



**ARMY MEDICINE**

Serving To Heal...Honored To Serve



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**Food Handler's Training  
Environmental Health Section  
Department of Preventive Medicine  
Bldg. 606 Thayer Road**



# Requirements for Temporary Food Establishments

- ❑ A *Temporary Food Establishment* operates for a period of no more than 14 consecutive days in conjunction with a single event or celebration.
  - ❑ An organization with a cookout, chapel suppers, pot luck & other similar events are NOT considered temporary food establishments (Unless there is money being charged for services).
  
- ❑ **TB MED 530/NAVMED P-5010-1/AFMAN 48-147\_IP**, Tri-Service Food Code specifies requirements for vendor application to operate a food establishment, employee training, and safe food handling practices.
  - ❑ Submit an application to operate to the Preventive Medicine office at least 30 days prior to the scheduled event or opening of the operation.
  - ❑ Pass a pre-operational inspection conducted by Preventive Medicine prior to serving customers. (Special Events, Vendors and AAFES contracts only)
  - ❑ Food operation person in charge must possess a valid Food Protection Manager Certification. (When using Potentially Hazardous Food (PHF))
  - ❑ When using PHFs, person in charge must remain on site at all times when the food operation is open for business.
  - ❑ Food service workers must be trained to perform prescribed duties in a safe manner and in accordance with the prescribed sanitation and food safety requirements.



# Purpose and Objective

- PURPOSE** – This training is designed to familiarize family readiness groups and Non-profit organizations operating a temporary food establishment with the basic principles of food safety that must be applied when conducting food operations on military installations.
  
- OBJECTIVE** – The objective for adhering to established food safety principles is to prevent the occurrence of foodborne illness.
  
- SCOPE OF TRAINING -**
  - Understand factors that contribute to foodborne illness.
  - Understand controls that will minimize the risk of foodborne illness.



# Training Outline



- Foodborne Illnesses
- Food Safety Hazards
- Biological Hazards & the Nature of Bacteria
- Key Terms
- Foodborne Illness Risk Factors
- Food Protection During Storage
- Layers of Protection
- Personal Hygiene & Work Habits
- Proper Cleaning & Sanitizing
- Time & Temperature Controls
- Requirements for an Event



# Foodborne Illnesses

- Only a small percentage of actual food-borne illness cases ever get reported.
- The CDC estimates that 76 million illnesses happen each year.
- There are about 325,000 hospitalizations and 5,000 deaths each year from food-borne illnesses.
- Food-borne illnesses do occur on military installations. In 2013, an outbreak occurred in a training population resulting in over 150 Soldiers with nausea, vomiting and diarrhea.
- Personnel who prepare food play a vital role in the prevention of foodborne illnesses by:
  - Adhering to prescribed food safety measures; and
  - Maintaining sanitary controls within food operations.



# Food Safety Hazards

- ❑ Harmful substances that present a food safety hazard can be chemical, physical, or biological in nature and may result in injury or illness when ingested.
  - ❑ Chemical: detergents, sanitizing agents, pesticides, fuels, etc.
    - Contamination of food or food contact surfaces (equipment/utensils) occurs through direct contact with chemicals or chemical residues following improper use or storage.
  - ❑ Physical: bone fragments, glass, toothpicks, etc.
    - When physical hazards such as insects and hair come into contact with food, biological contaminants contained on their surfaces are transferred to the food.
  - ❑ Biological: bacteria, viruses, parasites, yeasts, molds, etc.
    - Biological hazards contribute to almost two-thirds of all foodborne illnesses outbreaks.



# Biological Hazards and the Nature of Bacteria



- Bacteria are microscopic and cannot be seen by the naked eye.
  - Hundreds or thousands of bacteria may already exist on raw foods when purchased.
  
- The right temperature, moisture, and food are needed for bacteria to survive and multiply.
  - Under ideal conditions, bacteria can double in numbers every 15-20 minutes.
  
- Some bacteria produce toxins and/or spores.
  - Bacteria in food can cause:
    - Infection – illness caused by ingesting a sufficient amount of live bacteria.
    - Intoxication – illness caused by ingesting the toxic residues deposited in food when the bacteria was alive.



# Key Terms



- A **foodborne illness outbreak** is defined as 2 or more cases of a similar illness resulting from the ingestion of a common food.
  - Ice and beverages are included as a “food”
  
- Contaminated** is the presence of harmful substances (physical, chemical, or biological) in food.
  
- Clean** to sight and touch means there is no visible debris, encrusted food, or greasy feeling.
  
- Sanitize** is a process of reducing the total number of micro-organisms (germs) on a surface to safe levels.





# Key Terms



- Cross-contamination** is the transfer of harmful substances to food through direct or indirect contact:
  - Spilled chemicals or detergents on food packages or surfaces where food comes into direct contact such as plates, silverware, and food prep tables.
  - Using un-sanitized equipment or utensils to prepare, store, or serve food.
  - Bare hand contact with foods that are ready-to-eat (RTE) such as fresh fruits, sandwiches, salad vegetables, and deli meats and cheeses.
  - Bacteria from raw foods transferred to foods that are ready-to-eat.
    - Blood from raw meat dripping onto RTE foods stored on a lower shelf in the refrigerator.
    - Cutting boards and knives used to prepare raw meat are not cleaned and sanitized and are then used to prepare RTE foods.



# Key Terms



- Potentially Hazardous Food (PHF)** is a food that requires time or temperature control for safety to limit the growth of harmful micro-organisms or the formation of toxins:
  - Raw or heat-treated (cooked) animal food – *meat, poultry, seafood, dairy products.*
  - Heat-treated plant food – *rice, pasta, baked potato, fried onions, cooked apples.*
  - Cut plant foods – *cut tomatoes, cut leafy greens (spinach/salad), cut melons, chopped garlic in oil*
  - Raw seed sprouts.
  - Cream pies
  - Gravies.



# Foodborne Illness Risk Factors

- ❑ There are 5 major risk factors (or conditions) related to employee behaviors and food preparation practices that contribute to food-borne illness:
  - ❑ **Food from unsafe sources:** Food must be obtained from sanitary sources that conform to local, state, and federal statutes and regulations. ***Veterinary Services approves all food sources on and off installation.***
  - ❑ **Inadequate cooking:** Food must be cooked to prescribed temperatures in order to kill any residual bacteria, viruses, or parasites that might be in or on the food.
  - ❑ **Improper holding temperatures:** Potentially hazardous foods must be held at proper cold (41°F) holding and hot (135°F) holding temperatures to prevent growth of bacteria.
  - ❑ **Contaminated equipment:** Food contact surfaces must be cleaned and sanitized to prevent cross-contaminated of food.
  - ❑ **Poor personal hygiene:** Food employees must adhere to standards of hygiene to prevent contamination of food contact surfaces and food. (Wash hand up to forearm, remove/secure all jewelry, segregate work and personal items,Etc)



# Food Protected During Storage

- Protect from contamination when stored in refrigerators/freezers/ice chests.
  - All food must be wrapped or held in a covered container.
  - Food packaging/containers should be closed/covered so that there is no exposed food.
  - Food containers or packaging must be impermeable to protect from melting ice when stored in ice chests.
  - Storage units must be kept clean; free of residual food debris.
  
- Cover food (and containers of food) when held in hold or cold holding during service periods.
  
- Always examine food and food containers for signs of contamination or spoilage before use.



# Layers of Protection

- ❑ Apply multiple levels of control called *Layers of Protection* is the underlying principle for reducing the risk of foodborne illness from biological hazards.
  - ❑ Good personal hygiene and work habits represent the first layer of protection to prevent transferring biological contaminants to food and surfaces that generally come into contact with food.
  - ❑ Proper cleaning and sanitizing is the second layer of protection that prevents cross-contamination of food by removing harmful agents from surfaces.
  - ❑ The third layer, time and temperature controls, are employed to prevent the growth of harmful microorganisms that may already exist in food.



# Personal Hygiene and Work Habits



**“Hand-washing is the single most important means to preventing the spread of infection” – *Center for Disease Control and Prevention***

- People are natural carriers of bacteria –
  - Staph bacteria is found on skin and hair, regardless of how often you bathe.
  - Bacteria such as E. Coli are found in our intestines. When you go to the bathroom, hands become contaminated with bacteria which are transferred to everything you touch.
  
- People can also carry harmful viruses that are readily transmitted through food or contact with surfaces that are touched by others -
  - Norovirus is an example; it can live on surfaces such as door handles, dishes, or chairs for several days (*Generally the cause of disease on cruise ships*).
  - Infection occurs when contaminated food is ingested or contaminated hands come into contact with mucous membranes (eyes, nose, mouth).



# When Should You Wash Your Hands?

**“Hand-washing is the single most important means to preventing the spread of infection”** – *Center for Disease Control and Prevention*

- Before beginning work
- After using toilet facilities
- After smoking, eating, applying lip balm, or taking a break
- Before putting on disposable gloves and between glove changes.
  - Change gloves between food tasks and non-food tasks such as preparing food and handling money or restocking supplies and food/condiments.*
- Before handling cleaned and sanitized equipment and utensils.
- After every change of contamination.
  - Performing custodial tasks such as handling soiled equipment and utensils or trash*
  - Touching hair, face, nose, mouth, etc.*
- Before conducting any task involving food handling.



# Handwashing Sinks

- A dedicated handwashing sink must be provided at the food concession for food employee use only.
  
- Hand sanitizer cannot be used as a substitute for handwashing.
  
- Handwashing sinks must be stocked with:
  - Soap*
  - Hot water*
  - Disposal paper towels*
  - Garbage receptacle*
  
- Handwashing procedures:
  - Later all exposed skin up to mid-forearm*
  - Scrub lathered skin for up to 20 seconds*
  - Rinse & dry with disposable paper towel*





# Hygiene Standards

- Fingernails:
  - Neatly trimmed and smooth*
  - NO** *fingernail polish, false nails, nail ornaments or jewelry.*
  
- No eating or drinking in food preparation or serving areas.
  - Exception: *Water in a closed container.*
  - Used only designated break areas away from food serving and preparation.*
  
- When disposable gloves are worn you must change:
  - Between handling soiled and cleaned/sanitized equipment and utensils*
  - After handling trash*
  - After wiping tables/counters*
  - Before handling money*
  - When gloves become torn*



# Cleaning and Sanitizing

- Equipment and utensils will be cleaned and sanitized when they become soiled or contaminated in:
  - Hot soapy water*
  - An approved bleach solution.*
  
- Test sanitizing concentrations by:
  - Using test kits or test paper*
  - Minimum concentration should be 100 ppm*
  - Maximum concentration should be 200 ppm*
  
- Prepare bleach solution:
  - Use a 1 gallon container*
  - Add ½ tablespoon of bleach to 1 gallon of water*
  - Shake well, verify concentration, then fill individual spray bottles*
  - Prepare fresh for every event*



# Time & Temperature Control

## Hot foods:

- Must be maintained at 135°F or above during holding.*
- Cooked to appropriate temperatures for at least 15 seconds:*
  - Poultry, poultry and stuffed foods: 165°F.*
  - Pork, ground beef, fish, and bulk scrambled eggs: 155°F.*
  - Lamb, veal, made-to-order eggs: 145°F.*

## Cold foods:

- Must be maintained at 41°F or below.*
- Frozen foods **must remain frozen.***

## Three approved thawing techniques:

- In running water of 70°F (least preferred method).*
- In the microwave as part of the conventional cooking process.*
- In the refrigerator. After removal from freezer, product must be used within 7 calendar days (preferred method).*



# Requirements for Events

## Food Permits:

- Vendor and FRG operations must gain approval from Veterinary Food Inspectors for their food sources prior to operating on Fort Jackson (does not apply to baked goods/sales).*
- After approval from Veterinary Food Inspectors, contact Environmental Health for final approval of operations.*

## Food booths/operations must have:

- Bi-metal stemmed thermometer capable of being calibrated to  $\pm 2$  F.*
- Sterno, crockpot, or other hold holding device to keep food 135°F.*
- Self-draining ice chest to keep food cold.*
- Handwashing station must be available.*
- Garbage receptacle with lid.*
- Wiping cloths must be kept in a sanitizing solution of 100-200 ppm.*