium, mg	370.42

Pork Chops, Baked

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pork chop, boneless raw	lb	2 lb 8 oz	6 lb 4 oz	12 lb 8 oz	25	37 lb 8 oz	
Flour	cup	3/4	1	2	4	6	
Vegetable oil	cup	2 tsp	2 Tbs	1/4	1/2	3/4	
Salt	Tbs	1 tsp	2 tsp	1 1/2	3	4 1/2	
Black pepper	tsp	1/4	1/2	1	2	3	

Portion: 3 oz

Directions:

1. Start with clean hands, equipment, and work surface.
2. Mix flour, oil, salt and pepper.
3. Dredge chops in flour mixture.
4. Place on well-greased sheet pans.
5. Bake at 350ºF for 1 ¼ hours until pork chops reach a minimum internal temperature of 155ºF for 15 seconds.
6. Hold at greater than or equal to135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	183.01	Cholesterol, mg	66.86	Calcium, mg	7.92
Protein, grams	22.03	Fiber, grams	0.15	Iron, mg	0.74
Carbohydrates, grams	3.84	Vitamin A, IU	4.22	Potassium, mg	378.14
Fat, grams	7.48	Vitamin C, mg	0	Sodium, mg	51.19

Pork Chops, Barbecued

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pork chop, boneless raw	lb	2 lb 8 oz	6 lb 4 oz	12 lb 8 oz	25	37 lb 8 oz	
Barbecue sauce, bottled	cup	1 1/3	3 ¼	6 1/2	13	19 1/2	

Portion: 3 oz

Directions:

1. Start with clean hands, equipment, and work surface. Wipe off top of each can before opening.
2. Heat barbecue sauce through until hot, approximately 35 to 40 minutes. Mixture should be 160º to 180ºF. Set aside
3. Place chops on greased baking sheets. Sprinkle with salt (if desired).
4. Bake chops in 450ºF oven for 12 to 15 minutes. Transfer to counter pans.
5. Pour barbecue sauce over chops.
6. Bake at 325ºF for 1 1/2 hours or until chops reach a minimum internal temperature of 155ºF for 15 seconds.
7. Hold at greater than or equal to 135ºF until service.
8. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	217.06	Cholesterol, mg	66.86	Calcium, mg	18.95
Protein, grams	21.80	Fiber, grams	0.33	Iron, mg	0.73
Carbohydrates, grams	14.79	Vitamin A, IU	85.24	Potassium, mg	456.37
Fat, grams	6.38	Vitamin C, mg	0.22	Sodium, mg	420.40

Pork Roast

Portion 2 oz		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pork roast, loin,	lb AP	2 2/3	6 1/2	13	26	39	
Bay leaves	whole	1	2	3	6	9	
Onion, sliced	medium	1/4	1/2	1	2	3	
Water	cup	1/2	1	2 1/3	4 2/3	7	
Seasoned salt	to taste						

Portion 3 oz		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pork roast, loin,	lb AP	4	10	19 2/3	39 1/3	59	
Bay leaves	whole	1	2	5	10	15	
Onion, sliced	medium	1/4	2/3	1 1/3	2 2/3	4	
Water	cup	2/3	1 3/4	3 1/2	7	10 1/2	
Seasoned salt	to taste						

Directions:

1. Start with clean hands, equipment and work surface.
2. Slice onion on clean cutting board. Set aside.
3. Place meat, fat side up, on a rack in an open roasting pan.
4. Insert a meat thermometer in roast so that the bulb rests in the center of the cut but does not rest on bone or fat.
5. Season the meat with seasoned salt.
6. Place bay leaves and sliced onions on top of pork.
7. Pour water in roaster.
8. Roast meat covered for the first hour.
9. Remove cover, roast meat at 325°F for 30 to 35 minutes per pound until internal temperature reaches 145°F for 3 minutes.
10. Allow roast to set in warm place for 15 to 20 minutes before slicing.
11. Hold at greater than or equal to 135°F until service.
12. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Pork Roast (continued)

NOTE: 1 lb AP boneless pork loin yields approximately 8 1/2 oz. cooked meat.
If using roast with bone use 1 1/3 times measurement (17 1/4 lbs for 50 portions).

2 oz Portion

Calories	200.00	Cholesterol, mg	56.61	Calcium, mg	5.47
Protein, grams	18.80	Fiber, grams	0.04	Iron, mg	0.69
Carbohydrates, grams	0.22	Vitamin A, IU	7.81	Potassium, mg	365.46
Fat, grams	13.22	Vitamin C, mg	0.45	Sodium, mg	39.72

3 oz Portion

Calories	302.31	Cholesterol, mg	85.57	Calcium, mg	8.31
Protein, grams	28.42	Fiber, grams	0.07	Iron, mg	1.04
Carbohydrates, grams	0.33	Vitamin A, IU	12.12	Potassium, mg	552.40
Fat, grams	19.99	Vitamin C, mg	0.68	Sodium, mg	60.03

Roast Beef Sandwich, Open Faced

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Beef, roast	lb AP	2 1/2	6	12	24	36	
Beef stock	quart	1/3	3/4	1 1/2	3	4 1/2	
Bread	slice	10	25	50	100	150	
Gravy	gallon	1/4	1/2	1	2	3	

Portion: 2 oz meat, 1 slice bread, 2 oz gravy

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Prepare beef: Place the meat, fat side up, on a rack in open roasting pans, approximately 10 lb/pan. As the fat melts and runs down over the meat, it bastes the roast and adds flavor. Season the roast with salt and pepper. Do not add water and do not cover. Bake at 325ºF for 3¾ to 4 hours or until an internal temperature of 155ºF is reached for 3 minutes. NOTE: Roast will continue to cook for 15 to 20 minutes after being removed from oven. If cooking in a convection oven, the temperature should be dropped 50º to minimize drying of the roast's surface by moving air.
3. Slice roast into 2 oz portions.
4. Heat stock to 190ºF. Pour over meat.
5. Cover with aluminum foil and place in oven to keep warm at less than or equal to 135ºF.
6. To serve place 2 oz meat on each side of bread.
7. Top each slice with 2 oz gravy.
8. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	267.65	Cholesterol, mg	75.93	Calcium, mg	65.44
Protein, grams	27.27	Fiber, grams	0.78	Iron, mg	3.12
Carbohydrates, grams	15.29	Vitamin A, IU	1.11	Potassium, mg	445.05
Fat, grams	8.61	Vitamin C, mg	0.05	Sodium, mg	246.34

Tuna Noodle Casserole

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Noodles	lb	10 oz	1 lb 8 oz	3	5 lb 8 oz	8 lb 8 oz	
Oil, vegetable	oz	1/5	1/2	1	2	3	
Tuna, chunk	lb	1	2 lb 8 oz	5	10	15	
Margarine	cup	1/5	1/2	1	2	3	
Flour, all purpose	cup	1/5	1/2	1	2	3	
Garlic, powdered	tsp	dash	1/4	1/2	1	1 1/2	
Milk, 2% fat	gal	1 ½ cup	4 cup	1/2	1	1 1/2	
Cheese, cheddar, shredded	lb	7 oz	1	2	4	6	

Portion: 6 oz

Directions:

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Add oil to boiling water and cook noodles according to package directions. Drain. Flake tuna and add to noodles. Set aside.
3. Melt margarine. Stir in flour and seasonings. Stir until smooth.
4. Add milk gradually stirring constantly. Cook until thickened. Add cheese and stir until blended. Add sauce to tuna and noodles. Stir gently until well blended.
5. Divide evenly into greased 12 x 20 x 2" baking pans, 13 lb per pan.
6. Bake at 350ºF until mixture is heated through and cheese is melted, 30 to 45 minutes to an internal temperature of 165°F or higher.
7. Serve ¾ cup using a 6 oz. ladle.
8. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	272.60	Cholesterol, mg	58.15	Calcium, mg	189.35
Protein, grams	17.97	Fiber, grams	0.89	Iron, mg	1.9
Carbohydrates, grams	22.05	Vitamin A, IU	335.62	Potassium, mg	210.53
Fat, grams	11.35	Vitamin C, mg	0.07	Sodium, mg	282.18

Turkey, Roasted

Portion: 2 oz		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Turkey, boneless, roll, cooked	lb	2	5	9 1/4	18 1/2	27 3/4	

Portion: 3 oz		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Turkey, boneless, roll, cooked	lb	3	7	14	28	42	

Directions:

1. Start with clean hands, equipment and work surface.
2. Place roll on rack in an open pan. Roast at 325ºF until a meat thermometer inserted in the center registers 165ºF for 15 seconds or follow cooking directions on the package.
3. Hold at greater than or equal to 135ºF until service.
4. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Cooked Turkey Breast – Slice in portions. Place in steam table pan. Prepare chicken broth; pour over turkey. Heat turkey until it registers greater than 165ºF for 15 seconds. (Oven 300 to 325ºF)

2 oz portion

Calories	125.03	Cholesterol, mg	46.15	Calcium, mg	26.85
Protein, grams	15.22	Fiber, grams	0	Iron, mg	1.13
Carbohydrates, grams	1.78	Vitamin A, IU	0	Potassium, mg	226.57
Fat, grams	5.14	Vitamin C, mg	0	Sodium, mg	400.28

3 oz portion

Calories	189.24	Cholesterol, mg	69.85	Calcium, mg	40.64
Protein, grams	23.04	Fiber, grams	0	Iron, mg	1.71
Carbohydrates, grams	2.69	Vitamin A, IU	0	Potassium, mg	342.92
Fat, grams	7.77	Vitamin C, mg	0	Sodium, mg	605.83

Noodles, Buttered

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Noodles	lb	14 oz	1 lb 10 oz	3 lb 2 oz	6 lb 4 oz	9 lb 6 oz	
Water	gallon	1	2 1/2	5	10	15	
*Vegetable oil	Tbs	1/2	1 1/2	3	6	9	
Margarine	cup	1/5	1/2	1	2	3	

Portion: 1/2 cup

* Optional

Directions
1. Start with clean hands, equipment and work surface.
2. Bring water to a rapid boil and add oil.
3. Add pasta gradually while stirring.
4. Return to boiling.
5. Cook uncovered at a fast boil until tender 5 to 10 minutes.
6. Stir occasionally to prevent sticking.
7. Test for doneness. Pasta should still be firm to the bite.
8. Drain.
9. Add melted margarine. Hold at 135ºF until service.
10. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	143.89	Cholesterol, mg	23.81	Calcium, mg	10.06
Protein, grams	4.02	Fiber, grams	0.94	Iron, mg	1.14
Carbohydrates, grams	20.24	Vitamin A, IU	17.58	Potassium, mg	69.99
Fat, grams	4.90	Vitamin C, mg	0	Sodium, mg	35.62

Pasta

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Pasta	lb	1	2 1/2	5	10	15	
Water	gallon	1	2 1/2	5	10	15	
*Vegetable oil	Tbs	1/2	1 1/2	3	6	9	

Portion: 4 oz

* Optional

Directions

1. Start with clean hands, equipment and work surface.
2. Bring water to a rapid boil. Add salt and oil. Add pasta gradually while stirring.
3. Return to boiling. Cook uncovered at a fast boil until tender 5 to 10 minutes. Stir occasionally to prevent sticking.
4. Test for doneness. Pasta should still be firm to the bite. Drain. Hold at greater than or equal to 135ºF until service.
5. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Notes:

- Weight of cooked pasta will vary depending on length of time cooked.
- Additional oil is optional. It helps prevent foaming and sticking.
- Pasta is done when it is tender but firm. If pasta is to be used as an ingredient in a recipe requiring further cooking, under cook slightly.
- If product is not to be served immediately, drain and cover with cold water. Stir to aid in cooling. When pasta is cold, drain off water and toss lightly with a little vegetable oil. This will keep pasta from sticking or drying out. Cover tightly and store in refrigerator at less than or equal to 41ºF. To reheat, put pasta in a colander; immerse in rapidly boiling water just long enough to heat through to 165ºF for 15 seconds. DO NOT CONTINUE TO COOK.

Calories	79.19	Cholesterol, mg	0	Calcium, mg	3.18
Protein, grams	2.63	Fiber, grams	0.82	Iron, mg	0.58
Carbohydrates, grams	14.00	Vitamin A, IU	0	Potassium, mg	19.96
Fat, grams	1.14	Vitamin C, mg	0	Sodium, mg	0.45

Potatoes, Baked

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Baking potatoes	uniform	10	25	50	100	150	
Oil, vegetable	cup	2 Tbs	1/4	1/2	1	2 1/2	

Portion: 1 potato

Directions

1. Start with clean hands, equipment, and work surface.
2. Scrub potatoes and remove blemishes.
3. Rub or brush lightly with oil. Place on baking sheets.
4. Bake at 400ºF for 1 to 1 ½ hours or until tender.
5. Hold at greater than or equal to 135ºF until service.
6. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	85.82	Cholesterol, mg	0	Calcium, mg	34.02
Protein, grams	2.91	Fiber, grams	2.84	Iron, mg	3.67
Carbohydrates, grams	14.11	Vitamin A, IU	0	Potassium, mg	468.34
Fat, grams	2.35	Vitamin C, mg	12.93	Sodium, mg	11.34

Potatoes, Mashed

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Instant/dehydrated potatoes	lb	1/2	1 1/4	2 1/2	5	71/2	
Milk, hot	quart	1 3/4 cup	1	2 1/4	4 1/2	6 3/4	
Margarine	lb	1 1/2 Tbs	1/4	1/2	1	1 1/2	
Salt	Tbs	3/4	1 1/2	3	6	9	

Portion: ½ cup

Directions

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Measure boiling water and salt in steam table pan.
3. Add potatoes while stirring from edges inward.
4. Use a wire whip. Whip to desired consistency.
5. Hold at greater than or equal to 135ºF until service.
6. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	139.29	Cholesterol, mg	3.51	Calcium, mg	65.65
Protein, grams	3.40	Fiber, grams	1.61	Iron, mg	0.27
Carbohydrates, grams	21.61	Vitamin A, IU	92.09	Potassium, mg	231.41
Fat, grams	4.44	Vitamin C, mg	8.83	Sodium, mg	74.07

Potato Wedges

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Potatoes	small	10	25	50	100	150	
Vegetable oil spray	as needed						
Seasoned salt	cup	1/8	1/4	1/2	1	1 1/2	

Portion: 8 wedges

Directions

1. Start with clean hands, equipment and work surface.
2. Cut each potato into 8 wedges on clean cutting board away from beef, poultry, fish and eggs.
3. Spread wedges on baking dish.
4. Spray lightly with vegetable oil spray and sprinkle with seasoned salt.
5. Bake at 350ºF for 15 to 20 minutes.
6. Hold at greater than or equal to 135ºF until service.
7. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	65.77	Cholesterol, mg	0	Calcium, mg	34.02
Protein, grams	2.91	Fiber, grams	2.84	Iron, mg	3.67
Carbohydrates, grams	14.11	Vitamin A, IU	0	Potassium, mg	468.34
Fat, grams	0.08	Vitamin C, mg	12.93	Sodium, mg	775.38

Potatoes, Sweet – Baked, Canned

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Sweet Potatoes, canned	qt	5 ½ cup	3 ½ qt	7	14	21	
Margarine, melted	cup	1/4	1/2	1	2	3	

Portion: 1/2 cup

Directions

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener.
2. Heat to serving temperature.
3. Pour melted margarine over potatoes.
4. Hold at greater than or equal to 135ºF until service.

Calories	151.07	Cholesterol, mg	0	Calcium, mg	18.80
Protein, grams	1.41	Fiber, grams	3.29	Iron, mg	1.05
Carbohydrates, grams	27.87	Vitamin A, IU	10064.12	Potassium, mg	212.66
Fat, grams	3.80	Vitamin C, mg	11.85	Sodium, mg	72.47

Potatoes, Sweet – Baked, Fresh

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Sweet Potatoes, raw	qt	5 ½ cup	3 ½ qt	7	14	21	
Oil, vegetable	oz	1 2/3	4	8	16	24	

Portion: 1/2 cup

Fresh Potatoes

1. Start with clean hands, equipment, and work surface.
2. Scrub sweet potatoes. Rub or brush lightly with oil.
3. Place on baking pans. Prick each potato with a knife or fork.
4. Bake at 400°F for 60 to 90 minutes or until tender.
5. Can be served with margarine if desired.
6. Hold at greater than or equal to 135°F until service.
7. Dispose of leftovers, or if power is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	90.27	Cholesterol, mg	0	Calcium, mg	24.49
Protein, grams	1.28	Fiber, grams	2.45	Iron, mg	0.50
Carbohydrates, grams	16.43	Vitamin A, IU	11583.40	Potassium, mg	275.15
Fat, grams	2.29	Vitamin C, mg	1.96	Sodium, mg	44.91

Vegetables, Mixed, Frozen

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Vegetables, frozen	lb	2 lb 8 oz	6 lb 4 oz	12 ½	25	37 1/2	
Margarine, melted	oz	1	2 1/2	5	10	15	

Portion: 1/2 cup

Directions

1. Start with clean hands, equipment and work surface.
2. Place vegetables in boiling water and cook until tender, usually 10-20 minutes depending on the vegetable.
3. Drain mixed vegetables.
4. Pour melted margarine and salt as needed over vegetables.
5. Hold at greater than or equal to 135ºF until service.
6. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	94.04	Cholesterol, mg	0	Calcium, mg	28.44
Protein, grams	3.25	Fiber, grams	4.99	Iron, mg	0.93
Carbohydrates, grams	14.86	Vitamin A, IU	4850.12	Potassium, mg	192.16
Fat, grams	2.35	Vitamin C, mg	3.63	Sodium, mg	58.23

Vegetables, Mixed, Canned

		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Vegetables, canned	lb	2 lb 8 oz	6 lb 4 oz	12 ½	25	37 1/2	
Margarine, melted	cup	1/4	1/2	1 1/4	2 1/2	3 3/4	

Portion: 1/2 cup

Directions

1. Start with clean hands, equipment and work surface. Wipe off top of each can before opening with can opener and prepare according to package directions.
2. Pour melted margarine and salt as needed over vegetables.
3. Hold at greater than or equal to 135ºF until service.
4. Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

Calories	95.72	Cholesterol, mg	0	Calcium, mg	30.79
Protein, grams	2.95	Fiber, grams	3.40	Iron, mg	1.20
Carbohydrates, grams	10.54	Vitamin A, IU	13212.23	Potassium, mg	331.00
Fat, grams	4.67	Vitamin C, mg	5.67	Sodium, mg	279.30

Fruit

Portion: 1/2 cup		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Fruit, canned	#10 can	1/3	1	2	4	6	

Portion: 3/4 cup		SERVINGS					
Ingredients	Measurement	10	25	50	100	150	Custom Serving
Fruit, canned	#10 can	2/3	1 1/2	3	6	9	

Directions

1. Wipe off top of each can before opening. Start with clean hands, equipment and work surface.
2. Portion into individual serving dishes.
3. Chill at less than or equal to 41ºF. Cover and store leftovers at less than or equal to 41ºF.

Approximate Nutritional Values:

1/2 cup

Calories	56.39	Cholesterol, mg	0	Calcium, mg	9.81
Protein, grams	0.56	Fiber, grams	1.23	Iron, mg	0.26
Carbohydrates, grams	14.54	Vitamin A, IU	373.91	Potassium, mg	116.46
Fat, grams	0.01	Vitamin C, mg	3.31	Sodium, mg	4.90

3/4 cup

Calories	81.21	Cholesterol, mg	0	Calcium, mg	14.12
Protein, grams	0.81	Fiber, grams	1.77	Iron, mg	0.37
Carbohydrates, grams	20.94	Vitamin A,IU	538.44	Potassium, mg	167.71
Fat, grams	0.01	Vitamin C, mg	4.77	Sodium, mg	7.06

Additional Recipe Ideas

Peanut Butter Balls
Mix thoroughly: Equal parts of smooth peanut butter and dry milk, sweeten with honey or jam. Form into 1" balls (using clean, gloved hands). Maintain temperature at 41°F or lower.

Note: Do not serve to those on puree, mechanical soft, or carbohydrate controlled diets.

Layered Pudding
Layer 1/2 cup pudding and 1/2 cup crisped rice or other cereal. Top with whipped cream if available. Maintain temperature at 41°F or lower.

Notes: Do not serve to consistency altered diets. Use sugar free pudding if desired.

Chocolate Milk
Mix 8 oz fresh or reconstituted milk with chocolate syrup or powder. (May also use strawberry flavor). Maintain temperature at 41°F or lower.

Note: Use sugar free flavored syrup or powder for people on diets for diabetes if desired.

Mixed Vegetable Salad
Gently toss canned mixed vegetables with bottled Italian dressing. May also mix in cooked pasta. Cool and maintain temperature at 41°F or lower.

Baked Bean Casserole
Mix canned baked beans with drained canned green beans, wax beans, navy beans, butter beans and/or canned meat. Heat to internal temperature of 155ºF for a minimum of 15 seconds. Serve at greater than or equal to 135ºF.

Dispose of leftovers, or if refrigeration is available and food can be reheated safely, cool and reheat following guidelines on pages 83-86.

References and Resources

References

1. Fires in Health Care Facilities. National Fire Protection Association Web site. 2018. http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-by-property-type/health-care-facilities/fires-in-health-care-facilities. Accessed January 3, 2018

2. Office of Inspector General. Nursing Home Emergency Preparedness and Response During Recent Hurricanes. Department of Health and Human Services August 2006. http://www.midatlanticmda.org/sites/default/files/Emergency_Preparedness_2006_OIG_Suggested_provisions.pdf. Accessed January 3, 2018.

3. U.S. Department of Health and Human Services Office of Inspector General. Gaps Continue to Exist in Nursing Home Preparedness and Response During Disasters: 2007-2010. OEI-06-09-00270. https://oig.hhs.gov/oei/reports/oei-06-09-00270.pdf. Accessed January 3, 2018.

4. About OSHA. United States Department of Labor Occupational Safety and Health Administration Web site. https://www.osha.gov/about.html. Accessed January 3, 2018.

5. Emergency Preparedness and Response. U.S. Department of Labor Occupational Safety & Health Administration Web site. http://www.osha.gov/SLTC/emergencypreparedness/index.html. Accessed January 3, 2018.

6. Occupational Safety and Health Administration. OSHA Instruction Memo. Compliance Policy for Emergency Action Plans and Fire Prevention Plans. Effective Date July 9, 2002. http://www.osha.gov/OshDoc/Directive_pdf/CPL_2-1_037.pdf. Accessed January 3, 2018.

7. U.S. Department of Health and Human Services Center for Medicaid and Medicare Services. State Operations Manual: Appendix PP, Guidance to Surveyors for Long-Term Care Facilities. (Rev.168, 03-08-17). https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/som107ap_pp_guidelines_ltcf.pdf. Accessed January 3, 2018.

8. U.S. Department of Health and Human Services Center for Medicaid and Medicare Services. State Operations Manual: Appendix Z-Emergency Preparedness for All Provider and Certified Supplier Types. Interpretive Guidance. Rev.xxxx,TBD). https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-17-29.pdf. Accessed January 3, 2018.

9. Emergency Preparedness Rule. Centers for Medicare and Medicaid Services Web site. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Emergency-Prep-Rule.html. Accessed January 3, 2018.

10. Integrated Public Alert Warning System. FEMA Web site. https://www.fema.gov/integrated-public-alert-warning-system. Accessed January 3, 2018.

11. NOAA Weather Radio All Hazards. National Oceanic and Atmospheric Administration Web site. http://www.nws.noaa.gov/nwr. Accessed January 3, 2018.

12. Campell R. Structure Fires in Health Care Facilities. National Fire Protection Association. http://www.nfpa.org/news-and-research/fire-statistics-and-reports/fire-statistics/fires-by-property-type/health-care-facilities/fires-in-health-care-facilities Accessed May 16, 2017.

13. Center for Medicare & Medicaid Services Survey and Certification Letter Ref: S&C-13-55-LSC: Enforcement actions – Installation of Sprinkler Systems in Nursing Homes – August 13, 2013 Deadline, found at http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertificationGenInfo/Downloads/Survey-and-Cert-Letter-13-55.pdf. Accessed January 3, 2018.

14. FireWise Guidelines. Protect Your Home, Property, and Forest from Wildfire. Colorado State University Web site. http://static.colostate.edu/client-files/csfs/pdfs/wholenotebook.pdf. Accessed May 16, 2017.

15. Earthquakes. Centers for Disease Control and Prevention Web site. https://www.cdc.gov/disasters/earthquakes/index.html. Accessed January 3, 2018.

16. Bioterrorism Agents/Disease. Centers for Disease Control and Prevention Web site: https://emergency.cdc.gov/agent/agentlist.asp. Accessed January 3, 2018.

17. Smith TJ, Roxas-Duncan VI, Smith LA (2012) Botulinum Neurotoxins as Biothreat Agents. *J Bioterr Biodef. 2012.* https://www.omicsonline.org/botulinum-neurotoxins-as-biothreat-agents-2157-2526.S7-003.pdf. Accessed June 19, 2017.

18. Schneider KR, Chang A, Goodrich RM. Preventing Foodborne Illness: Clostridium botulinum. University of Florida IFAS Extension, 2013. Available at http://edis.ifas.ufl.edu/fs104. Accessed January 3, 2018.

19. Chemical Emergency Overview. Emergency Preparedness and Response. Centers for Disease Control and Prevention Web site. https://emergency.cdc.gov/chemical/overview.asp. Updated April 1, 2016. Accessed January 3, 2018.

20. Radiation Emergencies. Centers for Disease Control and Prevention Web site. https://emergency.cdc.gov/radiation/. Accessed January 3, 2018.

21. Radioactive Contamination and Radiation Exposure Fact Sheet. Emergency Preparedness and Response. Centers for Disease Control Web site. https://emergency.cdc.gov/radiation/pdf/contamination.pdf. Accessed June 11, 2017.

22. Water. FEMA Web site. https://www.ready.gov/water. Accessed January 3, 2018.

23. Water Treatment. American Red Cross Web site. http://www.redcross.org/prepare/disaster/water-safety/water-treatment. Accessed January 3, 2018.

24. Managing Water. FEMA Website: http://www.ready.gov/managing-water. Accessed January 3, 2018.

25. U.S. Department of Agriculture Food Safety Inspection Service. Keeping Food Safe During an Emergency. http://www.fsis.usda.gov/wps/wcm/connect/d3506874-2867-4190-a941-d511d3fcae71/Keep_Your_Food_Safe_During_Emergencies.pdf?MOD=AJPERES. Accessed January 3, 2018.

26. Keeping Food Safe During an Emergency. United States Department of Agriculture Food Safety Inspection Service. Food Safety Information Web site https://www.fsis.usda.gov/wps/wcm/connect/c91280f8-d8db-4ebe-99e9-a0f1aa7d466b/Keeping_Food_Safe_During_an_Emergency.pdf?MOD=AJPERES. Accessed January 3, 2018.

27. U.S. Department of Health and Human Services, U.S. Public Health Service, Food and Drug Administration. Food Code 2013. http://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf. Accessed June 11, 2017.

28. Dorner, B. *Policy & Procedure Manual: Food and Nutrition Guidelines for Health Care.* Dunedin FL: Becky Dorner & Associates, Inc. 2017. http://www.beckydorner.com/products/59. Accessed April 5, 2018.

Resources for More Information

- U.S. Department of Health and Human Services and CDC. Emergency Preparedness for Older Adults. Identifying Vulnerable Older Adults. Legal Options for Increasing Their Protection During All-Hazards Emergencies Available at http://www.cdc.gov/aging/emergency/.
- The Joint Commission. http://www.jointcommission.org/.
- National Emergency Management Association (NEMA).http://www.nemaweb.org.
- Federal Emergency Management Agency (FEMA). http://www.fema.gov.
- National Fire Safety Association. Safety Tip Sheets. http://www.nfpa.org/safety-information/safety-tip-sheets..
- American Red Cross. How to Prepare for Emergencies. http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready.
- American Red Cross. Flash Floods and Floods: The Awesome Power. http://www2.fiu.edu/orgs/w4ehw/flood%20guide%20noaa.pdf.
- APIC Bioterrorism Task Force, CDC Hospital Infections Program Bioterrorism Working Group. Bioterrorism Readiness Plan: A Template for Healthcare facilities. http://emergency.cdc.gov/bioterrorism/pdf/13apr99APIC-CDCBioterrorism.pdf.
- Build a Kit. Ready.gov. http://www.ready.gov/build-a-kit.
- Castro C, Persson D, Bergstrom N, Cron S. Surviving the Storms: Emergency Preparedness in Texas Nursing Facilities and Assisted Living Facilities. https://www.aahd.us/abstract/surviving-the-storms-emergency-preparedness-in-texas-nursing-facilities-and-assisted-living-facilities.
- Centers for Disease Control and Prevention Office of Public Health Preparedness and Response. Planning Resources by Setting. https://www.cdc.gov/phpr/healthcare/planning.htm.
- Centers for Disease Control and Prevention. Emergency Preparedness and Response: Preparation and Planning. http://emergency.cdc.gov/planning/.
- Centers for Disease Control and Prevention. Food, Water, Sanitation, and Hygiene Information for Use Before and After a Disaster or Emergency. https://www.cdc.gov/disasters/foodwater/index.html.
- Centers for Disease Control and Prevention. Radiation Emergencies. https://emergency.cdc.gov/radiation/.
- Centers for Disease Control and Prevention. The Chemical Emergencies Overview page. https://emergency.cdc.gov/chemical/overview.asp.

- Centers for Medicare and Medicaid Services. Survey and Certification: Emergency Preparedness for Every Emergency. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/index.html?redirect=/surveycertemergprep/.
- Eckstein L, editor. Emergency Management for the Healthcare Professional. Waterloo IA: Dietetics in Health Care Communities Dietetic Practice Group of the Academy of Nutrition and Dietetics, 2012.
- Federal Emergency Management Agency and the American Red Cross. Food and water in an emergency: http://www.fema.gov/pdf/library/f&web.pdf.
- Federal Emergency Management Agency. Fire Safety: https://www.fema.gov/media-library/multimedia/collections/192.
- Federal Emergency Management Agency. Developing and Maintaining Emergency Operations: https://www.fema.gov/pdf/about/divisions/npd/CPG_101_V2.pdf.
- Federal Emergency Management Agency. Center for Domestic Preparedness: https://cdp.dhs.gov/.
- Firewise. National Fire Protection Association. www.firewise.org.
- Institute of Child Nutrition. Emergency Readiness Plan: Guide and Forms for the School Foodservice Operation. http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=61.
- Landesman LY. Public Health Management of Disasters: 4th ed.. Washington DC: American Public Health Association. http://secure.apha.org/imis/ItemDetail?iProductCode=978-087553-2790&CATEGORY=BK.
- Ready.gov. Be informed. http://www.ready.gov/be-informed.
- Ready.gov. Hurricanes: https://www.ready.gov/hurricanes.
- Ready.gov. Prepare for Emergencies. https://www.ready.gov/prepare-for-emergencies.
- U.S. Department of Agriculture Food and Nutrition Services. Food Assistance for Disaster Relief. http://www.fns.usda.gov/disasters/disaster.htm.
- The Ready Set Go! Program. http://www.wildlandfirersg.org/.
- U.S. Fire Administration. Fire Prevention and Public Information. . https://www.usfa.fema.gov/prevention/.

- U.S. Department of Agriculture. Keep Your Food Safe During an Emergency. http://www.fsis.usda.gov/wps/wcm/connect/d3506874-2867-4190-a941-d511d3fcae71/Keep_Your_Food_Safe_During_Emergencies.pdf?MOD=AJPERES
- U.S. Department of Agriculture. Keeping Food Safe During an Emergency: General Guidelines for Keeping Food Safe http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/emergency-preparedness/keeping-food-safe-during-an-emergency/CT_Index.
- Refrigerated foods and power outages. When to save and when to throw out. Foodsafety.gov Web site. http://www.foodsafety.gov/keep/charts/refridg_food.html.
- Frozen Foods: When to Save and When to Throw Out (Handy Chart to Guide D U.S. Department of Agriculture Food and Nutrition Services. Food Assistance for Disaster Relief. http://www.fns.usda.gov/disasters/disaster.htm.
- United States Department of Agriculture Food Safety and Inspection Service Website, A Consumer's Guide to Food Safety: Severe Storms and Hurricanes at http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/emergency-preparedness/a-consumers-guide-to-food-safety-severe-storms-and-hurricanes/ct_indexecisions and http://www.foodsafety.gov/keep/charts/frozen_food.html.
- United States Environmental Protection Agency. Emergency Disinfection of Drinking Water. Institute of Child Nutrition. Emergency Readiness Plan: Guide and Forms for the School Foodservice Operation. http://nfsmi-web01.nfsmi.olemiss.edu/ResourceOverview.aspx?ID=61.
- United States Department of Labor. Occupational Health & Safety Administration website. https://www.osha.gov.
- U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. Emergency Preparedness Checklist: Recommended Tool for Effective Health Care Facility Planning. Available at: http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Downloads/SandC_EPChecklist_Provider.pdf.
- US Department of Health and Human Services. Centers for Medicare and Medicaid Services. Provider Survey and Certification. Declared Public Health Emergencies-All Hazards. Health Standards and Quality Issues. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/Downloads/All-Hazards-FAQs.pdf.
- U.S. Department of Health and Human Services Public Health Service Food and Drug Administration. 2013 Federal Food Code.

https://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/ucm374275.htm.

- US Food and Drug Administration Emergency Preparedness and Response. https://www.fda.gov/EmergencyPreparedness/default.htm.
- US Food and Drug Administration. Hurricanes: Health and Safety. https://www.fda.gov/NewsEvents/PublicHealthFocus/ucm064572.htm
- US Food and Drug Administration. FDA Offers Tips About Medical Devices and Hurricane Disasters. https://www.fda.gov/MedicalDevices/Safety/EmergencySituations/ucm055987.html
- Centers for Disease Control and Prevention. National Institute for Occupational Safety and Health. Emergency Response Resources. https://www.cdc.gov/niosh/topics/emres/flood.html

Resources Related to Pets

For additional information on how to prepare and care for pets during a disaster, see these resources.

- Fema.gov. Caring for Pets. http://www.ready.gov/caring-animals.
- Planning for Your Pet in the Event of Disaster available at http://www.fema.gov/news-release/2011/10/19/planning-your-pet-event-disaster.
- ASPCA Pet Care available at http://www.aspca.org/pet-care/disaster-preparedness/.
- The Humane Society of the U.S. Make a Disaster Plan for Your Pets available at http://www.humanesociety.org/issues/animal_rescue/tips/pets-disaster.html

Chapter 9: Policies and Procedures

The following policies and procedures are taken directly from the 2017 Becky Dorner & Associates, Inc. Policy and Procedure Manual for Food and Nutrition Services in Healthcare Facilities.

Emergency/Disaster Plan for Food and Dining Services

Emergency and Disaster Planning

Policy:
Emergency and disaster plans will be available and used as needed. In the event of a disaster or emergency, the facility will have a written disaster plan that includes emergency water and food needs. Refer to the facility's disaster plan for details on general procedures during an emergency.

The director of food and nutrition services will coordinate the function of the food and nutrition services department during an emergency. In the absence of the director of food and nutrition services or designee, a senior cook/chef will be responsible for the department. If neither is available, the administrator will assign a person to be responsible for the food and nutrition services department.

Procedure:
The following will be available during an emergency or disaster:

1. Emergency food, water and supplies for the planned menu pattern for 3 to 7 days.* This should include adequate water for additional people (staff, family members, rescue workers, and evacuees). The menu should be palatable even if repetitious. Food that can be transported in case of an evacuation should be available.

2. Emergency enteral supplies for tube fed individuals for at least 3 to 7 days.*

3. Disposable dishes, disposable wipes, hand sanitizer, and extra disposable supplies as necessary to support nursing and other staff needs for 3 to 7 days.

4. A list of organizations and vendors/suppliers that agree to provide assistance in case of an emergency.

5. A list of food and nutrition services department employees' names and telephone numbers.

6. A preplanned disaster-staffing schedule of employees who agree to work during and/or following the disaster which is maintained with current contact information. Note: This schedule must remain flexible depending on circumstances and availability at the time of the disaster.

7. A copy of all documents needed for meal service and regulatory purposes (such as menus, recipes, temperature logs, diet orders, tray tickets, policies and procedures) in electronic format. Use facility protocols for backing up electronic documents (system mainframe, the "cloud", DVD's, or thumb drives).

8. In the event of a reduction of food and nutrition services department personnel and/or product deliveries:
   a. The administrator will contact the director of food and nutrition services and the registered dietitian nutritionist (RDN) or designee.

b. If the director of food and nutrition services is unavailable, the administrator will assign a responsible person to direct the department.
c. Volunteers may be assigned to the food and nutrition services department as necessary during the emergency.
d. Vendors will be notified of the emergency status of the facility.
e. The administrator may request that staff members pick up supplies for the food and nutrition services department if vendors are unable to make deliveries.

*Check state regulations and if they are different than federal regulations or Joint Commission regulations, follow the most stringent of the recommendations. Note: Joint Commission requires a minimum of 4 days of food, water and supplies.

Emergency/Disaster Plan for Food and Dining Services

Role of Food Service Department During an Emergency

Policy:
The food service manager or designee will coordinate the function of the food service department during an emergency.

Procedure:
The food service manager's responsibilities during an emergency include, but are not limited to the following:

1. Notify staff that an emergency plan is in effect.

2. Confirm a 3 to 7 day emergency plan.

3. Assure a 3 to 7 supply* of water, foods, beverages, enteral feedings/supplies, oral nutrition supplements, disposable dishes and supplies.

4. Provide a list of food service department employees' names and telephone numbers to be utilized if additional staff is needed. Notify vendors of the emergency status of the facility and any pressing needs. (See Emergency Contact Information Sample Form on page 96.)

5. Assign volunteers in each department as necessary to work during the emergency.

6. Request that staff members bring supplies if vendors are unable to make deliveries.

7. Determine how to use the perishable food items on hand in the coolers and freezers in the first and second day.

8. Use foods in order of their keeping qualities:
    - Food in refrigerators – check internal food temperatures to ensure food safety.
    - Food in freezers – check internal food temperatures to ensure food safety.
    - Canned and dry foods – use last.
    - Packaged oral nutritional supplements and enteral formulas – see manufacturer's instructions.

*Check your state regulations and follow the more stringent recommendations between state and federal regulations and Joint Commission regulations. (Joint Commission requires a minimum of 4 days of food, water and supplies.)

Note: See page 74 for information on Keeping Food Safe During a Disaster.

Emergency/Disaster Plan for Food and Dining Services

Back-up for Electronic Files

Policy:
Electronic files needed for operation of the food and nutrition services department will be backed up periodically so that files will be accessible from a remote location in the event of an emergency.

Procedure:
1. Consult with the facility IT department to obtain information on:
   a. Preferred method to back up information that contains protected patient/resident information (diet orders, food preferences, diagnosis, etc.) on the facility server, main-frame computer, or “cloud” back up.
   b. Preferred method to back up and access other department files from the facility server, main-frame computer, or “cloud” back up.

2. Follow facility protocols for backing up all information and files pertinent to the day to day operation.

3. If possible, store copies of data offsite in the “cloud”, on DVD’s, or thumb drives as instructed by the IT department.

4. Print a hard copy of emergency menus and emergency procedures and store with the emergency food supply.

5. Consult with the maintenance department to determine if department computers have power if the facility emergency generator is running.

Emergency/Disaster Plan for Food and Dining Services

Employee Training

Policy:
Employees will be prepared for unexpected events.

Procedure:
1. Staff should be trained in emergency and disaster relief as part of their initial orientation and periodically thereafter. Mock disaster drills should be used to determine the training's impact.

2. To ensure that employees are prepared for the unexpected events that may occur, in-service on the following items:
   a. Overview of the emergency and disaster plan.
   b. Overview of the emergency food and water plan, menus and recipes.
   c. Location of stored supplies including food, water, drinking water, all-purpose water, enteral feeding supplies, paper products, etc.
   d. Location of emergency equipment and first aid supplies.
   e. Water purification techniques and supply locations.
   f. Sanitation/food safety during a disaster.
   g. Responsibilities in relationship with other departments.
   h. Coordinator of each department and location of contact information in case of unexpected events or emergency situations.
   i. Location of emergency contact numbers.
   j. How to locate and use the firefighting equipment.
   k. Evacuation routes, routines, and maps with directions.
   l. All alarm and signal systems.
   m. Management of casualties, first aid training.
   n. Use of generators and/or review of equipment on the emergency generator.
   o. How to access back-ups of electronic files.

3. Emergency disaster drills should be conducted at least twice per year, in advance of potential threats. For example, if the facility is in a geographic area that is prone to hurricanes, a drill should be conducted prior to hurricane season.

4. After each disaster drill, evaluate the staff's response and determine additional training needs. Then conduct the additional training and adjust disaster plans accordingly. (These evaluations and adjustments should also be made after each disaster).

5. Staff should be able to answer the following questions:
   a. If the fire alarm goes off, what should you do?
   b. What would you do if you discovered a fire in the kitchen? In a dining area? In a resident's/patient's room?
   c. Where are the fire alarms and fire extinguisher located in the kitchen? Dining area? Near resident's/patient's rooms?
   d. How do you use the fire extinguisher? (Please demonstrate).
   e. Where is the emergency disaster plan kept?

f. Where are the emergency food, water, and supplies stored? How do you access them?
g. How can you purify contaminated water?
h. What is the procedure in case of evacuation?
i. Also add questions related to geographically specific disasters (hurricanes, tornadoes, floods, earthquakes, winter storms, etc.).

Resources:

- Keeping Food Safe During an Emergency: General Guidelines for Keeping Food Safe http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/emergency-preparedness/keeping-food-safe-during-an-emergency/CT_Index. Accessed May 25, 2017.
- Refrigerator Foods: When to Save and When to Throw Out (Handy Chart to Guide Decisions) http://www.foodsafety.gov/keep/charts/refridg_food.html. Accessed May 25, 2017.
- Frozen Foods: When to Save and When to Throw Out (Handy Chart to Guide Decisions) http://www.foodsafety.gov/keep/charts/frozen_food.html. Accessed May 25, 2017.

Emergency/Disaster Plan for Food and Dining Services

Resource: Food and Nutrition Service Disaster Plan

General Instructions for Person in Charge

Check state and local regulations for other information specific to your area.

1. Inventory the situation to make your plan of action.

2. Delegate work and details to others so that you are available for keeping the situation under control.

3. Access back-ups of electronic files (menus, recipes, tray tickets/ID cards, etc.) as needed.

4. Develop a plan to use food in stock (in order of their keeping qualities):
   - Perishable fresh foods
   - Food in refrigerators – check temperatures to assure safety
   - Food in freezers - check temperatures to assure safety
   - Canned foods
   - Packaged nutritional supplements, and enteral formulas for those on tube feeding

5. Maintain well-balanced meals with as normal a menu as possible. Texture modifications, allergy and food intolerance concerns are most important. Remember to have items for individuals with food allergies and/or intolerance (example: soy milk, Lactaid or Lactaid milk, gluten free products, etc.). Remember any special religious, social or cultural custom requirements.

6. Use extra precautions regarding sanitation.
   - Separate clean areas from dirty areas.
   - Keep waste and garbage in covered containers and remove from food areas as soon as possible.
   - If water quality is questionable, use bottled water, or follow boil requirements as directed by local authorities (see the policy on Water Purification on pages 70-72 for instructions).
   - Do not use food that might be spoiled.
   - Do not taste food that may be in question. Do not rely on the way it looks or smells.
   - Use emergency supply of disposable dishes and utensils when necessary.

Types of Disasters:

1. Gas Shut Off in the Kitchen:
   - If range and convection ovens in the kitchen use gas, utilize microwave ovens and electric stoves.
   - Use plain foods that need only minimal heating.
   - If nursing or activity areas have working electric stoves or microwaves available, take supplies for cooking and serving to these areas and serve directly from these areas.
   - Be cooperative with nurses and other staff/volunteers. Offer assistance with serving trays and assisting individuals who need help (within scope of practice/competence).

2. No Water Supply or Water Supply is Shut Off:
   - The facility should have bottled water in the storeroom (0.5 gallons per person/day). Save this for cooking and drinking only.
     Note: Consider negotiating a water contract for additional water to be delivered by a vendor in a nearby area.
   - Other sources of fluids which should be on hand in kitchen, storeroom, and freezer include:
     - Fruit/vegetable juices
     - Canned soups and broth
     - Soft drinks (item kept on hand for liquid diets)
   - Bottled water may be used to:
     - Mix nonfat dry milk - make up fresh for each meal (make only the amount that will be used for the meal)
     - Make instant coffee and tea
     - Dilute concentrated soups or condensed beverages
   - Reduce the amount of salt in cooking to avoid thirst sensation.
   - Monitor all individuals to ensure they are receiving adequate hydration.

3. Electricity Shut Off:
   - The facility has auxiliary power that should take over quickly. Staff must be trained on which equipment is connected to the emergency generator so they know which equipment is operable when the power goes off.
   - Should there be a delay, do not open refrigerator or freezer doors unless absolutely necessary until the power returns.
   - Assure department computers containing files necessary for operations are plugged into an outlet serviced by auxiliary power.

4. Unable to receive deliveries:
   - An emergency supply of foods, beverages and supplies must be available in the facility. A minimum of a three to seven (3 to 7) day supply is recommended. *
   - Have alternative supply sources lined up in advance. A local restaurant, school or church may be an appropriate alternate supplier if delivery trucks cannot get through with supplies.

     See Sample Letter of Intent for Provision of Emergency Supplies on page 95.

5. Combination of Situations:
   - If a combination of these situations exists, combine instructions as needed.

*Check state regulations and follow the more stringent recommendations. Joint commission requires a minimum of 4 days of food, water and supplies.

Emergency/Disaster Plan for Food and Dining Services

Coordination of Emergency and Disaster Plan

Policy:
The director of food and nutrition services or designee will coordinate the function of the food and nutrition services department during an emergency.

Procedure:
The director of food and nutrition service's responsibilities during an emergency will include, but are not limited to the following:

1. Notify staff that an emergency plan is in effect.

2. Confirm a three to seven day (3 to 7) emergency plan.

3. Assure a three to seven day (3 to 7) supply* of water, foods, beverages, enteral feedings/supplies, oral nutrition supplements, disposable dishes and supplies.

4. Confirm supply of general disaster supplies. (See pages 93-94.)

5. Access back-ups to electronic files (menus, tray tickets/ID cards, etc.) if necessary.

6. Provide a list of food and nutrition services department employees' names and telephone numbers to be utilized if additional staff is needed. (See page 96.)

7. Notify vendors of the emergency status of the facility and any pressing needs. (See the policy on Emergency Contact Information on page 204.)

8. Assign volunteers in each department as necessary to work during the emergency.

9. Request that staff members bring supplies if vendors are unable to make deliveries.
   a. Determine how to use perishable food items on hand in the coolers and freezers in the first and second day (based on keeping qualities): Food in refrigerators – check food temperatures to ensure food safety.
   b. Food in freezers – check food temperatures to ensure food safety.
   c. Canned and dry foods – use last.
   d. Packaged nutritional supplements and enteral formulas – see manufacturer's instructions.

*Check state regulations and follow the more stringent recommendations. Joint commission requires a minimum of 4 days of food, water and supplies.

Also see the Disaster Responsibilities and Assignment Form on page 92.

Emergency/Disaster Plan for Food and Dining Services

Emergency Contact Information

Policy
When the registered dietitian nutritionist (RDN), nutrition and dietetic technician registered (NDTR) and /or director of food and nutrition services are not in the building, emergency services are provided to answer questions that need immediate attention.

An employee phone roster is maintained with current cell phone and home phone numbers for used in a phone tree.

Procedure:
Use the form below and see page 73 for additional emergency contacts.

Employee Contact Information Sample Form

Name	Title	Cell Phone Number	Home Phone Number

Copy this form onto brightly colored paper and place a copy of the completed form in an area where staff can utilize it in case of emergency.

Emergency/Disaster Plan for Food and Dining Services

Fire Prevention

Policy:
The facility should be constructed, equipped, and maintained to promote fire safety and protect the health and safety of patients/residents, employees and the public. Food and nutrition services employees will be trained on fire safety and fire prevention.

Procedure:
1. A copy of the facility's disaster plan should be posted in the food service department.

2. Fire extinguishers will be checked monthly. (This is usually done by the maintenance department).

3. Employees should be familiar with the location and use of fire extinguishers and the fire reporting system.

4. Inservice training sessions should be conducted to familiarize staff with the location and use of fire extinguishers, and this should be documented in the annual inservice records.

5. Employees will be made aware of procedures to follow in case of fire.

6. Hoods, fans, vents, grills and other equipment will be kept free of grease and dust accumulation.

7. A routine cleaning schedule should be posted and enforced for all equipment where grease or dust accumulates.

8. Smoking, if allowed at all, should only be allowed in designated areas. It will not be permitted in the kitchen, storeroom, restrooms, or patient's/resident's rooms.

9. All employees will participate in routine fire drills.

10. All fire doors, exits, and stairways will be maintained to be clean of material and equipment.

Note: Check state fire authority, or local or county health department regulations for area-specific regulations.

Resource:
National Fire Safety Association, Free Safety Tip Sheets. http://www.nfpa.org/public-education/resources/safety-tip-sheets. Accessed May 18, 2017

Resource: Fire Prevention Plan

Fire Prevention Plan (FPP):
A FPP is a hazard prevention plan that is to assure advanced planning for evacuations in fire and other emergencies. An FPP is a written document that is required by a particular OSHA standard. The elements of the plan shall include but are not limited to:

1. A list of major workplace fire hazards and their proper handling and storage procedures, potential ignition sources, their control procedures, and the type of fire protection equipment or systems that can control a fire.

2. Names or job titles of those persons responsible for maintenance of equipment and systems installed to prevent or control ignition of fires.

3. Names or job titles of those persons responsible for control of fuel source hazards.

Fire Safety Rules

Policy:
All employees should be aware of rules to follow in a fire emergency.

Procedure:
1. In the event of a small fire, locate and use the nearest hand fire extinguisher.

2. If the fire is small and confined to a burner or a pan skillet fire, smother by covering with a pan lid or using baking soda.

3. DO NOT use water as a means of extinguishing any fire that involves grease.

4. Report the fire to the administrator or person in charge.

5. In the event that the fire is large, pull the nearest fire alarm box.

6. In the event that the fire is large, notify the administrator, and call the emergency number or the local fire department and report the fire. The following information should be given:
   a. Name of facility
   b. Address
   c. Telephone number
   d. Location of fire
   e. Name of employee making the phone call and the department they represent

7. When a fire breaks out, shut off all exhaust fans; turn off all gas and electrical equipment, and close all doors and windows in the dietary department.

8. In the event of extensive smoke, evacuate the kitchen and close all kitchen doors.

9. Food service personnel on duty during the occurrence of a fire shall assist in evacuating residents/patients from the dining room.

Emergency/Disaster Plan for Food and Dining Services

Fire Plan for Food and Nutrition Services Department

Policy:
All food and nutrition services employees will follow the fire plan for the department. Staff will be well trained on fire safety, procedures to follow in the event of a fire, and will be aware of rules to follow in a fire emergency.

Procedure:
1. Staff will be trained on behavior in the event of a fire:
   a. Stay calm (do not panic). Never yell “Fire!”

2. In the event of a small fire, proper procedures will be followed for the type of fire:
   a. If the fire is small and confined to a burner or a pan skillet fire, a pan lid or baking soda should be used to smother the fire.
   b. Water should not be used to extinguish any fire that involves grease.

3. If needed, the nearest hand fire extinguisher should be located and used to extinguish the fire. Do not fight the fire if it becomes dangerous to personal safety.

4. If a fire is large and uncontrolled:
   a. Use overhead fire extinguishers.
   b. Turn off vents/exhaust systems if in close proximity to the fire.
   b. Notify a supervisor, who will oversee the following:
      - Notify the person in charge (facility administrator or designee) to alert other employees of the fire as needed.
      - Pull the fire alarm box.
      - Call 9-1-1 and report the following information:
        - Name, address and telephone number of the facility
        - Location of fire (in the building)
        - Name of employee making the phone call and their department

5. If there is extensive smoke or flames:
   a. The cook/chef on duty will turn off all electrical and gas cooking equipment, and exhaust fans.
   b. The director of food and nutrition services (or person in charge) will oversee the following:
      - Evacuate the kitchen.
      - Turn off lights and close doors in storage areas and offices.
      - Turn off the air conditioning.
      - After employees are in a safe area:
        - Turn off main light switch
        - Close all outside doors
        - Take the posted staffing schedule when leaving (as a reference for a head count).

6. Food and nutrition services employees on duty during a fire shall assist in evacuating patients/residents from the dining room and other areas as directed.

7. Attend to emergency needs of employees as needed.

Note: Food and nutrition services procedures should be discussed with maintenance, safety officer and/or fire department and adjust this policy and procedure to reflect their input and the facility's procedures.

Resource: How to Contain Food and Nutrition Services Department Fires

1. Oven fire
    f. Turn off gas or electric.
    g. Close oven door.
    h. If it is a small fire, use the fire extinguisher as needed.

2. Stove fire
    a. Turn off gas or electric.
    b. Smother with a lid if the fire is contained to a pan.
    c. If it is a small fire, use the fire extinguisher as needed.
    d. Use range hood extinguisher if needed.

3. Electrical equipment fire
    a. Shut off the breaker.
    b. If it is a small fire, use the fire extinguisher as needed.

4. Trash container fire
    a. Smother with a lid if the fire is contained within a trash container.
    b. If it is a small fire, use the fire extinguisher as needed.

5. Clothing fire
    a. Smother with an apron or blanket.
    b. **Stop** moving.
    c. **Drop** to ground or floor.
    d. **Roll** on the floor to smother the fire.
    e. Call emergency services for immediate medical attention.

6. Know the location and use of the:
    a. Fire extinguisher.
    b. Fire alarm pull station.
    c. Range hood extinguisher.
    d. Electrical breaker panel.
    e. Fire blanket.
    f. Phone for emergency calls.

Note: Food and nutrition services procedures should be discussed with maintenance, safety officer and/or fire department and adjusted to reflect their input and the facility's procedures.

Emergency/Disaster Plan for Food and Dining Services

Resource: Helpful Fire Safety Information: R.A.C.E. and P.A.S.S.

Routine fire safety training and practice drills using different scenarios will help staff prepare for fire emergencies. All staff members should know the primary and secondary safe areas and route of evacuation according to the facility's fire plan, which should be on display. The plan should include a chain of command for clear and frequent communication so all staff understands what has been done and what needs to happen next. Fire plans should be tailored to the facility and shared with the community fire department. Audits should be performed routinely to ensure good lighting and a clear path for all exit doors -exits must never be blocked.

To help staff remember the information, the following acronym is often used: R.A.C.E., which stands for the four steps that should be used when responding to a fire emergency:

1. **(R) Remove** – Remove individuals in danger of immediate harm by evacuating them from the room and closing the room door. This is always the first step to keeping people safe and avoiding injury or death. Smoke inhalation is the primary killer in a fire, and older adults and children are especially susceptible.

2. **(A) Alarm** – Call 911 and activate the fire call box/pull station. Use the intercom system to call out a "Code Red." When calling 911 provide: name, phone number you are calling from, location (address, facility name, area of the building – kitchen, floor and/or room number), and what you are reporting (sight or smell of smoke or fire). Note: Alarms will trigger locked doors to unlock including exits and lock down areas, so exits should be quickly monitored.

3. **(C) Contain** – Contain the fire, smoke, and/or toxic combustion products to the area where the fire started. Close doors and windows to prevent smoke from spreading and cut off the flow of oxygen to the fire.

4. **(E) Extinguish/Evacuate** – Know the location of the fire extinguishers and be able to find them even if the lights are out or there is a lot of smoke. Use the fire extinguisher label to determine the type of fire it will extinguish, and the operating instructions. All fire extinguishers operate in the same way, which can be remembered using the P.A.S.S. acronym:
   P – Pull the pin in the nozzle of the extinguisher
   A – Aim the nozzle at the base of the fire
   S – Squeeze the handle
   S – Sweep from side to side, covering the fire

Only attempt to extinguish small, contained fires (no larger than the size of a waste basket) - and only if safety is assured, there is an escape route behind you, and other staff members are there to assist. Other staff should be rescuing people in immediate danger, activating the alarm, and confining fire and smoke at the same time. If the fire is not easily extinguished, leave the area immediately, close it off, and wait for the fire department.

Resource: Helpful Fire Safety Information

Evacuation Methods

When there is danger from smoke or fire in the immediate area, evacuate by moving people down the hall, through at least one set of fire doors to a safe area.

1. Never open a door if it is hot to the touch.

2. Never use elevators to evacuate a fire area.

3. Evacuate people closest to danger first, then those who are ambulatory then non-ambulatory, and last, critically ill people on life support (they will need more time and care).

4. If possible, take the medical record with the patient/ resident. If electronic records are used there should be a back-up for the files available.

If there is continued danger from smoke or fire, move people down the stairs to a lower level of safety and eventually out of the building.

If there is enough staff available form a line and pass frail or injured people along from one staff member to another, until they reach a safe, smoke-free area. If there is insufficient staff, frail or injured people can be moved by placing the person in a blanket and pulling them down the hall to safety. As rooms are evacuated, mark the area to let others know that the room has been evacuated.

Additional Notes:

1. Do NOT go through closed fire doors unless you are part of the ‘Fire Response Team’.

2. Unless you must pass another area for the safety of a resident/patient or yourself, stay in the area you are in until the ‘All Clear’ is given.

3. If you arrive to work during a fire or a fire drill, remain outside. Congested entrances could slow the fire department response time.

Emergency/Disaster Plan for Food and Dining Services

Facility Specific Policy and Procedure for Fires

Insert facility fire policy and procedure here.

Emergency/Disaster Plan for Food and Dining Services

Resource: Emergency First Aid

For any of the following concerns, call the nursing staff or 911 immediately for assistance.

1. Burns
   a. Run under cold water.

2. Cuts
   a. Apply direct pressure to control bleeding.

3. Severed limb or digit
   a. Apply direct pressure to control bleeding of a stump.
   b. Place severed limb or digit on ice.

4. Falls
   a. Do not move.

5. Chemicals
   a. Proceed according to product label - be familiar with safety data sheets (SDS).
   b. Know where and how to use eye wash station if chemicals are in eyes and washing is appropriate according to SDS sheets.

Emergency Eye Wash

Policy:

If an eye wash station is available, all staff will be trained on its use.

Procedure:

1. If an eye wash station is available, all staff will be inserviced at least during initial employee orientation and yearly thereafter on the following:
   a. Location of the eye wash station.
   b. Operation of the eye wash station.
   c. Appropriate use of the eye wash.

Note: Follow manufacturer's instructions for use of eye wash/eye wash station.

Emergency Eye Wash

Insert a copy of facility eye wash/station instructions here.

Emergency/Disaster Plan for Food and Dining Services

Accident/Incident Report

Policy:
All accidents and incidents will be reported and documented.

Procedure:
1. Any accident or incident involving an injury that occurs in the kitchen or dining area should be reported to the director of food and nutrition services.

2. The director of nurses or nursing staff may be contacted for necessary first aid.

3. Physicians or emergency services may be contacted as needed.

4. The accident or incident should be thoroughly documented on the appropriate facility form.

5. Any accident or incident should be reported whether an injury occurred or not and the appropriate person should be informed according to facility policy.

Accident/Incident Report

Insert a copy of facility's accident/incident report here.

Water Requirements

Policy:
In the event of a loss of utilities, water may be unavailable, or if available, it may be contaminated and in need of purification. In either case, the food and nutrition services department will need to have an adequate supply of water on hand. This water will be used for cooking, cleaning, drinking, and food preparation. Recognizing that suppliers may be unable to deliver immediately, a three to seven (3 to 7) day emergency supply of water is recommended. Water should be stored in a cool, dry area away from heat sources.

Procedure:
1. A minimum 3 day supply of water, and preferably a 7 day supply of water, should be available. The quantity of water that is needed can be determined by the following calculations:

Suggested Water Requirements:

Type of Water	Amount Needed	Formula	Example (7 day supply) for 100 People
Drinking Water	2 quarts (0.5 gallon) per person per day**	# of people* X 0.5** gallons X 3 days (or 7 days) = gallons of drinking water needed	100 people X 0.5 gallon X 7 days = 350 gallons of drinking water
All-purpose Water	1 gallon per person per day	# of people* X 1 gallon X 3 days (or 7 days) = gallons of all-purpose water needed	100 people X 1 gallon X 7 days = 700 gallons of all-purpose water

*Include residents/patients, staff, visitors, evacuees and rescue workers as appropriate in estimate of water needed. Include nursing needs as necessary (medication pass, etc.). A good estimate is number of residents/patients plus 50 to 100%.

**Hot climates can double the amount of fluid needed for drinking. If located in a hot climate area, increase the amount of drinking water to 1 gallon per person per day. Adjust the amount of all-purpose water accordingly as well. (Again, add extra as noted above in *.)

Note: Please check state regulations for specific quantities of water required.

Use of Stored Water Supplies
1. Bottled or distilled water for emergency purposes should be stored and labeled “FOR EMERGENCY USE ONLY”.
2. The nursing department may want to designate a specific amount for nursing procedures such as flushes, sterile dressing uses, or any other nursing procedure needing distilled or sterile water.
3. Staff should be instructed not to use the emergency water supply for any purpose other than an emergency situation.
4. During an emergency, staff will be provided with bottled or canned beverages for drinking.

Keeping Water Supplies Fresh

1. Rotate or discard water according to the manufacturer's expiration date on the container, then replace emergency water accordingly. Bottled water is expensive so a written plan to use, rotate and replace the water should be part of the disaster plan.

Preparing/Using Water Containers

1. Use food grade water storage containers made specifically for water storage.
2. Clean and sanitize containers prior to use.
3. Fill water containers with tap water from a source that has been commercially treated with chlorine from a water utility.
   - If the water is from a source not treated with chlorine (i.e. well water), add 2 drops non-scented household chlorine bleach to each 1 gallon of water being careful not to contaminate the inside of the cup.
4. Tightly seal the container (being careful not to contaminate the inside of the cup) and store for later use.
5. Date the outside of the container clearly.
6. Store in a cool dark place.

Source:

Federal Emergency Management Agency. Ready.gov Web site. Water. Updated 4/9/14. http://www.ready.gov/water. Accessed May 25, 2017.

How to Turn Off the Main Water Valves

Water already inside the facility will need to be protected from contamination in the event of broken water or sewage lines, or if local officials advise there is a problem. To close the incoming water source, locate the incoming valve and turn it to the closed position. Be sure key staff members know how to perform this important procedure.

1. To use the water in the pipes, let air into the plumbing by turning on the faucet at the highest level. A small amount of water will trickle out. Then obtain water from the lowest faucet in the facility.
2. To use the water in the hot-water tank, ask for assistance from the maintenance department as needed.
   - Be sure the electricity or gas is off.
   - Open the drain at the bottom of the tank.
   - Start the water flowing by turning off the water intake valve at the tank and turning on the hot water faucet.
   - Do not turn on the gas or electricity when the tank is empty.
   - Refill the tank before turning the gas or electricity back on. If the gas is turned off, a professional will need to turn it back on.

Sources of Water During an Emergency

Policy:
In an emergency situation, supplemental water sources may be needed. Only safe water will be used. Water will not be rationed during an emergency. Each person needs to remain well hydrated, especially in warm climates. The Federal Emergency Management Agency (FEMA) recommends that each person be allowed to consume the needed requirements of water each day, and that facilities continue to search for more water supplies.

Procedure:
1. Locate and utilize safe sources of drinking water.
2. Bottled or distilled water for emergency purposes should be stored and labeled "FOR EMERGENCY USE ONLY". The nursing department may want to designate a specific amount of water for nursing procedures, such as enteral feeding flushes, or any other nursing procedure needing bottled or distilled water.
3. Staff should be instructed not to use the emergency water supply for any purpose other than an emergency situation.
4. Rotate supplies to use the water prior to the manufacturer's expiration date. Discard water according to the manufacturer's expiration date on the container.
5. Consider use of water barrels or water bladders, which can be filled with water in advance of an emergency.

Emergency Water Sources*

Safe Sources
- Safe uncontaminated melted ice cubes.
- Liquids from canned goods such as fruit or vegetable juices.
- Water drained from clean, safe, pipes.
- Undamaged hot water heaters can contain water. Remember, though, that this water is not purified and should be used as all-purpose water, not drinking water.

Unsafe Sources
- Radiators and hot water boilers (home heating system).
- Water beds (fungicides added to the water or chemicals in the vinyl may make water unsafe to use).
- Water from the toilet bowl or flush tank.
- Swimming pools and spas (chemicals used to kill germs are too concentrated for safe drinking but can be used for personal hygiene, cleaning, and related uses).

***Reference:**
Emergency Water Storage and Purification Guidelines, Federal Emergency Management Agency available at http://www.fema.gov/pdf/library/f&web.pdf. Accessed May 25, 2017.

See page 222 for information on water purification.

Water Purification

Policy:
If instructed by local officials, the water supply must be purified before using.

Procedure:
Water Purification - Strain the water through cheesecloth, paper towel or coffee filter to remove dirt or other particles if needed. Choose one of the following three (3) ways to purify the water.

Boiling
Boiling is one of the most common and safest ways to purify water. Steps for purifying water using the boiling method include:

1. Pour water into an appropriate cooking container, place on the stovetop, and bring to a rolling boil.

2. Boil vigorously for one full minute.

3. To prevent evaporation, put a lid on the container after the water has been boiled to trap any evaporating steam.

4. Cool the water for 30 minutes to a safe handling temperature before transferring it into clean containers.

5. To improve the taste of the water, pour it from one container to another several times.

Note: A loss of utilities may result in not having a heat source available to boil the water.

Water Purification Tablets
Water purification tablets can be purchased locally at most sporting goods stores, camping supply stores or drug stores. An Internet search of “water purification tablets” will result in several sources. These tablets release chlorine or iodine for purification. Keep water purification tablets with other emergency supplies to ensure they are on hand when needed. Follow the manufacturer’s directions for use. Usually one tablet is enough for one quart of water. Double the dose of purification tablets for cloudy water.

Bleach Purification
Another purification method is the use of liquid household bleach. Follow these steps:

1. Use household bleach in liquid form that contains 5.25 to 6.0% sodium hypochlorite. Do not use color safe bleaches or bleaches with added cleaners, soaps or scents. Use bleach from an unopened or newly opened bottle (bleach’s potency reduces over time). Important: Be sure to use bleach that contains 5.25 or 6.0% sodium hypochlorite as the only active ingredient.

2. Before treating, let any suspended particles settle to the bottom or strain them through coffee filters, paper towel or layers of clean cloth to remove dirt or particles.

3. Measure bleach carefully (over or under measuring may be harmful).
   a. Add 16 drops (1/8 teaspoon) of bleach per 1 gallon of water and mix well.
   b. Let stand for 30 minutes.
   c. The water should have a slight bleach odor. If it doesn't, then repeat the dosage and let stand another 15 minutes.
   d. If it still does not smell of chlorine, discard it and find another source of water.

4. Seal containers tightly, label them clearly, and store in a cool, dark place.

Amount of Water	Amount of Bleach Needed
1 quart	4 drops*
1 gallon	16 drops* (1/8 teaspoon)
5 gallons	5/8 teaspoon

* An eyedropper is ideal to measure the number of drops.

Source:
FEMA Website: http://www.ready.gov/managing-water. Accessed May 25, 2017.

Resource:
Emergency Water Storage & Purification Guidelines, Federal Emergency Management Agency available at http://www.fema.gov/pdf/library/f&web.pdf. Accessed May 25, 2017.

Safe Water After a Disaster
After a boil water advisory has been lifted, follow these steps. Do not resume using water for drinking until authorities have announced it is safe.

1. Empty any automatic filling ice trays in ice machines. Discard three (3) full runs of ice before allowing ice consumption.

2. Run refrigerated water lines for 5 minutes to remove contaminated water from lines. Replace or thoroughly clean water filters.

3. Well water: If floodwaters have contaminated wells, disinfect and test after floodwaters have receded. For other types of contamination, check with authorities prior to use to assure water safety.

Hand Washing During a Disaster

Policy:
Safe and effective hand washing and/or sanitizing techniques will be utilized during emergency situations.

Procedure:
1. The director of food and nutrition services will determine the safety of the water supply. If water is contaminated, it will need to be purified prior to use for hand washing (see Water Purification on page 222); or stored water that is safe for general use will need to be used for hand washing.

2. A hand washing area will be set up for staff use. Clean water will be available in large containers. Handwashing technique will be as follows:
   a. Remove debris from hands using a paper towel.
   b. One staff person will pour water over the hands of the person washing his/her hands.
   c. Soap will be applied and thorough washing above wrists, between fingers, under nails, etc. will occur for a minimum of 20 seconds.
   d. Again, one staff person will pour water from the clean water container to rinse the other staff person's hands.
   e. A clean towel or paper towel will be used to dry hands.

   Note: Do **NOT** wash and rinse hands in the bucket and then reuse the water.

3. Alternative to hand washing:
   If hands are not heavily soiled with debris, an instant hand sanitizer (hand cleaner) that does not require rinsing can be utilized for hand sanitizing during a disaster. These products report high levels of success in killing most common disease causing germs. They also provide a fast and easy way to sanitize hands.

   However, they do not take the place of appropriate hand-washing techniques and are only for temporary use during emergency situations. Consult the facility's policies and procedures and state and local regulations on the use of hand sanitizer.

   Follow manufacturers' directions for use.

Dishwashing Without Electricity

Policy:
If there is no electricity for dishwashing, hand dishwashing will be implemented.

Procedure:
A 3-sink dishwashing system will be set up in a safe, clean area, close to dining areas. The procedure used is as follows:

1. Wash: A dish is first scraped and then washed in a solution of dish soap and hot water (if available).

2. Rinse: Once the dish has been washed, is it rinsed in a basin filled with clean hot water (if available).

3. Sanitize: After the dish has been rinsed, it is run through the third basin, which contains a sanitizing solution. Keep enough sanitizing solution on hand for emergencies and use test strips to assure proper level of sanitizer is used.

Note: Use disposable dishes and utensils when possible and/or necessary during emergency situations.

Emergency/Disaster Plan for Food and Dining Services

Internal Policies

Insert Facility Policies Here (as required by OSHA, JCAHO, CMS)

1. Procedures for reporting a fire or other emergency.

2. Procedures for emergency evacuation, including type of evacuation and exit route assignments.

3. Procedures to be followed by employees who remain in the facility to operate critical plant operations before they evacuate.

4. Procedures to account for all employees after evacuation.

5. Procedures to be followed by employees performing rescue or medical duties.

6. The name or job title of every employee who may be contacted by employees who need more information about the plan or an explanation of their duties under the plan.

Disaster Resources

Resources for More Information on Dealing with Emergencies

- U.S. Department of Health and Human Services and CDC. Emergency Preparedness for Older Adults. Identifying Vulnerable Older Adults. Legal Options for Increasing Their Protection During All-Hazards Emergencies. http://www.cdc.gov/aging/emergency/. Accessed July 24, 2018.
- Centers for Disease Control and Prevention. Survey and Certification: Emergency Preparedness for Every Emergency. https://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/SurveyCertEmergPrep/index.html?redirect=/surveycertemergprep/. Accessed July 24, 2018.
- American Red Cross. Prepare for Emergencies. http://www.redcross.org/get-help/prepare-for-emergencies/be-red-cross-ready. Accessed July 24, 2018.
- Build a Kit. Ready.gov. http://www.ready.gov/build-a-kit. Accessed July 24, 2018.
- U.S. Department of Agriculture Food and Nutrition Services. Food Assistance for Disaster Relief. http://www.fns.usda.gov/disasters/disaster.htm. Accessed July 24, 2018.
- National Emergency Management Association (NEMA). http://www.nemaweb.org. Accessed July 24, 2018.
- Federal Emergency Management Agency (FEMA) website. http://www.fema.gov. Accessed July 24, 2018.
- National Fire Safety Association, Free Safety Tip Sheets. http://www.nfpa.org/safety-information/safety-tip-sheets. Accessed July 24, 2018.
- Academy of Nutrition and Dietetics. Emergency Preparedness: What RDs and DTRs need to know. http://www.eatrightpro.org/resource/leadership/house-of-delegates/resources/emergency-preparedness-what-rdns-and-dtrs-should-know. Accessed July 24, 2018.
- American Red Cross. Flood Safety. http://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/flood#About. July 24, 2018.
- American Red Cross. Hurricanes: Unleashing Nature's Fury. http://www.crh.noaa.gov/Image/fwd/pdf/Hurricane_unleashing06.pdf. Accessed July 24, 2018.
- APIC Bioterrorism Task Force, CDC Hospital Infections Program Bioterrorism Working Group. Bioterrorism Readiness Plan: A Template for Healthcare facilities. http://emergency.cdc.gov/bioterrorism/pdf/13apr99APIC-CDCBioterrorism.pdf. Accessed July 24, 2018.
- Castro C, Persson D, Bergstrom N, Cron S. Surviving the Storms: Emergency Preparedness in Texas Nursing Facilities and Assisted Living Facilities. https://www.aahd.us/abstract/surviving-the-storms-emergency-preparedness-in-texas-nursing-facilities-and-assisted-living-facilities/. Accessed July 24, 2018.
- Centers for Disease Control and Prevention. Emergency Preparedness and Response: Preparation and Planning. http://emergency.cdc.gov/planning/. Accessed July 24, 2018.
- Centers for Disease Control and Prevention. Keeping water and food safe after a disaster or emergency. https://www.cdc.gov/disasters/foodwater/facts.html. Accessed July 24, 2018.

- Eckstein L, editor. Emergency Management for the Healthcare Professional. Waterloo IA: Dietetics in Health Care Communities Dietetic Practice Group of the Academy of Nutrition and Dietetics, 2012.
- Federal Emergency Management Agency and The American Red Cross Food and water in an emergency. http://www.fema.gov/pdf/library/f&web.pdf. Accessed July 24, 2018.
- Landesman LY. Public Health Management of Disasters: The Pocket Guide. Washington DC: American Public Health Association. Landesman LY. Public Health Management of Disasters: The Pocket Guide. Washington DC: American Public Health Association. https://www.ready.gov/. Accessed July 24, 2018.
- Federal Emergency Management Association. Be Informed. Available at http://www.ready.gov/be-informed. Accessed July 24, 2018.
- Red Cross Family Disaster Planning: http://www.redcross.org/services/disaster/beprepared/familyplan.html. Accessed July 24, 2018.
- U.S. Department of Agriculture Food and Nutrition Services. Food Assistance for Disaster Relief. http://www.fns.usda.gov/disasters/disaster.htm. Accessed July 24, 2018.
- Firewise. www.firewise.org which provides information to assure safety from fire. Accessed July 24, 2018.
- U.S. Fire Administration, Wildfire…Are you Prepared? FEMA FA-287/August 2004. https://webreg.propertyware.com/pw/setup/mail_merge_images/127698091/Wildfire+Are+You+Prepared.pdf. Accessed July 24, 2018.
- U.S. Department of Agriculture. Keeping food safe during an emergency. http://www.fsis.usda.gov/wps/wcm/connect/d3506874-2867-4190-a941-d511d3fcae71/Keep_Your_Food_Safe_During_Emergencies.pdf?MOD=AJPERES. Accessed July 24, 2018.
- U.S. Department of Agriculture. Keeping Food Safe During an Emergency: General Guidelines for Keeping Food Safe. http://www.fsis.usda.gov/wps/portal/fsis/topics/food-safety-education/get-answers/food-safety-fact-sheets/emergency-preparedness/keeping-food-safe-during-an-emergency/CT_Index. Accessed July 24, 2018.
- Refrigerated foods and power outages: When to save and when to throw out. Foodsafety.gov Web site. http://www.foodsafety.gov/keep/charts/refridg_food.html. Accessed July 24, 2018.
- Frozen Foods: When to Save and When to Throw Out (Handy Chart to Guide Decisions) http://www.foodsafety.gov/keep/charts/frozen_food.html. Accessed July 24, 2018.
- United States Environmental Protection Agency. Emergency Disinfection of Drinking Water. https://www.epa.gov/ground-water-and-drinking-water/emergency-disinfection-drinking-water. Accessed July 24, 2018.