



# TB MED 530

## -- Summary of Changes --

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# Purpose



- ▶ Provide orientation to new TB MED 530 format.
- ▶ Highlight changes to existing standards.
- ▶ Identify new requirements.

## AGENDA

- ✓ Food Safety Regulatory Authority
- ✓ Program Emphasis & Document Organization
- ✓ Management Requirements:
  - Person in Charge
  - Training
- ✓ Food Safety & Sanitation Standards
  - Garrison
  - Field



# Regulatory Authority

**Federal:** Office of the Surgeon General functions as federal agency.

**State:** Army MACOMs (Surgeon); other similar agencies include DoD, DLA, Indian Tribes, U.S. territories, & Commonwealth of Puerto Rico.

**Local:** Installation Medical Authority (PM & VET Svc) function as a local health department.

- IMA has final word on Standard interpretation, application, and modification.



# Change to Program Emphasis

## Old TB MED 530

- ▶ Primary emphasis was Sanitation (facility & equipment cleanliness)
- ▶ Reactive approach to food protection.

## New TB MED 530

Risk-based (HACCP)...

- ▶ Proactive: Emphasis on controlling conditions associated with foodborne disease outbreaks:
  - Food contamination
  - Growth of harmful organisms in food



# TB MED - Organization

- ▶ **It is the Army Food Sanitation Program Document**
  - Standards (inspection guide)
  - Procedures (training text & user guide)
- ▶ **Language & Standards parallel FDA Model Food Code**
- ▶ **Organization**
  - Chapters = Major Program Areas
    - Personnel
    - Food
    - Equipment & Food Establishments/Materials
    - Unique Food Service Operations
    - Compliance & Enforcement



## Organization (continued)

- ▶ **Reduced redundancy**
  - Requirements presented by principle instead of subject
    - Example: Equipment requirements presented under *Materials, Design, and Construction*
  - Internal cross referencing used instead of restating requirements.
- ▶ **Italicized text**
  - Provisions, not requirements
  - Provide relative information about specific exemptions & alternative means for compliance
- ▶ **Abbreviations & Capitalized words**
  - Defined in the glossary
  - Emphasized due to specific meanings or provisions



## Organization (continued)

### Categories of Violation: *(based on public health significance)*

- **Critical\*** - Bold asterisk after a paragraph title or a paragraph indicates all provisions that follow are critical.
  - **Pivotal<sup>P</sup>** - Violation may or may not be critical; depends on circumstances.
  - **Non-Critical<sup>N</sup>** - Includes all provisions following an unmarked paragraph.
- ▶ **Helps new/junior-level inspectors & users (cooks) to better understand or identify which standards are associated with the greater health risks.**



# Chapter 1 - Overview

- ▶ **Brief history of changes in food sanitation practices.**
- ▶ **Guidance for using/reading the TB MED.**
- ▶ **Installation Food Advisor (Food Program Manager) responsibilities defined:**
  - Training criteria in Food Service contracts
  - Assist COR in coordinating with IMA for sanitation requirements & evaluation
  - Distribution & dissemination of inspection reports
  - Provides guidance & oversees training for military KPs and their supervisors



## Chapter 2 – Management & Personnel

- ▶ Designated, trained & certified, person-in-charge present during food operations.
  - ▶ Demonstration of knowledge:
    - Foodborne disease prevention
    - Application of HACCP principles
  - ▶ Responsibilities:
    - Supervise worker health; ration/subsistence inspection; food prep & service
    - Reporting illnesses to health authority; excluding or restricting infectious workers.
- \*\* Workers are obligated to report potential disease exposure (family or OCONUS travel) & symptoms defined in TB MED 530.



## Chapter 2

- ▶ **Hand Sanitizer Use Criteria:**
  - Listed as safe & approved as food additive
  - Used only after proper hand washing
  - When used, don't touch food or food contact surfaces until sanitizer dries
- ▶ **Criteria for unlisted hand sanitizers**
  - Limited to situations that do not involve direct bare-hand contact with food, food-contact surfaces, or utensils.
  - Thorough hand rinsing in clean water or disposable glove required after application.



## Chapter 2

### ▶ **Fingernail Maintenance:**

- Length - no longer than fleshy portion of fingertip.
- Artificial nails, nail jewelry/adornments and coverings (polish) PROHIBITED.

### ▶ **Drinking in Food Prep Areas:**

- Food workers may drink from a closed container that prevents contamination of the worker's hands, the container, and exposed foods, equipment, and linens.
- Closed containers: sports bottle; cup with lid & straw.



## Chapter 2

Army Center of Excellence, Subsistence (ACES)

### Food Safety and Protection Certification Course

#### Training:

##### ▶ Person-in-charge

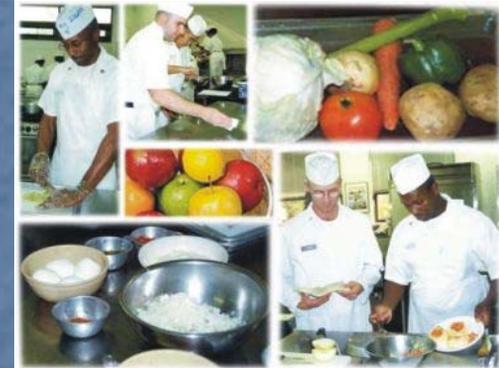
- Certification every 4 years
- Demonstrate knowledge (foodborne illness & HACCP)
- ServSafe; QMC&S; other...

##### ▶ Other food service workers

- 8 hours initial w/in 30 days
- 4 hours annual refresher

##### ▶ KPs & Detailed military KP supervisors

- Sanitation criteria associated with required duties (i.e., water temp or sanitizer concentration)



- Adjunct Instructor Course (5 days)
- 16-hour FSPCC thru Adjunct Instructors

[www.quartermaster.army.mil/dl/fspcc/](http://www.quartermaster.army.mil/dl/fspcc/)

# Chapter 3 - Food



- ▶ **Highly Susceptible Population:** Military personnel in deployments and/or extended training exercises
  - Increased stress, fatigue, & living conditions affects immune system
  - Classifying as Highly Susceptible allows safer rations.
- ▶ **Restrictions:**
  - No undercooked PHFs
  - No raw seed sprouts
  - Pasteurized eggs must be used

**Outbreak of  
foodborne illness**



**Possible  
mission failure**



## Chapter 3

### ▶ Approved Sources

- Absolute prohibition on home-canned foods.
- Home-prepared foods prohibited for service in Food Establishments.
- Exception for home-prepared foods (*except home canned*) apply to social events, church suppers, FCC homes, unit bake sales... (food must be identified as "Home-Prepared")
- Recreationally caught fish - unit type functions only.
  - must be from approved waters and inspected by IMA or Vets.



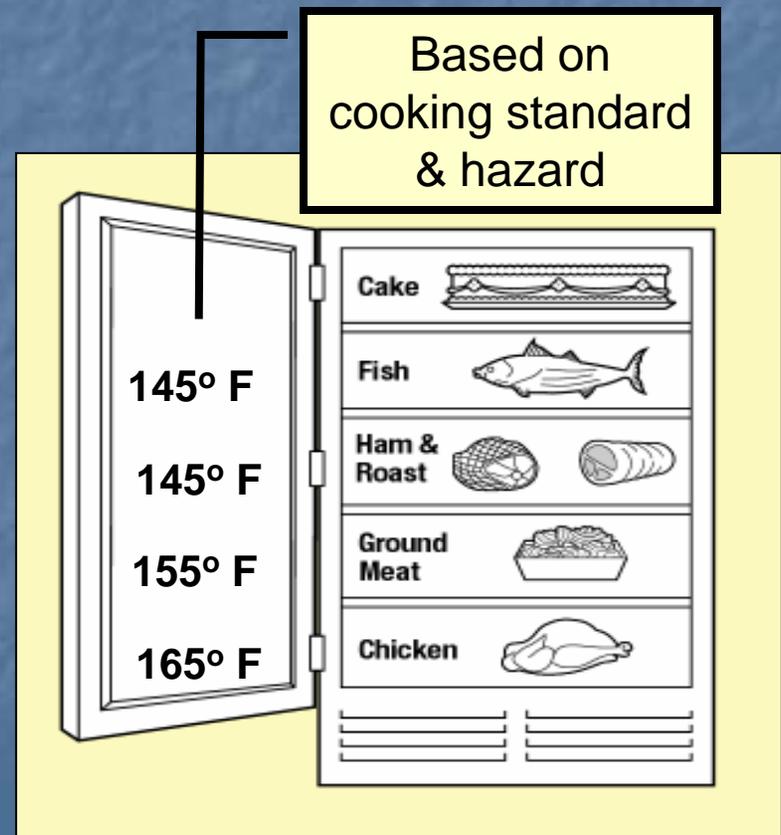
## Chapter 3

- ▶ Refrigerated PHF internal temp reduced to 40° F
- ▶ No bare-hand contact with Ready-to-Eat foods
  - Exception: when washing fruits & vegetables (prior to sanitizing)
- ▶ Pasteurized egg use
  - Mandatory for all recipes requiring raw shell eggs or egg products that will not be cooked IAW prescribed standards.
  - Mandatory for all recipes/menu items prepared by food operations servicing Highly Susceptible Populations.



## Chapter 3

- ▶ **Segregation during storage:**
  - Raw, raw-RTE, cooked-RTE
  - Physical segregation by equipment
  - Arrange based on cooking temp
- ▶ **Wash & Sanitize Fruits and Vegetables**
  - 30 sec. in 100-ppm total chlorine or 5-ppm FAC
  - Remove core on leafy items
  - Exceptions for RTE salads & whole fruit to be peeled or washed by individual





# Chapter 3

## Changes to Cooking Standard (Garrison)

Product	Temp & Time
<b>Ready-to-Eat commercially processed foods; Fruits &amp; Vegetables cooked for hot holding</b>	140° F
Whole beef & corned beef <b><u>roasts</u></b>	145° F for <b>3 minutes</b> <b>or IAW Table 3-3</b>
<b>Made-to-order eggs; Fish; Seafood;</b> Beef; Veal; Lamb; Commercial game animal	145° F for 15 sec
Pork; Ground meats & fish; <b>Injected Meats; Bulk prep eggs</b>	155° F for 15 sec
Leftovers; Poultry; Dressings & All Stuffed Foods; <b>Microwaved Foods</b>	165° F for 15 sec



## Chapter 3

- ▶ **Slacking Food** – in refrigeration that maintains food temp at 40° F or below.
- ▶ **Thawing** – when water method is used:
  - Completely submersed in running water; product surface temp should not exceed 40° F
  - ➔ May take 2-5 days to temper; Must adjust Pull dates & delivery dates
- ▶ **Cooling** – New 2-Stage Method
  - Cool food from 140° F to 70° F within two (2) hours
  - Then to 40° F or lower in an additional four (4) hours.
  - ➔ PHFs prepared from ingredients as ambient temp must be cooled w/in 4 hours to 40° F
  - ➔ Documentation for each item cooled is Required (*DA Form 7460 noted in DA Pam 30-22*)



## Chapter 3

### ▶ Time as Public Health Control

- Label: use by \_\_\_\_\_ (*time 4 hours after removal from temperature control*)
- Max 4 hours out of temperature control
- Food in unmarked containers or held >4 hrs must be discarded as food waste.
- Requires written procedure (SOP) at the facility
  - SOP must be made available to PM

#### **Ideal use:**

- **When holding units cannot keep foods at 140° F or above.**
- **Field feeding using IFCs.**



## Chapter 3

### ▶ Variance Authorization

- Seek approval from regulatory authority before implementing.
- Must have a HACCP plan that documents the new procedure is proven (*laboratory tested*) safe.
- Inform customer of increased risk (on menu or place card).

Chapter 12 provides guidance for obtaining a variance grant.



## Chapter 4 – Equipment & Utensils

- ▶ **Sponges**
  - For non-food contact surfaces only (cleaning walls & floors)
  - Must be stored in sanitizing solution between uses
- ▶ **Wiping Cloths**
  - Segregate use for food contact surfaces and non-food contact surfaces (*color-coding recommended*)
  - For food contact surfaces, must store in 100-ppm chlorine solution between uses
- ▶ **Ice Machines & Dispensers**
  - Recommended: to be emptied, drained, cleaned, & sanitized every 30 days
- ▶ **Guidance for use of 2-Compartment sink**
  - Use must be approved by IMA



## Chapter 4

### ▶ Manual Sanitizing Standard

- Hot water increased to 171° F
- Chlorine = 100-ppm for 15 seconds (water at 75° F; pH 6-10)
- Test strips required
- Chlorine concentration above 200-ppm requires second clear water rinse.

### ▶ Mechanical Sanitizing Standard

- Check machine data plate for manufacturers' wash, rinse, & final rinse temp., and conveyor speed - *verify during inspection*
- 160° F minimum surface temp of dishes for hot water sanitizing
- Chemical test kit/strips on hand to verify sanitizing agent concentration
  - Measure sanitizer concentration on a dish as it exits the machine



## Chapter 5 - Sanitary Facilities & Controls

- ▶ Term “potable water” replaced by “drinking water”
- ▶ Bulk Water (in the field):
  - Person-in-charge must test for chlorine residual prior to use.
- ▶ Plumbing code
  - Follow state or local jurisdiction (*check with DPW or Engineer for Code in use*)
- ▶ Grease Traps
  - Installed outside building
  - Applies to only to new construction
  - Only exception: distance from facility or cold causes grease to congeal in pipe



## Chapter 5

### 3 Basic rules of an IPM program

- ✓ Deny pests access to the facility
- ✓ Deny pests food, water, hiding/nesting place
- ✓ Work with PM & PCO to control and eliminate pests

### ▶ **Integrated Pest Management (IPM)**

- Structural design
- Stock handling practices
- Premises pest exclusion
- Non-chemical control methods
  - Light traps that stun flies & then traps them on a sticky surface are allowed in non-food prep areas.
- Chemical control methods
  - Contact AFPMB or DoD Pesticide Hotline [DSN 584] COM (410) 436-3773

## Chapters 6 thru 8



### Changes not Discussed

- ▶ **Chapter 6** – Construction & Maintenance of Food Establishments
- ▶ **Chapter 7** – Mobile Food Establishments
- ▶ **Chapter 8** – Temporary Food Service Establishments
  - Fixed location; duration  $\leq$  14 days
  - Does NOT apply to Field food service operations



## Chapter 9 - Field Food Service

**Military in deployments & extended field training exercises are considered a Highly Susceptible Population.**

- ▶ **All foods cooked to 165° F**
- ▶ **Thawing & Refrigerated Storage**
  - 40° F or below
  - Thaw at ration breakpoint recommended
- ▶ **Time as public health control.**
  - 4 hrs to consume food after last valid temperature check (*140°F or above*)
  - Each IFC label must have food name, # of servings, & date/time it must be consumed by



## Chapter 9

- ▶ **NO Leftovers in field food service**
- ▶ **Pasteurized egg use ONLY!**
- ▶ **Wash & Sanitize all Fresh Fruits & Vegetables**
  - Before being cut, combined, cooked, or offered for service
  - Sanitize: 100-ppm total chlorine (5-ppm free available), or 1 minute in drinking water at 140° F
  - Exceptions: commercially processed/packaged vegetables in RTE form



## Chapter 9

- ▶ NO camouflage paints on hands, exposed arms, or face of food operations personnel preparing, serving food, or sanitizing food contact surfaces.
  - ▶ Exceptions\*\*
    - detail KPs that are only serving food (*using clean sanitized utensils*)
    - KPs performing basic cleanup (*not cleaning & sanitizing food contact surfaces*)
- \*\* must wear disposable plastic gloves over camouflage paint

# Chapters 10 & 11



- ▶ **Chapter 10** – Vending Machine Operations
- ▶ **Chapter 11** – Poisonous or Toxic Materials
  - HAZCOM program required (chemical inventory; MSDSs; training)
  - Recommendation: Post emergency phone numbers & first-aid procedures for choking (*available through American Red Cross or National Restaurant Association*)



## Chapter 12 – Admin Procedures, Compliance & Enforcement

- ▶ **Person-in-charge required to conduct self-inspections**
  - Daily (undocumented); Weekly (documented)
  - No special guidance provided to address RC/NG operations -(Suggest: document once each drill weekend or once quarterly; establish unit SOP)
  - Check time/temp controls; personal hygiene; food handling practices
  - DA Pam 30-22 (DA Forms 7458, 7459, 7460)
- ▶ **Procedures for obtaining a Variance**

# Chapter 12



- ▶ **Guidance & procedures when a HACCP plan is required**
  - Patient Nutrition Care -Inpatient service only (*not required for DFAC servicing workers & outpatients*)
  - Variance to cooking temperatures
  - Variance to other specific requirements.
- ▶ **Inspection Guidance**
  - Self-evaluations
  - Food Establishment Risk Assessments
  - Substituting routine inspections with intervention activities (i.e., HACCP training)
- ▶ **Inspection Emphasis:** control of practices & conditions that have been associated with foodborne illness outbreaks
  - Temperature control, Personal hygiene, Cross contamination



## Chapter 12

- ▶ **Conditions presenting an Imminent Health Hazards**
  - Cease operations and notify IMA
    - Fire
    - Flooding
    - Interruption of water or electric power > 2 hrs.
    - Sewage backup
    - Misuse of poisonous or toxic materials
    - Apparent outbreak of foodborne illness
    - Other situations that may endanger public health
- ▶ **Forward UNSAT inspections to USACHPPM**
- ▶ **Routine (DA 5162-R) & Comprehensive (DA 5161-R, 5161-1-R) Inspection Forms**



# Appendices

## A: References

## B: Model Risk Assessment Plan for Scheduling Food Sanitation Inspections

- DA 7437-R

## C: HACCP Guidelines

- DA 7438-R, HACCP CCP Monitoring Report



# Other Food Sanitation & Safety Resources



# Required Food Risk Management Procedures in Garrison Dining Facilities

(DA Pam 30-22)

[http://www.quartermaster.lee.army.mil/  
aces/food\\_safety/articles/risk\\_management.html](http://www.quartermaster.lee.army.mil/aces/food_safety/articles/risk_management.html)



# Food Risk Management Requirements

- ▶ **Reference: AR 30-22; DA PAM 30-22, para. 3-7**
- ▶ **Incorporation of HACCP principles:**
  - Monitoring Procedures
  - Application of Critical Limits
  - Record Keeping (DA Forms 7458, 7459, 7460)
- ▶ **Defined Processes for Monitoring:**
  - Cold holding & storage
  - Hot holding
  - Cooking
  - Cooling (leftovers, pre-prepared items)

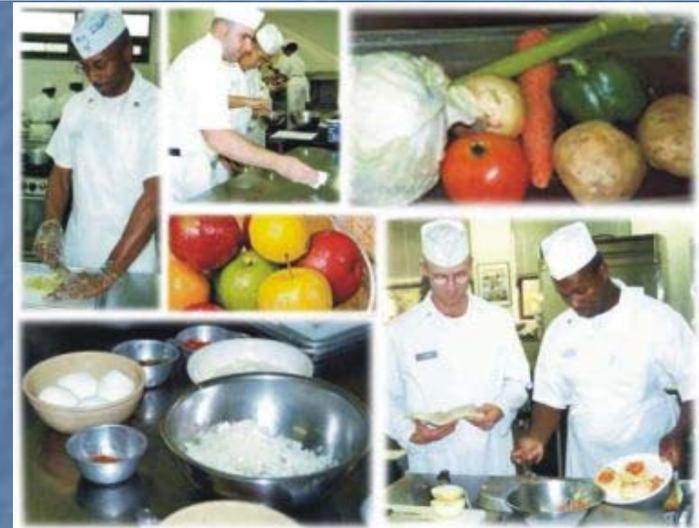


# QMC&S Web Training

Army Center of Excellence, Subsistence (ACES)

## Food Safety and Protection Certification Course

- ▶ Comprehensive (TB MED 530)
- ▶ Free
- ▶ On-line proctored exam
- ▶ Instant results & print certificate
- ▶ Promotion point credits  
(equivalent to 40-hour course)
- ▶ Registration is active for 6  
months



*U.S. ARMY  
FOOD AND WATER  
VULNERABILITY ASSESSMENT  
GUIDE*

**TG 188 (FOUO)**

# Table of Contents



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- ▶ Chapter 2. Food Vulnerability Assessment
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  - Process
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  - Points Of Contact
- ▶ Chapter 3. Water System Vulnerability Assessments

# Strategy



- ▶ Reduce vulnerability of food and water supplies to terrorist attack. This guide is intended for installation commanders and their staffs to counter terrorist threats to Army food and water supplies. It is also designed to assist in the planning and implementing of protective measures to prevent or mitigate attacks against food and water at fixed installations and to assist commanders in instituting control measures during periods of increasing threat.

# SCOPE



- ▶ The focus of this program is to assess installation vulnerability to intentional contamination or destruction of food and water supplies.
  
- ▶ Introduction and two stand alone chapters
  - food vulnerability
  - water system vulnerability
    - different teams will likely conduct each assessment
    - assessments follow different procedures
    - many common goals and objectives



# Summary

<http://chppm-www.apgea.army.mil/>

- ▶ Regulatory Authority
- ▶ Change to Program Emphasis
- ▶ TB MED Organization
- ▶ Highlighted Changes & New Provisions applicable to Fixed and Field Food Operations
- ▶ Introduction to Food Risk Management Requirements in Garrison DFACs
- ▶ QMC&S Web-Based Sanitation Certification
- ▶ TG 188 Synopsis