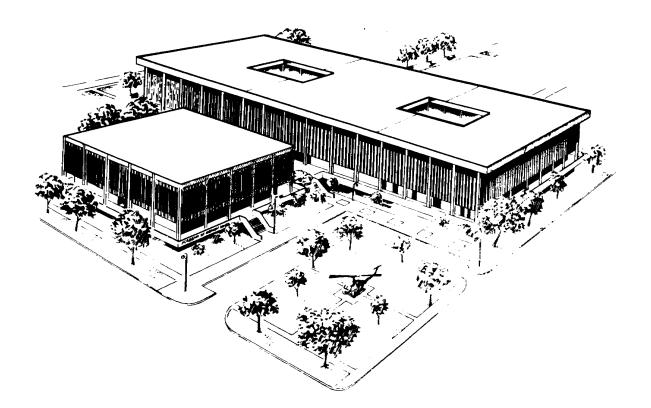
U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL FORT SAM HOUSTON, TEXAS 78234-6100



FOOD SERVICE SANITATION AND INSPECTIONS II

SUBCOURSE MD0182

EDITION 100

DEVELOPMENT

This subcourse is approved for resident and correspondence course instruction. It reflects the current thought of the Academy of Health Sciences and conforms to printed Department of the Army doctrine as closely as currently possible. Development and progress render such doctrine continuously subject to change.

When used in this publication, words such as "he," "him," "his," and "men" 'are intended to include both the masculine and feminine genders, unless specifically stated otherwise or when obvious in context.

The instructional systems specialist responsible for development of this edition was William H. Shade, DSN 471-8906 or commercial (210)221-8906; Academy of Health Sciences, Multimedia Development Branch, ATTN: MCCS-HLD, 2250 Stanley Road (Room 326), Fort Sam Houston, Texas 78234-6130.

The subject matter experts responsible for writing and content accuracy of this edition were from Preventive Medicine Division, DSN 471-8909 or commercial (210)221-8909; Commander, U.S. Army Medical Department Center and School, ATTN: MCCS-MP, Fort Sam Houston, Texas 78234-6100.

ADMINISTRATION

Students who desire credit hours for this correspondence subcourse must meet eligibility requirements and must enroll through the Nonresident Instruction Branch of the U.S. Army Medical Department Center and School (AMEDDC&S).

Application for enrollment should be made at the Internet website: http://www.atrrs.army.mil. You can access the course catalog in the upper right corner. Enter School Code 555 for medical correspondence courses. Copy down the course number and title. To apply for enrollment, return to the main ATRRS screen and scroll down the right side for ATRRS Channels. Click on SELF DEVELOPMENT to open the application and then follow the on screen instructions.

In general, eligible personnel include enlisted personnel of all components of the U.S. Army who hold an AMEDD MOS or MOS 18D. Officer personnel, members of other branches of the Armed Forces, and civilian employees will be considered eligible based upon their AOC, NEC, AFSC or Job Series which will verify job relevance. Applicants who wish to be considered for a waiver should submit justification to the Nonresident Instruction Branch at e-mail address: accp@amedd.army.mil.

For comments or questions regarding enrollment, student records, or shipments, contact the Nonresident Instruction Branch at DSN 471-5877, commercial (210) 221-5877, toll-free 1-800-344-2380; fax: 210-221-4012 or DSN 471-4012, e-mail accp@amedd.army.mil, or write to:

NONRESIDENT INSTRUCTION BRANCH AMEDDC&S ATTN: MCCS-HSN 2105 11TH STREET SUITE 4191 FORT SAM HOUSTON TX 78234-5064

TABLE OF CONTENTS

<u>Lesson</u>		Paragraphs	<u>Page</u>
	INTRODUCTION		iii
1	INTRODUCTION TO FOOD SERVICE INSPECTIO	ONS	
	Section I. Overview Section II. The Inspection Checklist for Food		1-2
	Service Facilities Section III. The Chart Section IV. The Hazard Analysis Critical Control		1-3 1-7
	Point (HACCP) Approach	1-121-16	1-9
	Exercises		1-13
2	INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL	2-12-2	2-1
	Exercises		2-15
3	INSPECT RESTROOMS AND HANDWASHING FACILITIES	3-13-2	3-1
	Exercises		3-11
4	INSPECT THE SERVING LINE AREA	4-14-2	4-1
	Exercises		4-19
5	INSPECT THE COLD STORAGE AREA	55-2	5-1
	Exercises		5-11
6	INSPECT THE DRY STORAGE AREA	6-16-2	6-1
	Exercises		6-19
7	INSPECT THE LOADING DOCKS/INCOMING FOO AREAS	-	7-1
	Exercises		7-11

<u>Lesson</u>		Paragraphs	<u>Page</u>
8	INSPECT THE DISHWASHING MACHINE AND DISH- WASHING PROCEDURES		8-1
	Exercises		8-19
	APPENDIX A		A-1

LIST OF ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
1-1	DA Form 5161, Comprehensive Food Service Inspection	1-5

LIST OF SOLDIER'S MANUAL TASKS

The material contained in this subcourse deals with information covered in the following tasks in the STP 8-91S15-SM-TG:

Task Number	Task Title
081-850-0111	Inspect a Food Service Facility
081-850-0112	Inspect a Field Food Service Facility

CORRESPONDENCE COURSE OF THE U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL

SUBCOURSE MD0182

FOOD SERVICE SANITATION AND INSPECTIONS II

INTRODUCTION

In the role of an inspector, the preventive medicine specialist is responsible for determining that Army food service facilities offer safe, acceptable food items while reducing waste and financial loss to a minimum. Subcourse MD0181, Food Service Sanitation and Inspections I, presented the basic knowledge required of a food service inspector, including the threat from microbial contamination and the general factors involved in outbreaks of foodborne illness. Subcourse MD0182, Food Service Sanitation and Inspections II, will present specific items that the preventive medicine specialist must check when inspecting the various areas of a food service facility. This subcourse will discuss the reason for checking each item and its importance in contributing to foodborne illness. It will also relate how to record a deficiency for each item on the food service inspection checklist (DA Form 5161) and any other required corrective actions.

This subcourse consists of eight lessons and an examination. The lessons are as follows:

- Lesson 1, Introduction to Food Service Inspections.
- Lesson 2, Inspect the Health Status and Food Handling Procedures of Personnel.
- Lesson 3, Inspect Restrooms and Handwashing Facilities.
- Lesson 4, Inspect the Serving Line Area.
- Lesson 5, Inspect the Cold Storage Area.
- Lesson 6, Inspect the Dry Storage Area.
- Lesson 7, Inspect the Loading Docks/Incoming Food Areas.
- Lesson 8, Inspect the Dishwashing Machine and Dishwashing Procedures.

Credit Awarded:

Upon successful completion of this subcourse, you will be awarded 9 credit hours.

Materials Furnished:

Materials provided include this booklet, an examination answer sheet, and an envelope. Answer sheets are not provided for individual lessons in this subcourse because you are to grade your own lessons. Exercises and solutions for all lessons are contained in this booklet. You must furnish a #2 pencil.

Procedures for Subcourse Completion:

You are encouraged to complete the subcourse lesson by lesson. When you have completed all of the lessons to your satisfaction, fill out the examination answer sheet and mail it to the AMEDDC&S, along with the Student Comment Sheet, in the envelope provided. *Be sure that your social security number is on all correspondence sent to the AMEDDC&S*. You will be notified by return mail of the examination results. Your grade on the examination will be your rating for the subcourse.

Study Suggestions:

Here are some suggestions that may be helpful to you in completing this subcourse:

- --Read and study each lesson carefully.
- --Complete the subcourse lesson by lesson. After completing each lesson, work the exercises at the end of the lesson, marking your answers in this booklet.
- --After completing each set of lesson exercises, compare your answers with those on the solution sheet, which follows the exercises. If you have answered an exercise incorrectly, check the reference cited after the answer on the solution sheet to determine why your response was not the correct one.
- --As you successfully complete each lesson, go on to the next. When you have completed all of the lessons, complete the examination. Mark your answers in this booklet; then transfer your responses to the examination answer sheet using a #2 pencil and mail it to the AMEDDC&S for grading.

Student Comment Sheet:

Be sure to provide us with your suggestions and criticisms by filling out the Student Comment Sheet (found at the back of this booklet) and returning it to us with your examination answer sheet. Please review this comment sheet before studying this subcourse. In this way, you will help us to improve the quality of this subcourse.

LESSON ASSIGNMENT

Introduction to Food Service Inspections.

Paragraphs 1-1 through 1-16 and the appendices.

LESSON OBJECTIVES	After completing this lesson, you should be able to:
	1-1. Identify the seven factors most frequently involved in foodborne disease outbreaks.
	1-2. Identify the major steps in the foodborne disease cycle.
	1-3. Identify the important entries on the food inspection checklist.
	1-4. Record any deficiencies found during a food service inspection on the inspection checklist and rate the facility as a whole.
	1-5. Identify the purpose and goals of the HACCP process.
	1-6. Identify the major steps in the HACCP process.
	1-7. Define "critical control point."
	 Select from a list of foods, those classified as "potentially hazardous foods" (PHF).
	1-9. Identify the three-hazard categories IAW the HACCP process.
SUGGESTION	After studying the assignment, complete the exercises at the end of this lesson. These exercises

LESSON 1

LESSON ASSIGNMENT

will help you to achieve the lesson objectives.

LESSON 1

INTRODUCTION TO FOOD SERVICE INSPECTIONS

Section I. OVERVIEW

1-1. GENERAL

a. The Army Medical Department is responsible for monitoring food safety and sanitation in support of 995 troop dining facilities, 212 club operations, and 2,070 exchange food service facilities. These facilities prepare and serve an estimated 1.5 to 1.8 million meals a day. During FY 1988 and FY 1989, ten foods-related outbreaks were reported involving 848 individuals. Of these, 154 were hospitalized.

b. Many more cases of foodborne illness occur than are reported. Surveillance data has shown that there has been little decrease in the incidence of foodborne illness with today's outdated food safety programs.

c. Studies in the United States and other countries have shown that certain contributing factors are involved in foodborne disease outbreaks. These factors are (in order of frequency of occurrence):

- (1) Improper cooling of foods.
- (2) Infected food handlers.
- (3) Length of time between preparation and serving of food.
- (4) Inadequate time/temperature exposure during food processing.
- (5) Improper storage of hot foods.
- (6) Inadequate reheating procedures.
- (7) Ingestion of contaminated raw ingredients.

d. Disease investigation data show that there is a sequence of events, which occurs in the foodborne disease transmission cycle. This sequence is:

(1) The offending microorganism(s) must be present in the people, animals, or physical environment of the community.

(2) The toxic agent(s) must either be in the animal/plant, or it must be contaminated during growing, harvesting, storage, or preparation.

(3) The agent must multiply in the food to a sufficient concentration to survive processing/storage and still be able to cause illness. (Or it must be contaminated after processing.)

(4) Enough contaminated food must be ingested so that the amount of toxic organism ingested will cause illness.

e. Foodborne disease outbreaks are a significant problem in the military and civilian environments, but one which can be prevented, or at least minimized, with a proper surveillance program.

(1) One such program is the Hazard Analysis Critical Control Point (HACCP) which will be introduced in Lesson 1. Lesson 1 will also present an explanation of the important entries and organization of the inspection checklist, DA Form 5161, and the chart used in completing the checklist.

(2) Lessons 2 through 8 discuss inspecting specific areas of a food service facility. Each lesson contains a chart and an inspection checklist. The charts will tell you the basic items to look for in that area during your inspection. The inspection checklists will allow you to see exactly where you mark unsatisfactory items for that area on the checklist.

(3) Appendix A at the end of this subcourse provides an easy to reference listing of all the items on the inspection checklist along with their corresponding paragraph reference numbers from TB MED 530.

Section II. THE INSPECTION CHECKLIST FOR FOOD SERVICE FACILITIES

1-2. INTRODUCTION

a. DA Form 5161 (see figure 1-1) is the standard form for comprehensive food service inspections. For routine food inspections, DA Form 5162 should be used. To provide remarks fully explaining items requiring corrective action beyond the capability of the facility manager or deficiencies not specifically or clearly addressed on the inspection form, use DA Form 5161-1. This subcourse will deal with comprehensive food inspections using DA Form 5161. For information regarding the use of DA Forms 5162 and 5161-1, refer to TB MED 530.

b. The checklist has three main sections: the body (main) section, the heading, and the signature section. Paragraphs 1-3 through 1-5 discuss the important entries in each section of the checklist. Only critical entries will be explained; those that are self-explanatory will not be discussed. Refer to figure 1-1 while reading paragraphs 1-3 to 1-5.

1-3. THE BODY OF THE INSPECTION CHECKLIST

The body of the checklist contains information on the actual items you will check during the inspection. These items also appear in Appendix A at the end of this subcourse.

a. The column entitled "Description" specifies the item you will be examining and indicates what to look for when checking the items. Note that these items are grouped under general headings (food, personnel, etc.).

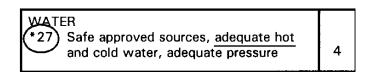
b. The column entitled "WT" (weight) assigns an importance value to each item. Values are on a scale of 1 to 5 with "5" indicating the most hazardous items. The least hazardous items are indicated by a "1."

c. The back of DA Form 5161 lists the paragraph numbers from TB MED 530 which correspond to the categories on the checklist. If you have questions about an item, check this reference.

d. The "follow-up" block, located in the bottom right corner of the checklist, is used to indicate whether or not the facility should be reinspected to determine that corrections have been made.

e. The "Rating Score" block, also located in the bottom right corner of the checklist, is used to record the overall rating of the facility.

(1) When inspecting a food service facility, make an entry on the checklist for unsatisfactory items. To make an entry, circle the number of the unsatisfactory item and underline the specific problem. For example, assume that item 27 is unsatisfactory because the water is not hot enough. Your entry would be:



(2) When you have finished recording, add the weights of all unsatisfactory items.

(3) Subtract the sum from 100 and enter the result in the "Rating Score" block.

		SA	MP	LE		Fo	r use	of					HENSIV MED 530,									on	Gener	al.		S	۹MI	PL	E	
	INSTA	LLATI	ON							,				DING	· ·		<u> </u>		CILITY											
	PERSO	ON IN C	CHARGI	E OF F	ACIL	.ITY									0	COP	Y REPOF	RT FUF	INISHI	D TO										
				TYPE F	ACI	LITY				1				F	ATIN	3			2					PUI	RPC	OSE				Т
	1		p Dining	ļ	[Dinir	ng		1.	Satisfact	ory			3. M	largina	1		I. Reg	gula	ar				3. Rei	nspe	ctior	1
ading		Facili			F		Facil					2.	Unsatisfa	actory		Ľ	4. 0				2. Co	urte	esy				4. Oti	ner <i>(s</i>	speci	fy)
J		. Cafe				_	Club										(s	pecify,												
		. Snac	R Bar	ION	_	6.	-		PECITY ECTO		INS	PE	CTION				DATE							RES	ER					
	COM- MAND												(MIN)	Y			MO	DA	.Y											
	4 5	6 7	89	10	11	12	1:	3	14	15	16		17 18	19	20	2		23	24	25	26	2	7 28	3 29	•	30	31 3	32	33	3
				SCRIP					_	WT				ESCR	IRTIO				wт					SCRIF						w
	FOOD			John	nor	•					FOO	D	EQUIPMEN				ILS (con	't)	•• 1	GAR	BAGE	AN					(con't)			F
			ved sou ce of sp			conditi	on, r	10		5	20		Nash, rins emperatur		er: Cl	ean	, proper		2	34							constru hing fa			1
			al conta			rly labe	led			1	*21		Sanitizatio								CT, RO	ODI		THER	AN	IMAL	CONTR			Γ
			ECTION		s for	nd mee	's					t	emperatur	oressu	re. Ec			ure	4	50			orized a			54011	-			4
		time/te	emperat	ure rec	quire	ments	durin			5	22		utensils sa Niping clo			rest	tricted in	use.					LS, A				properly	,		Γ
	 storage, preparation, display, service, transport; leftover policy *04 Equipment to maintain product 										•23	S	stored in s	anitizi	ng soli	utio	n		1		in go	ood		; cove	ring	, insta	lation o		le,	1
			nent to ratures	mainta	in pi	roduct				4	1	â	and utensil	s: cle	an, sa	niti	zed		3	37			eilings							t
		Therm accura		s provid	ded,	, conspicuous,			1	between uses, free of abrasives/ detergents							clean		cted pr ustless				oair, su ods	race	S	1				
		hazard	temper ous foo	d						3	protected								quate, fixtures shielded,				1							
	*07 Potentially hazardous food offered for self service not re-served								elf	2	25		Proper stor sanitized e						1		ILATI	ON								1
			orotecte /, servic				prep	arati	ion	2	26		Single-serv						2		Filter	rs a		ase ex	trac	cting e	quipme	nt		┢
V	09	Handlir	ng of fa	od/ice	mini	imized				2			properly st	ored,	and di	spe	nsed		_				nd prop							Ľ
			. food/ic	e uten	sils	properl	/ sto	red		1	WA1 *27	5	⊰ Safe appro and cold w					not	4		Clear	n, le	OMS/			conv	enient le	ocatio	on,	1
		DNNEL Trainin	ig progr	am rec	ords	availa	ole			1	SEW			ater, i	Juequi	are	Pressure			071	used		TION							Ļ
			dence o fections				lisea	ses,		5	*28	- 4	dequate : disposal	sewag	e and	liqu	iid waste	•	4		Nece	essa	ATION ary tox used		ıs p	roperl	/ stored	ł,		4
		Hands practic	washed es	d and c	clean	, good	hygi	ene		4	PLUI 29		BING nstalled, n	nainta	ined p	rope	erly		1	43			s: Ma sary a							Γ
	14						1	*30	1	No cross-c back sipho	onnec	tion, p	ote	ntial		3		equip	pme					thorized	ł		1			
			MENT /									LET	AND LAV	ATO	RY FA	CILI	TIES			44	Clear	n/so	oiled lin	nen pro	pe	rly sto	red			1
		proper	ce conta ly desig d, and n	ned, co	onsti				I,	3	31		Adequate i ble, design						3	45							peratio aundry	ns		1
			od cont ed, con					ated	ı, T	1	32	c	Toilet roon doors, goo	d repa	ir, ade	equa	ate hand						specify							L
			aintaine I washii		litv r	properly	des	igne	id,	I cleaner, running water, temperature, hand drying facilities, waste receptacles				1		ow-u														
		operat	ed, mai	ntaineo	d, an	d insta	lled			2	GAR	RA		REFUS		POS	SAL													
			ate ther cal test			·		uge	s,	2	GARBAGE AND REFUSE I 33 Containers or recep adequate number, v emptied frequently,			ceptac r, verr	otacles covered, vermin proof, 3				48 No											
			ls preflu			-				1													ess we		f ite	ms vi	blated			
	*Critic	cal defi	ciencies	s requir	ring i	immedi	ate o	orre	ection	- Us	e DA	For	rm 5161-1	for a	dditio	nali	remarks.													
	SIGNA	ATURE	OF INS	PECTC	DR													TIME							(DATE				
Ire	SIGNA	ATURE	OF REC	EIVER	1																				-	DATE				

Figure 1-1. DA Form 5161, Comprehensive Food Service Inspection (reduced).

(4) An example of computing the rating score is given below.

(a) You inspect a facility and find three unsatisfactory items with the following weights:

		_
v	v	
v	v	ι.

Item A	4
Item B	2
Item C	3

(b) The weights total 9. You subtract 9 from 100 to obtain the rating score of 91. The rating score is entered in the "Rating Score" block.

1-4. THE HEADING OF THE INSPECTION CHECKLIST

a. The heading of the inspection checklist contains entries for basic information on the facility undergoing the inspection, the authorities at the facility, and the purpose of the inspection. Enter the name of the installation, the building number, and the facility designation on the first line of the heading. Enter the name and title of the person in charge of the facility and the name and title of the facility person who receives a copy of the report on the second line. On the third line, check or write in the type of facility being inspected and the purpose of the inspection. The entry for the "Rating" block is discussed in the following paragraphs.

b. The "Rating" block on line three is an especially important part of the heading. It contains four ratings: satisfactory, unsatisfactory, marginal, and other.

(1) The purpose of this block is to assign an overall rating to the facility. This overall rating is derived from the number entered in the "Rating Score." In the "Rating" block of the heading, you take the numerical rating score and assign it to one of the four overall ratings.

(2) The assignment of the numerical rating score to a specific overall rating depends upon the local policy that you are following.

(3) For example, suppose you have inspected a facility and have determined that the totaled weight of unsatisfactory items is 25. You then calculate the rating score to be 75 (100 - 25 = 75). Which overall rating will you assign to this score? This depends on the installation to which you are assigned. One installation may rate this score as unsatisfactory; another installation may rate it as marginal.

1-5 THE SIGNATURE SECTION OF THE INSPECTION CHECKLIST

The signature section on the bottom of the checklist contains a block for your signature and a block for the date and time you entered your signature. It also contains a block for the signature of the authority at the facility undergoing the inspection and the date and time of this person's signature. The shift supervisor and the facility manager are typical examples of authorities signing this block.

Section III. THE CHART

1-6. INTRODUCTION

The chart is a device used in this subcourse that enables you to easily and quickly know the important items to check in a specific area of a food service facility. Some of the items on the chart relate to items on the inspection checklist. This will be noted in the following discussion of the chart organization. The chart is organized into four columns: The "Item" column, the "Reason" column, the "Importance" column, and the "Action" column. As you read this explanation, look at the following example of the chart format from page 2-3 in Lesson 2.

ITEM	REASON	IMPORTANCE	ACTION
1. Check to make sure that employees handling food are free of communicable disease and infected sores and cuts.	Employees with communicable disease symptoms or infected sores can directly contaminate food with harmful microorganisms. Contamination can occur through coughing, sneezing, and skin contact.	Category <u>5</u> .	 Record the problem on the inspection checklist, item 12 Recommend to the manager that the employee be removed from food handling duties.
	NOTE: If the employees are not directly handling food items, contamination is less of a threat.		 If in doubt, call the OIC/NCOIC for advice.

1-7. THE ITEM COLUMN

The "Item" column describes the items you should check in a given area of a food service facility and suggests questions to ask when checking each item. This column is similar to the "Description" column on the inspection checklist.

1-8. THE REASON COLUMN

The "Reason" column briefly states why each item should be checked. It tells what problems could result from inadequate performance.

1-9. THE IMPORTANCE COLUMN

The "Importance" column places each item into one of five categories based upon importance in contributing to foodborne disease outbreaks. These categories are derived from the fact that some items are a greater health hazard than others. For example, infected employees handling food are a greater health hazard than improper storage of utensils.

a. There are five categories. These categories correspond to the weight on the inspection checklist (para 1-3b). Categories used to identify the seriousness of health hazards are:

(1) <u>Category 5</u>. This category is for those items that are extremely hazardous. If safeguards are not taken, an item in this category can be the direct and rapid cause of foodborne illness. These items usually involve food contact and temperature control. Examples are the temperature requirements for potentially hazardous foods and the requirement that employees with communicable diseases, infected cuts, burns, etc., not work.

(2) <u>Category 4</u>. This category indicates items that are hazardous but not so hazardous as the items in Category 5. Category 4 items can also cause outbreaks of foodborne illness, but they are less likely to do so than are Category 5 items. Items in Category 4 involve storage of toxic items, employee hygiene, maintenance of safe temperatures for refrigeration equipment, and safe water and sewage systems.

(3) <u>Category 3</u>. This category includes items that contribute to foodborne disease outbreaks in an indirect manner. They are not so immediately hazardous as items in Categories 4 and 5. Examples are the conditions of food contact surfaces and the condition of toilet and lavatory facilities.

(4) <u>Category 2</u>. Category 2 indicates items, which are not very hazardous. However, they can be part of the chain of events leading to a foodborne disease outbreak. Examples of items in this category are the provision of thermometers, pressure gauges, chemical test kits, and the construction and maintenance of nonfood contact surfaces.

(5) <u>Category 1</u>. This category is for items that are basically not health hazards. Given other factors and the right situation, they can sometimes contribute to outbreaks of foodborne illness. Frequently, they are a matter of appearance, design, or simply neatness and efficiency. Examples are the lighting system, the proper labeling of containers, the neatness of the premises, and the maintenance of training records.

b. The categories on the chart are basically a system of priorities for you to follow when conducting an inspection. Note that a facility could have several minor problems (Categories 1 and 2) without presenting a serious health problem while one or two major problems (Categories 4 and 5) can make a facility an extreme health hazard.

1-10. THE ACTION COLUMN

The "Action" column lists actions an inspector can take when an item is found to be unsatisfactory. It indicates whom the inspector contacts, what entries are marked on the inspection checklist, and what corrections should be made. However, in many cases, remedial actions will be based on local guidelines.

1-11. PURPOSE OF THE CHART

The chart is not an absolute and final authority on inspecting food service facilities. Use it as a reference for basic items to check in each area. When you actually conduct an inspection, you will also use your general knowledge of sanitation as well as local requirements and policies.

Section IV. THE HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) APPROACH

1-12. INTRODUCTION

As a preventive medicine specialist, you may be called upon to perform foodborne disease surveillance, investigation, and reporting. An active foodborne disease surveillance program should seek to identify primary contributing factors to foodborne disease outbreaks. This section will introduce one method--the Hazard Analysis Critical Control Point (HACCP). The HACCP program is a systematic approach to the identification, assessment, and monitoring of the microbiological, chemical, and physical hazards and risks associated with a food operation. HACCP is an ongoing procedure, which involves monitoring all phases of the food service process for hazardous conditions.

1-13. BACKGROUND OF HACCP

HACCP originated in the 1940s in the chemical processing and nuclear plant design industries as a way of controlling the risk of accident. HACCP was first presented publicly at the 1971 National Conference on Food Protection, and provided a more specific approach to the control and microbiological hazards in foods than was provided by traditional inspections and quality control procedures. The HACCP system has been successfully used in a number of areas and is currently being taught by the AMEDD Center and School as a potential tool to reduce the incidence of foodborne disease in the military community.

1-14. GOALS OF HACCP

a. The major goals of HACCP are to reduce (ideally to zero) complaints of unsanitary practices in food services and incidences of foodborne illnesses.

b. The HACCP seeks to eliminate hazardous conditions by studying the steps in the food production process, identifying the critical control points, and making recommendations to eliminate any safety hazards found.

1-15. THE HACCP PROCESS

a. After obtaining the necessary equipment, identify each ingredient in a product and do a hazard analysis. The hazard must be identified before a control standard is imposed. Hazard categories are:

(1) <u>Hazard Category I</u>--has been continually identified by food safety experts from foodborne illness investigation as an agent or cause responsible for foodborne illness outbreaks.

(2) <u>Hazard Category II</u>--has been shown by food safety experts in reproducible laboratory studies to be a likely hazard and cause responsible for foodborne illness outbreaks or has a strong theoretical rationale based on scientific data.

(3) <u>Hazard Category III</u>--has been proposed in professional journals by some investigators as a hazard or cause of foodborne outbreaks, but to date lacks any operational supporting evidence or strong theoretical rationale that it is a hazard or cause of foodborne illness.

b. Talk to managers and key workers about potentially hazardous food ingredients and the way they are received, stored, reconstituted or thawed, handled during preparation, cooked, handled after cooking, held hot, cooled, reheated, and served.

NOTE: "Potentially hazardous food" (PHF) means any food that consists in whole or in part of milk or milk products, eggs, meat, poultry, fish, shellfish, edible crustacean, or other ingredients to include synthetic ones, in a form capable of supporting rapid and progressive growth of infectious or toxigenic microorganisms. (The term does <u>not</u> include clean, whole, uncracked, odor-free eggs, or foods which have a pH level of 4.6 or below or a water activity value of 0.85 or less.)

c. Observe all or part of the operations judged to be potentially hazardous, noting the hygienic practices of the workers and methods of cleaning equipment. Use the following criteria to help decide which operations to evaluate:

- (1) Potentially hazardous status of the food items.
 - (a) Susceptibility of food to contamination.
 - (b) Opportunity for survival of pathogens.
 - (c) Likelihood of microbial growth during food operations.
 - (d) Whether or not food is cooked prior to serving.
 - (e) Susceptibility of consumers to infectious agents/toxins.
- (2) Volume prepared at one time.
- (3) Length of processing time and complication of preparation.
- (4) The food's epidemiological history as a vehicle of foodborne disease.
- d. Based on the previous steps, make a diagram of the food flow.

(1) Codes and symbols are used to provide the details about actual or potential contamination, time-temperature exposures, and survival or growth of pathogenic foodborne microorganisms.

(2) Observe the food operation as it occurs routinely, noting the start time, quantities used, employees handling the food, and work location.

(3) During the preparation period, record the temperatures of potentially hazardous foods along with the time and food location of each entry. It may be necessary to note the number and size of containers used.

(a) It is important to take temperatures at the surface and geometric center at one-half hour intervals during any process in which the product temperature will fluctuate into the danger zone between 45° and 140° F.

(b) Since improper cooling is the most frequent factor to foodborne disease outbreaks, it is imperative to continue surveillance of time and temperature measurements during the cooling period.

(c) Later, the time-temperature relationships will be graphed to better evaluate any potentially dangerous periods.

(4) The diagram should show all the pertinent processing or preparation steps. Consideration must be given to other processes in the same area or use of the same equipment because of the potential of cross-contamination.

(5) A diagram is only done once for each hazardous food at each establishment, unless there are changes in food, equipment, personnel, or process. Usually only the modifications have to be changed on the diagram.

(6) Sources of contamination, processes during which microorganisms could survive, and operations during which growth could occur are sought and annotated during the analysis and the review of the flow diagram.

e. Critical control points (CCP) are then identified from the evaluation. A CCP is an operation at which time preventive or control measures can be exercised which will eliminate or minimize a hazard that may have occurred prior to that point.

f. Specifications for each food item need to be developed jointly by the inspectors and a knowledgeable company representative. A monitoring method must be instituted that involves systematic observation, measurement, and/or recording of the significant factors for preventive measures or control of hazards. The monitoring procedures that are chosen must:

- (1) Be practical to implement.
- (2) Set parameters for what is acceptable performance of a process.

(3) Be specific and detailed enough to allow the food handler to correctly observe when CCPs are not met.

(4) Describe what to do when the CCPs are not met.

(5) Explain how to bring the product back into acceptable limits, as soon as possible, either before or during the operation.

g. The monitoring procedures should be incorporated into a written description of employee responsibilities that will serve as a reference for the food handler, the supervisor, and the inspector.

h. A follow-up meeting with the establishment management should be scheduled to discuss the CCPs and monitoring procedures, and to seek agreement and understanding of the importance of the whole process. Future inspections will evaluate the establishment's monitoring of their CCPs.

1-16. SUMMARY

As this lesson demonstrates, outbreaks of foodborne diseases are a significant problem in the military environment. This problem can be prevented or reduced through an efficient surveillance and inspection program.

Continue with Exercises

EXERCISES, LESSON 1

INSTRUCTIONS. Follow the special instructions given below. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers.

<u>SPECIAL INSTRUCTIONS FOR EXERCISES 1 THROUGH 6</u>. COLUMN I contains the names of entries on the inspection checklist. COLUMN II contains information that is recorded on the inspection checklist. Match each entry in COLUMN I with the appropriate information in COLUMN II.

COLUMN I

COLUMN II

- _____ 1. "Wt" Column.
- 2. "Description" Column.
 - 3. "Follow-up" Block.
 - 4. "Reference Paragraph Number" page.
- 5. "Rating Score" Block.
 - 6. "Rating" Block.

- a. Indicates whether the facility should be reinspected to determine that corrections have been made.
- b. Assigns a priority value to each item to be inspected on a scale of 1 to 5.
- c. Contains a number derived by adding the weights of all unsatisfactory items and subtracting the sum from 100.
- d. Specifies the item to be inspected.
- e. Contains four ratings; used to assign an overall rating to the facility.
- f. Gives the location of information from TB MED 530 for each item on the checklist.

<u>SPECIAL INSTRUCTIONS FOR EXERCISE 7</u>. Refer to the inspection checklist on the following page. The checklist shows the results of an inspection of a food service facility. Basic information and unsatisfactory items have already been recorded. You are following an SOP, which states that:

A rating score of 90 or above is satisfactory. A rating score of 80-89 is marginal. A rating score of 79 or below is unsatisfactory.

7. Using this information, record the rating score and the overall rating for the facility.

SAMPLE	COMPREHENSIVE FOOD SERVICE INSPECTION SAMPLE																			
INSTALLATION							DING NO.			-		SIGNA								
PERSON IN CHARGE OF FACILITY COPY REPORT FURNISHED TO																				
	FACILITY			1			RATIN	G			2	1		PUR	POSE				3	
1. Troop Dining Facility		Hospit Facility		ing		1. Satisfact			3. Ma	•		1. Re	-			-	Reinsp			
2. Cafeteria	5.	Club				2. Unsatisf	actory		4. Oth (spe	er ecify)		2. Co	ourtesy	/	L	4. Other (specify)				
3. Snack Bar	6.	Other	(speci	fy)																
COM-	FACILITY	INS	SPECT	OR		PECTION		DA	TE					RESE	RVED					
MAND				r		· ···· ·	YR	N	0	DAY	_					1			·	
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	32	33	34	
DESCRIP	TION			wт			DESCRIPTIO	N		w.	г			DESCRIPT	TION				wт	
FOOD Approved source, so evidence of spoilage		on, <u>no</u>		5	F00 20		NT AND UT se water: Cl re			2		4 Out	side st	REFUSE DIS orage area p quate conta	properl	y cons	structe		1	
02 Original container, p	roperly labe	ed		1	•21		n rinse: clea							T, OTHER A			TROL			
FOOD PROTECTION *03 Potentially hazardou	s food meet	s			1		re, concentr pressure. E			e 4				ed animals			_		4	
time/temperature red storage, preparation transport; leftover p	quirements (, display, se	during		5	22	Wiping clo	oths: Clean, anitizing sol		ted in u	se, 1		6 Floo	rs: co	6, AND CEIL Instructed, c apair; coveri	drained			ble,	1	
*04 Equipment to mainta temperatures	ain product			4	*23	and utensi	act surfaces ils: clean, sauses, free of	anitize	d	3	3	7 Wal	ls, ceil	leaning metl ings, attach	ed equ					
05 Thermometers provise accurate	ded, conspie	cuous,		1	between uses, free of abrasives/ detergents clean, dustless cleaning method									surrac	es	1				
Proper tempering/that hazardous food	awing of po	tentiall	lγ	3	24	Nonfood c and utensi	ontact surfa ils clean	ces of	equipm	ent 1			ting ac ected	dequate, <u>fix</u>	fixtures shielded, 1					
*07 Potentially hazardou service not re-served 08 Food protected durin	d			2	25 Broper storage handling of close						iired				1					
display, service trans		Jepara	ation	2	26		vice items: tored, and di			2	*4			grease extr properly ins		equip	ment		4	
09 Handling of food/ice				2	WAT	ER		-						MS/AREAS	laneu					
10 In use, food/ice uten PERSONNEL 11 Training program rec			a	1	*27	and cold v	oved sources vater, adequ			t 4			n, loci	kers provide	d, con	venier	nt locat	ion,	1	
*12 No evidence of com skin infections, cuts	municable d		s,	1 5	SEW *28		sewage and	liquid	waste	4				toxic items	toxic items properly stored, 4					
*13 Hands washed and opractices		hygien	e	4	PLUN (29)	//BING	maintained p	roperi	v	1	4	3 Prer	nises:	Maintained						
14 Clean work garment no unauthorized jew				1	3	No cross-c	connection, j	ootent		3		equi		ry articles - properly sto only					1	
FOOD EQUIPMENT AND U						ET AND LA	VATORY FA	CILITI			4	4 Clea	n/soile	ed linen prop	perly st	tored			1	
*15 Food/ice contact sur properly designed, c located, and maintai	onstructed,			3	31		number, cor ned and insta			3	4			separation o /sleeping qu					1	
16 Nonfood contact sur designed, constructe			ed,	1	32	doors, goo	ns enclosed od repair, ad	equate	hand			6 Oth		cify)						
and maintained 17 Utensil washing faci operated, maintained			ned,	2	hand drying facilities, waste receptacles															
(18) Accurate thermomet chemical test kits pr	ters, pressu	e gauç	ges,	2		Containers	REFUSE DIS s or receptace number, ver	les co	vered,	3	4	8 No								
	chemical test kits provided/used 2 adequate number, vermin proof, emptied frequently, clean 3 19 Utensils preflushed, scraped, soaked 1																			
*Critical deficiencies requi	ring immedi	ate cor	rrectio	n - Us	e DA I	orm 5161-	1 for additio	nal rer	narks.	-	_			,						
SIGNATURE OF INSPECTO	DR								T	IME				- .	DAT	E				
SIGNATURE OF RECEIVER	1								l						DAT	E				
DA FORM 5161, A	UG 91																ι	SAPA	V1.00	

Comprehensive Food Service Inspection (DA Form 5161) for exercise 7.

8. Under HACCP, a food which has been proposed by some food safety experts as a possible cause of foodborne illness outbreaks but lacks any supporting evidence is identified as:

- a. Hazard Category I.
- b. Hazard Category II.
- c. Hazard Category III.

9. Which of the following items is NOT considered to be a potentially hazardous food (PHF)?

- a. Milk.
- b. Poultry.
- c. Tomatoes.
- d. Eggs.
- e. Shellfish.

10. Which of the following factors is a contributor to foodborne disease outbreaks, as shown by studies in the U.S. and abroad?

- a. Inadequate storage of foods.
- b. Improper storage of dry foods.
- c. Inadequate reheating procedures.
- d. Contamination of dry foods by insects.

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 1

- 1. b (para 1-3b)
- 2. d (para 1-3a)
- 3. a (para 1-3d)
- 4. f (para 1-3c)
- 5. c (para 1-3e)
- 6. e (para 1-4b)

7. In this example, the total of the weights of unsatisfactory items is 15; the rating score is 85.

5	100
3	<u> 15</u>
2	85
1	
3	
1	
15	

On the checklist, you should have:

"Written "85" in the "Rating Score" block. "

"Marked the box by "Marginal" in the "Rating" block.

(paras 1-3e, 1-4b)

- 8. c (para 1-15a)
- 9. c (para 1-15b)
- 10. c (para 1-1c)

End of Lesson 1

LESSON ASSIGNMENT

LESSON 2	Inspect the Health Status and Food Handling Procedures of Personnel.
LESSON ASSIGNMENT	Paragraphs 2-1 and 2-2 and chart.
LESSON OBJECTIVES	After completing this lesson, you should be able to:
	2-1. Identify the basic items to check when inspecting personnel to include: reasons for checking the items, their importance as possible causes of foodborne illness, and corrective actions.
	2-2. Evaluate the health and work procedures of personnel at a described food service facility and record any deficiencies on the inspection checklist.
	2-3. Evaluate the personnel situation at the described facility as a whole.
SUGGESTION	After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 2

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL



2-1. INTRODUCTION

Lesson 2 presents the important items to look for when inspecting the health status and food handling practices of food service personnel. This is a critical area. Employees with communicable diseases and employees who do not follow sanitary food handling procedures are major causes of outbreaks of foodborne illness.

2-2 INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

a. The chart on pages 2-3 through 2-14 presents the important items to check when inspecting the health and food handling procedures of personnel. A series of questions follows each item on the chart. Answer the questions and then check your responses by turning to the next page. Follow this procedure for each of the lessons in this subcourse.

b. Employee health and food handling practices are not limited to just one area of the food service facility. You must be alert to employee food handling techniques throughout your inspection.

c. It is important to distinguish between major problems that could be a direct cause of foodborne illness and minor problems that are unlikely to be the immediate source of an outbreak of foodborne disease. Minor problems do not mean that the entire facility is a health hazard. On the other hand, even one major health threat can be enough to make the area unsatisfactory.

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
1. Check to make sure that employees handling food are free of communicable disease and infected sores and cuts.	Employees with communicable disease symptoms or infected sores can directly contaminate food with harmful microorganisms. Contamination can occur through coughing, sneezing, and skin contact. NOTE: If the employees are not directly handling food items, contamination is less of a threat.	Category <u>5</u> .	 Record the problem on the inspection checklist, item 12 Recommend to the manager that the employee be removed from food handling duties. If in doubt, call the OIC/NCOIC for advice.
QUESTION	QUESTION	QUESTION	QUESTION
Employees who handle food must be free of and 	Employees with communicable disease or infected sores and cuts can contaminate food. Contamination can occur through, and	This item is rated as Category	 Record the presence of an employee with a communicable disease or an infected cut/sore on the inspection checklist, item Recommend that the employee be removed from duties.

Turn to page 2-4 to check your answers.

SELF-ASSESSMENT, ITEM 1

ITEM	REASON	IMPORTANCE	ACTION
Employees who handle food must be free of <u>communicable</u> <u>disease</u> and <u>infected</u> <u>sores and cuts</u> .	Employees with communicable disease or infected sores and cuts can <u>directly</u> contaminate food. Contamination can occur through <u>coughing</u> , <u>sneezing</u> . and <u>skin contact</u> .	Category <u>5</u> .	• Record the presence of an employee with a communicable disease or an infected cut/sore on the inspection checklist, item <u>12</u> .
			 Recommend that the employee be removed from <u>food handling</u> duties.

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
2. Check to make sure that employees do not smoke in the food preparation area. Be sure that:	Saliva, which contains harmful microorganisms, will contaminate the smoker's hands. The hands can then directly	Category <u>4</u> .	 Record smoking in the food preparation area on the inspection checklist, item 13. If previous inspection reports
 A separate break area where employees can smoke is provided. 	contaminate foods and cause an outbreak of foodborne illness.		indicate a smoking problem, record the smoker's name.
 Smokers wash their hands before returning to work. 			 Bring the problem to the attention of the manager for immediate correction. A distinct smoking area
 There is no evidence of smoking in the food preparation area (ashtrays, ashes, cigarette butts). 			should be set up and handwashing enforced.

QUESTION	QUESTION	QUESTION	QUESTION
To check that employees are not smoking in the food preparation area, check the area to be sure there is no of smoking. In addition, check to see that: • A separate	A smoker's can be contaminated with harmful microorganisms. This can then directly food.	This item is rated as Category	 Record smoking in the food preparation area on the inspection checklist, item Record the name if the problem previously existed. The manager should correct the problem
is provided.			··
 Smokers wash their before returning to work. 			

Turn to page 2-6 to check your answers.

SELF-ASSESSMENT, ITEM 2

ITEM	REASON	IMPORTANCE	ACTION
To check that employees are smoking in the food preparation area, be sure that there is no <u>evidence</u> of smoking in the food preparation area.	A smoker's <u>hands</u> can be contaminated with harmful microorganisms. This can then directly <u>contaminate</u> food.	This item is rated as Category <u>4</u>	 Record smoking in the food preparation area on the inspection checklist, item <u>13</u>. Record the <u>smoker's</u> name if this problem existed previously.
In addition, check to see that:			The manager should
 A separate <u>break area</u> is provided. 			correct the problem immediately.
 Smokers wash their <u>hands</u> before returning to work. 			

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure employees minimize the contact of their hands with food and ice. Appropriate utensils should be used instead of hands. In particular, make sure that employees use utensils to handle ice intended for human consumption. 	Direct employee handling of food and ice increases the risk of contamination. If a utensil is designed to be used for handling food or ice, it should be used (scoops, tongs, etc.). For example, employees should handle ice with an ice scoop, not with their hands.	Category <u>2</u> .	 Record the problem on the inspection checklist, Item 09. Bring the problem to the attention of the manager
QUESTION	QUESTION	QUESTION	QUESTION
Be sure that employees minimize contact between their and or should be used for these items instead of hands.	The risk of contamination when employees handle food or ice directly with their 	This item is rated as Category	Record excessive contact of employees' hands with food and/or ice on the inspection checklist, item

Turn to page 2-8 to check your answers.

SELF-ASSESSMENT, ITEM 3

ITEM	REASON	IMPORTANCE	ACTION
Be sure that employees minimize contact between their <u>hands</u> and <u>food</u> or <u>ice</u> . <u>Appropriate utensils</u> should be used in place of hands.	The risk of contamination increases when employees handle food or ice directly with their hands.	This item is rated as Category <u>2</u> .	Record excessive contact of employees hands with food and/or ice on the inspection checklist, item <u>09</u> .

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure that employees aren't wearing excessive jewelry (jewelry other than wristwatches, wedding bands, and engagement rings). 	Excessive jewelry allows food particles to accumulate between the skin and the jewelry and can trap dirt containing harmful microorganisms. Excessive jewelry can also interfere with proper handwashing.	Category <u>1</u> .	 If several employees are wearing excessive jewelry, record the problem on the Inspectior checklist, item 14. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
When observing employees, make sure that they are not wearing 	Excessive jewelry allows food particles to accumulate between the and the It can trap containing harmful microorganisms. Excessive jewelry can also interfere with proper 	This item is rated as Category 	Record the problem of employees wearing excessive jewelry on the inspection checklist, item

Turn to page 2-10 to check your answers.

SELF-ASSESSMENT, ITEM 4

ITEM	REASON	IMPORTANCE	ACTION
When observing employees, make sure that they are not wearing <u>excessive jewelry</u> .	Excessive jewelry allows food particles to accumulate between the <u>skin</u> and the jewelry. It can trap <u>dirt</u> containing harmful microorganisms. Excessive jewelry can also interfere with proper <u>handwashing</u> .	This Item is rated as Category <u>1</u> .	Record the problem of employees wearing excessive jewelry on the inspection checklist, item <u>14</u> .

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
5. Check to make that employees garments are c and that effecti restraints are u	s' work contaminate lean employees' han ve which, in turn, c	ads, could od. are used loyees' into contain 'ga- iood is d often	 Record the problem on the inspection checklist, item 14. Follow local SOP as established by the OIC/ NCOIC and bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Employee work garr should be employees should u effective	and contaminate Ise employees'		Record a problem with dirty garments or hair restraints or the inspection checklist, item

Turn to page 2-12 to check your answers.

•

Hair restraints prevent

employees' _____ from falling into _____.

SELF-ASSESSMENT, ITEM 5

ITEM		REASON	IMPORTANCE	ACTION
Employee's work garments should be <u>clean</u> and employees should use effective <u>hair restraints</u> .	•	Soiled <u>garments</u> can contaminate employees' <u>hands,</u> which could then contaminate <u>food</u> .	This item is rated as Category <u>1</u> .	Record a problem with dirty garments or hair restraints on the inspection checklist, item <u>14</u> .
	•	Hair restraints prevent employees' <u>hair</u> from falling into <u>food</u> .		

INSPECT THE HEALTH STATUS AND FOOD HANDLING PROCEDURES OF PERSONNEL

ITEM	REASON	IMPORTANCE	ACTION
 Check for the presence of training records. 	Requirements for cards will vary from facility to facility. Some posts may require food handler cards for each employee; others will require training in food sanitation.	Category <u>1</u> .	 Record a problem with the food handler card on the inspection checklist, item 11 for training. Follow local SOP as established by OIC/NCOIC.
	NOTE: Food handler cards indicate freedom from communicable disease at the time of hiring.		

QUESTION	QUESTION	QUESTION	QUESTION
When evaluating employee health status, check for cards or similar requirements.	Some facilities may require as an alternative to the cards.	This item is rated as Category 	Record a problem with the food handler card on the inspection checklist, item for training.

Turn to page 2-14 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When evaluating employee status, check for <u>food</u> <u>handler</u> cards or similar requirements.	Some facilities my require <u>training in food sanitation</u> as an alternative to the cards.	This item is rated as Category <u>1</u> .	Record a problem with the food handler card on the inspection checklist, item <u>11</u> for training.

Continue with Exercises

EXERCISES, LESSON 2

INSTRUCTIONS. Answer the following exercises by circling the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by making entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: During your inspection of an Army food service facility, you observe employees and their food handling practices. You make the following observations:

<u>Observation 1</u>. You observe two employees cutting and preparing chicken for baking. One of the employees has a reddish sore on his chin and periodically touches this sore.

<u>Observation 2</u>. You do not see employees smoking directly in the food preparation area nor do you see ashes or cigarette butts on the equipment surfaces or the floors of this area. There is no distinct break area. Instead, employees go outside to take breaks and smoke. You observe two employees smoking outside on their break and then rushing back into the food preparation area to begin work. They do not stop to wash their hands.

<u>Observation 3</u>. Employees use ice scoops to fill glasses intended for iced water. You also observe them handling olives, pickle slices, and other relishes with tongs.

<u>Observation 4</u>. This particular facility does not require a food handler's card. It does, however, require a medical examination to disclose obvious medical conditions that would prevent the employee from working in a food service facility. Filed reports on the result of this medical examination exist for all employees. The reports indicate no major communicable disease state for any employee at the time of hiring.

<u>Observation 5</u>. Employees in all areas of the food service facility wear and show signs of careful personal hygiene (clean hair, clean uniforms, nails, etc.). Most of the female employees do not wear hairnets.

Refer to these observations when answering exercises 1 through 4.

 a. Are there any problems in observation 1? describe them. 	If so, briefly
 b. Are there any problems in observation 2? describe them. 	If so, briefly
c. Are there any problems in observation 3? describe them.	If so, briefly
d. Are there any problems in observation 4? describe them.	If so, briefly
e. Are there any problems in observation 5? describe them.	If so, briefly

2. What corrective actions would you suggest for any unsatisfactory observations?

- 3. Record any unsatisfactory observations on the inspection checklist shown on the following page.
- 4. How would you rate personnel health and food-handling procedures at this food service facility?
 - a. As unsatisfactory. Critical items have been violated and the risk of contamination and foodborne illness is quite high.
 - b. As completely satisfactory. No problems have been found at this facility.
 - c. As basically satisfactory. Some minor problems have occurred, but they are not likely to cause contamination or an outbreak of foodborne illness.

Check Your Answers

SAMPLE	COMPREHENSIVE FOOD SERVICE INSPECTION For use of this form, see TB MED 530, the proponent agency is the Office of The Surgeon General.																				
INSTALLATION							DING NO.			FACIL											
PERSON IN CHARGE OF F	ACILITY							COPY	REPORT	FURNIS	SHE	ED TO									
	ACILITY			1			RATIN	G			2					URPO					3
1. Troop Dining		Hospita	al Dini	_	\square	1. Satisfact			3. Mai		-		1. Re	qular	P	URP	05E	3	Reinsp	ection	-
Facility		Facility		ng		2. Unsatisf	•	П	4. Oth	•				urtesy	,				Other		
2. Cafeteria	5.								(spe	cify)											
3. Snack Bar	FACILITY	Other ((special SPECT			PECTION									DI	SER					
COM-	PACIEITT	1113	FEGI	UΠ		AE (MIN)	YR	<u> </u>		DAY					n	ESEN	VED				
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	r +	(24	25	26	27	28	29	30	31	32	33	34
DESCRIP				wт			DESCRIPTIC			14	νт				DESCF						WT
FOOD	TION			VV I	FOO				G (con't)		V I	GAR	BAGE	AND	REFUSE			_ (con	't)		~~ ~
*01 Approved source, so evidence of spoilage		on, no		5	20	Wash, rins temperatu	e water: C re	lean, p	roper		2	34			orage are quate co						1
02 Original container, p	roperly label	ed		1	*21		n rinse: cle re, concent								T, OTHE				ITROL		
FOOD PROTECTION *03 Potentially hazardou:	s food meet	s					pressure. E			· · ·	4		unau	thoriz	ed anima	als					4
time/temperature rec storage, preparation	, display, se			5	22	Wiping clo	ths: Clean		ted in u	se, .	1	FLOORS, WALLS, AND CEILINGS 36 Floors: constructed, drained properly,									
transport; leftover pe *04 Equipment to mainta	· · · · · · · · · · · · · · · · · · ·	-			•23	stored in sanitizing solution			-	in good repair; covering installation durable, dustless cleaning methods				1							
temperatures				4		between u	ls: clean, s ises, free of				3	37 Walls, ceilings, attached equipment constructed properly, good repair, surfaces									
05 Thermometers provi accurate	ded, conspic	cuous,		1	24	detergents			oguine				clear		tless clea						1
*06 Proper tempering/that hazardous food	awing of pot	tentiall	Y	3	24	and utensi	ontact surf Is clean	ices of	equipm		1			ting ac ected	lequate,	fixtu	res st	nielde	d,		1
*07 Potentially hazardou service not re-served	d			2	25 Proper storage, handling of clean, sanitized equipment and utensils				1				1								
08 Food protected durin display, service trans		prepara	ation	2	26	26 Single-service items: not reused,				2		Filter	rs and	grease e	extra	cting	equip	ment		4	
09 Handling of food/ice	minimized			2	WAT	properly stored, and dispensed WATER			_		clean and properly installed				4						
10 In use, food/ice uten	sils properly	stored	d	1	*27	Safe appro	oved source vater, adequ				4	DRESSING ROOMS/AREAS 41 Clean, lockers provided, convenient location,			1						
PERSONNEL 11 Training program rec	cords availat	le		1	SEW	AGE						отн	used	ERATI	ONS						
*12 No evidence of com skin infections, cuts		iseases	s,	5	*28	Adequate disposal	sewage and	l liquid	waste	4	4	*42 Necessary toxic items properly stored, labeled, used				4					
*13 Hands washed and o	clean, good	hygien	e	4	PLUN 29	/BING	maintained	roperl	.,	1	1	43	Prem	nises:	Maintair		d free of litter,				
practices 14 Clean work garment no unauthorized jew				1	*30	No cross-c	connection,	potent		+	3	unnecessary articles - maintenance equipment properly stored, authorized personnel only				1					
FOOD EQUIPMENT AND U	ITENSILS					ET AND LA	VATORY FA	CILITI			\neg	44	Clea	n/soile	ed linen p	prope	rly st	ored			1
*15 Food/ice contact sur properly designed, c located, and maintai	onstructed,			3	31	Adequate ble, desigr	number, co ned and inst			isi-	з	45			separatio /sleeping						1
16 Nonfood contact sur designed, constructe			ed.		32		ns enclosed od repair, ad					46	Othe	r (spe	cify)						
and maintained 17 Utensil washing faci				1		cleaner, ru	inning wate g facilities,	r, temp	perature,		1		.OW-L								
operated, maintained			,	2	GAD										•••••			. [
18 Accurate thermomer chemical test kits pr			jes,	2		GARBAGE AND REFUSE DISPOSAL 33 Containers or receptacles covered, adequate number, vermin proof, emptied frequently, clean				3				IF USED					-		
19 Utensils preflushed,	scraped, so	aked		1		amptieu Ir									weight		ems v	iolate	d		
*Critical deficiencies requi	-	ate cor	rectio	n - Us	e DA I	Form 5161-	1 for addition	nal rer													
SIGNATURE OF INSPECTO	DR								T	IME							DATE				
SIGNATURE OF RECEIVER	1																DATE				
DA FORM 5161, A	UG 91																		L	ISAPA	V1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 3

SOLUTIONS TO EXERCISES, LESSON 2

- **<u>NOTE</u>**: The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.
- 1. a. Yes. The employee who touches the sore on his chin could contaminate food and food contact surfaces. Employees with infected sores should not handle food. (chart, item 1)
 - b. Yes. There is no designated smoking area. In addition, the employees returning from their break did not wash their hands. (chart, item 2)
 - c. No. (chart, item 3)
 - d. No. (chart, item 6)
 - e. Yes. Most female employees are not wearing hair restraints. Hair restraints should be worn to prevent hair from falling into food. (chart, item 5)
- 2. For Observation 1, recommend to the manager that he remove the employee from food handling duties. For Observation 2, recommend to the manager that he set up a specific smoking/break area and enforce handwashing procedures. If the problem is repeated, record the smoker's name. For Observation 5, bring the problem to the manager's attention. (chart, items 1, 2, and 5)
- 3. On the checklist, you should have:

Circled item 12 and underlined "skin infections."

Circled item 13 and underlined "hands washed."

Circled item 14 and underlined "hair restraints."

(chart, items 1, 2, and 5)

4. a. Two major (Categories 4 and 5) health problems were identified. (para 1-9b; chart, items 1 and 2)

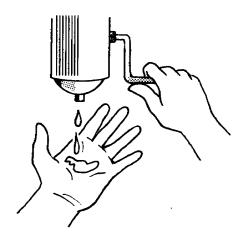
End of Lesson 2

LESSON ASSIGNMENT

LESSON 3

TEXT ASSIGNMENT

LESSON OBJECTIVES



SUGGESTION

Inspect Restrooms and Handwashing Facilities.

Paragraphs 3-1 and 3-2 and chart.

After completing this lesson, you should be able to:

- 3-1. Identify the basic items to check when inspecting restrooms and handwashing facilities to include: the reason for checking the items, their importance as possible causes of foodborne illness, and corrective actions.
- 3-2. Evaluate the conditions in a described restroom and record any deficiencies on the inspection checklist.
- 3-3. Evaluate the described restroom as a whole.

After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 3

INSPECT RESTROOMS AND HANDWASHING FACILITIES



3-1. INTRODUCTION

This lesson deals with inspecting restrooms and handwashing facilities. Adequate restroom handwashing facilities must be provided for employees. Inadequate handwashing is one of the most common causes of foodborne illness.

3-2. INSPECT RESTROOMS AND HANDWASHING FACILITIES

a. The chart on pages 3-3 through 3-10 presents the important items to observe when checking restrooms and handwashing facilities.

b. Again, it is important to use common sense when evaluating restroom and handwashing facilities. You must be able to distinguish between minor problems and deficiencies that are a direct health hazard.

c. Answer the questions with the items as you did in Lesson 2.

INSPECT RESTROOMS AND HANDWASHING FACILITIES

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure that restrooms and handwashing facilities are: Adequate in numbers to service employees. Located so that they are easy to find and use. 	Employees must wash their hands to avoid contaminating food. If restrooms or handwashing facilities are too few or difficult to find, employees will probably become careless about handwashing. This could result in contaminated food.	Category <u>3</u> .	 Record the problem on the inspection checklist, item 31. Recommend that restroom/handwashing facilities be installed during the next major modification of the facility.
QUESTION	QUESTION	QUESTION	QUESTION
Restrooms and handwashing facilities Should be: • in to serve employees.	If restrooms/handwashing facilities do not adequately service employees, employees will become about and could food.	This item is rated as Category 	 Record the lack of accessible restroom/ handwashing facilities on the inspection checklist, item
 In a place where they are easy toand 			

Turn to page 3-4 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Restrooms and handwashing facilities should be:	If restrooms/handwashing facilities do not adequately service employees, employees will become	This item is rated as Category <u>3</u> .	 Record the lack of accessible restroom/hand- washing facilities on the inspection checklist item
 <u>Adequate</u> in <u>number</u> to serve employees. 	careless about handwashing and could contaminate food.		<u>31</u> .
 In a place where they are easy to <u>find</u> and 			

<u>use</u>.

INSPECT RESTROOMS AND HANDWASHING FACILITIES

ITEM	REASON	IMPORTANCE	ACTION
 Check handwashing facilities. Be sure that they are: 	Unwashed hands can contaminate food. NOTE: This requirement	Category <u>1</u> .	• Record the problem on the inspection checklist, items <u>32</u> .
Clean and in good repair.	may be waived in mobile food units or temporary facilities where food items		 Bring the problem to the attention of the manager for correction.
 Provided with soap and paper towels or a hot air hand dryer. 	are premade and wrapped. In this case, emphasis should be placed on personal hygiene and		
 Provided with a sign reminding personnel to wash their hands. 	practices that may contaminate food.		

QUESTION	QUESTION	QUESTION	QUESTION
Handwashing facilities should be:	Unwashed hands can food.	This item is rated as Category	Record the presence of inadequate handwashing facilities on the inspection checklist, item
 Clean and in Provided with soap and paper towels or a Provided with a sign reminding personnel to 	 When food items are premade and wrapped, attention should be focused on proper and 	'	

Turn to page 3-6 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Handwashing facilities should be:	 Unwashed can <u>contan</u> food. 		Record the presence of inadequate handwashing facilities on the inspection
Clean and in good		0 7 =	checklist, item <u>32</u> .
<u>repair</u> .	 When food are premace 		
 Provided with soap and paper towels or a <u>hot air hand dryer</u>. 	wrapped, a should be f on proper <u>p</u> <u>hygiene</u> an	ttention ocused personal	
 Provided with a sign reminding personnel to <u>wash their hands</u>. 	practices.		

INSPECT RESTROOMS AND HANDWASHING FACILITIES

ITEM	REASON	IMPORTANCE	ACTION
 3. Check the restroom door. Be sure that it: Is self-closing. Doesn't open directly into the food service area. 	Open restroom doors give flies access to food processing area. Flies that have contacted human waste or contaminated surfaces in restrooms can then contaminate food items.	Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>32</u>. Bring the problem to the attention of the manager. If the door does not completely close, recommend that a spring be installed.
QUESTION	QUESTION	QUESTION	QUESTION
When checking the restroom door, ensure that the door is and does not open directly Into the 	Restroom doors that do not close completely allow to enter the food processing area. They can then food items.	This item is rated as Category 	 Record a problem with the restroom door on the inspection checklist, item When the restroom door does not completely close, recommend the installation of a

Turn to page 3-8 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking the restroom door, ensure that the door is <u>self-closing</u> and does not open directly into the	Restroom doors that do not close completely allow <u>flies</u> to enter the food processing area. They can then contaminate food items.	This item is rated as Category <u>1</u> .	• Record a problem with the restroom door on the inspection checklist, item <u>32</u> .
food service area.			• When the restroom door does not completely close, recommend the installation of a <u>spring</u> .

INSPECT RESTROOMS AND HANDWASHING FACILITIES

ITEM	REASON	IMPORTANCE	ACTION
 Check to be sure waste containers are present, clean, and adequate in number. 	The presence of waste containers encourages good handwashing techniques. Waste containers also limit trash to one area. Trash may contain harmful microorganisms.	Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>32</u>. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Restroom should have waste containers present that areand	Waste containers in a restroom encourage good	This item is rated Category <u>1</u> .	 Record a problem on the inspection checklist, item

Turn to page 3-10 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Restroom should have waste containers present that are clean and <u>adequate</u> <u>in number</u> .	Waste containers in a restroom encourage good <u>handwashing techniques</u> .	This item is rated as Category <u>1</u> .	Record a problem on the inspection checklist, item <u>32</u> .

Continue with Exercises

EXERCISES, LESSON 3

INSTRUCTIONS. Answer the following exercises by circling the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by marking entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: You are checking the restroom of an Army food service facility and make the following observations:

<u>Observation 1</u>. Restrooms do not seem overcrowded; you do not see employees waiting to use the facilities. All employees know where the restrooms are located.

<u>Observation 2</u>. The restroom is clean and has hot running water and soap. The hot air hand dryer is out of order and there are no paper or disposable towels.

<u>Observation 3</u>. A sign is posted reminding employees to wash their hands before returning to work.

<u>Observation 4</u>. The restroom contains two waste containers, one of which is large. There is no litter on the floor.

<u>Observation 5</u>. The restroom door is designed to be self-closing but will not completely close on its own.

Use these observations when answering the following exercises.

1. Place a check by the observations which are unsatisfactory.

1
2
3
4

Observation 5 _____

2. If you have checked any observations as unsatisfactory, briefly explain why and what corrections you would suggest.

- 3. Record any unsatisfactory observations on the inspection checklist on page 3-13.
- 4. As an inspector, how would you best evaluate the restroom at this food service facility?
 - a. Completely satisfactory. There are no health issues involved.
 - b. Unsatisfactory and very hazardous. Major sanitation precautions have been violated.
 - c. As basically acceptable. There are some problems, which you have noted, but they are not extremely serious.

Check Your Answers

SAMPLE	Fo	use o	of this				E FOOD						eon Ge	eneral.	S	A	ΙPI	E	
INSTALLATION				,			DING NO.	3	,	FACILIT									
PERSON IN CHARGE OF F	ACILITY						(COPY	REPORT	URNISH)							
											····								
	ACILITY			1			RATIN	G		2	-			PUR	POSE				3
1. Troop Dining Facility		Hospit Facility		ing		1. Satisfac			3. Març			1. Re	-			-	Reinsp		
2. Cafeteria	5.	Club				2. Unsatisf	actory		4. Othe (spec			2. Co	urtesy	/	L] 4.	Other	(speci:	fy)
3. Snack Bar	6.	Other	(speci	fy)															
COM- MAND	FACILITY	INS	SPECT	OR		PECTION ME (MIN)			TE		_			RESE	RVED				
							YR	M	r	DAY									
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	22 2	3 24	25	26	27	28 29	30	31	32	33	34
				WT			DESCRIPTIO			WT	-			DESCRIPT					WT
DESCRIP	TION				FOOL		NT AND UT		6 (con't)		GAF	BAGE	AND	REFUSE DIS		L (cor	n'tj		VV I
*01 Approved source, so evidence of spoilage		on, no		5	20	Wash, rins temperatu	se water: Cl re	ean, p	roper	2	34			orage area p quate conta					1
02 Original container, p	roperly labe	ed		1	*21		n rinse: clea							T, OTHER A			ITROL		
FOOD PROTECTION *03 Potentially hazardou	s food meet	s					pressure. Ed			4				ed animals					4
time/temperature red storage, preparation	quirements (luring		5	22		ths: Clean,	restric	ted in us	э, <u>1</u>	FLOORS, WALLS, AND CEILINGS 36 Floors: constructed, drained properly,								
transport; leftover po *04 Equipment to mainta		_			•23		anitizing sol act surfaces		upment		in good repair; covering installation dura dustless cleaning methods			on dura	ble,	1			
temperatures				4		and utensi	ls: clean, sa ises, free of	nitize	d	3	37 Walls, ceilings, attached equipment constructed properly, good repair, surfa				05				
05 Thermometers provise accurate	ded, conspie	uous,		1		detergents						clear		tless cleanir					1
*06 Proper tempering/that hazardous food	awing of po	entiall	lγ	3	24	Nonfood o and utensi	ontact surfa ils clean	ces of	equipme	^{nt} 1	LIGHTING 38 Lighting adequate, fixtures shielded, protected				1				
*07 Potentially hazardou service not re-served	t			2	25		rage, handlir equipment ar			1	VEN 39	TILATI		nted as requ	uired				1
08 Food protected durin display, service trans		prepara	ation	2	26		vice items: i tored, and di			2	*40	Filter	rs and	grease extr	acting	equip	ment		4
09 Handling of food/ice	minimized			2	WAT		torea, and a	spens	eu	_				properly ins	talled				–
10 In use, food/ice uten PERSONNEL	isils properly	store	d	1	*27	Safe appro	oved sources vater, adequ			4	DRE 41		n, locl	MS/AREAS kers provide	d, con	venier	nt loca	tion,	1
11 Training program rec	ords availat	le		1	SEW					-	-	IER OP		IONS					
*12 No evidence of com skin infections, cuts		isease	s,	5	*28	Adequate disposal	sewage and	liquid	waste	4		Nece		toxic items	prope	rly sto	ored,		4
*13 Hands washed and o practices	clean, good	hygien	e	4		IBING Installed, I	maintained p	roperl	Ŷ	1	43			Maintained					
14 Clean work garment no unauthorized jew				1	*30		connection, ponage, backf		iał	3		equi		properly st					1
	OD EQUIPMENT AND UTENSILS 5 Food/ice contact surfaces are nontoxic,				TOILI 31	ET AND LA	VATORY FA number, con	CILITI			44	Clea	n/soile	ed linen prop	perly s	tored			1
properly designed, c located, and maintai	onstructed,			3	31		number, con ned and insta			3	45			separation o /sleeping qu					1
16 Nonfood contact sur designed, constructe			ed,	1	32	doors, goo	ns enclosed, od repair, ade	equate	hand			Othe		ecify)					
and maintained 17 Utensil washing faci operated, maintained			ned,	2			inning water ng facilities, v			es 1		LOW-U Yes.							
18 Accurate thermomer chemical test kits pr			ges,	2		Containers	REFUSE DIS s or receptac number, verr	les co	vered,	3	48	No							
19 Utensils preflushed,				1			equently, cle			Ĭ				IF USED s weight of i	items	violate	ed		
*Critical deficiencies requi	ring immedi	ate cor	rrectio	n - Us	e DA F	orm 5161-	1 for additio	nal rer	narks.					,					
SIGNATURE OF INSPECTO	DR								TI	ИE				*	DAT	E			
SIGNATURE OF RECEIVER	1														DAT	E			
																		ISAPA	V1 00
DA FORM 5161, A	10 9 1																L L	SAPA	v1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 3.

SOLUTIONS TO EXERCISES, LESSON 3

- **<u>NOTE</u>**: The wording of your answers can differ from the wording of the solutions. However₁ the same ideas must be expressed.
- 2. Observation 2 is unsatisfactory because there is no way for employees to dry their hands. This would discourage adequate handwashing. You would suggest that paper towels be present or the hot air hand dryer be repaired. Observation 5 is unsatisfactory because a restroom door that does not close would allow flies to enter the food processing area and contaminate food items. You would recommend that a spring be installed. (chart, items 2 and 3)
- 3. On the checklist, you should have:

Circled item 32 and underlined "hand drying facilities."

Underlined "self-closing doors" in item 32. (Item is already circled.).

(chart, items 2 and 3)

4. c Both problems are minor categories 1 and 2 problems. (chart, items 2 and 3; para 3-2b)

End of Lesson 3

LESSON ASSIGNMENT

LESSON 4	Inspect the Serving Line Area.
----------	--------------------------------

LESSON OBJECTIVES

LESSON ASSIGNMENT Paragraphs 4-1 and 4-2 and chart.

After completing this lesson, you should be able to:

- 4-1. Identify the basic items to check when inspecting the serving line area, to include: reasons for checking the items, their importance as possible causes of foodborne illness, and corrective actions.
- 4-2. Evaluate a described food serving line area and record any deficiencies on the inspection checklist.
- 4-3. Evaluate the described serving line area as a whole.

SUGGESTION After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 4

INSPECT THE SERVING LINE AREA



4-1. INTRODUCTION

Lesson 4 presents the major items to check when inspecting the serving line area. This is the area where diners obtain the prepared food. It would be unfortunate if the food arrived at the serving line in a safe condition and then, due to careless serving line procedures, became a health hazard. For this reason, it is important that the serving line be maintained in a safe and sanitary condition.

4-2. INSPECT THE SERVING LINE AREA

a. The chart on pages 4-3 through 4-18 presents the important items to check when inspecting the serving line area.

b. Again, as with other areas of a food service facility, it is important to distinguish between major and minor deficiencies.

c. Answer the questions with the items as you did in Lessons 2 and 3.

ITEM	REASON	IMPORTANCE	ACTION
. Check temperatures. Make sure that time and temperature controls are being	Potentially hazardous foods on the serving line must be kept at safe temperatures (45°F and below or 140°F	Category <u>5</u> .	 Record the problem on the inspection checklist item 03.
followed for potentially hazardous food items on the serving line (for example, the temperature of the steam table).	and above) to prevent the growth of harmful microorganisms. If these foods are exposed to unsafe temperatures for more than three hours, they must be discarded. This is due to the rapid growth of microorganisms outside the safe temperature zones.		Bring the problem to the attention of the manage for immediate correction

QUESTION	QUESTION	QUESTION	QUESTION
and controls must be followed for potentially hazardous food items on the serving line.	Potentially hazardous foods on the serving line must be kept within the safe tem- perature zones of or below and or above to prevent the growth	This item is rated as Category 	• Record the violation of time and temperature controls for serving items on the inspection checklist, item
	of harmful microorganisms. After hours at dangerous temperatures, these foods must be		 Bring violations to the attention of the manager for

Turn to page 4-4 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
<u>Time</u> and <u>temperature</u> controls must be followed for potentially hazardous food items on the serving line.	Potentially hazardous foods and the serving line must be kept within the safe temperature zones of <u>45°F</u> or below and <u>140°F</u> or above to prevent the growth	This item is rated as Category <u>5</u> .	• Record the violation of time and temperature controls for serving items on the inspection checklist, item <u>03</u> .
	of harmful microorganisms. After <u>three</u> hours at dangerous temperatures, these foods must be <u>discarded</u> .		 Bring violations to the attention of the manager for <u>immediate correction</u>

ITEM	REASON	IMPORTANCE	ACTION
 2. Check milk dispensers for: Maintenance of the proper temperature 	 Milk is a potentially hazardous food and must be kept at the proper temperature to inhibit the growth of harmful 	• Temperature category <u>5</u> .	 For improperly maintained temperature: Record the problem on the inspection checklist, item
(45°F or below).	microorganisms.		03. -Inform the manager for immediate correction.
 Presence of incremented thermometers. 	• Incremented thermometers must be present to indicate that the dispenser is keeping the milk at required temperatures.	• Thermometer Category <u>1</u> .	• For lack of thermometers, record on the inspection checklist, item <u>05</u> , and tell the manager.
 Proper length of the dispensing tube. 	• Dispensing tubes must be cut crosswise approximately 1/2" down from the cut-off valve. A long dispensing tube is more likely to become contaminated.	• Tube Category <u>2</u> .	• For improper length of tubing, record on the inspection checklist, item 09, and tell the manager.

QUESTION	QUESTION	QUESTION	QUESTION
 When checking milk dispensers, look for: Maintenance of the proper temperature, which is 	• Milk is a food and must be kept at the proper temperature to inhibit the growth of	• Improper temperature control of milk dispensers is rated as category	 Record a milk dispenser with improper temperature on the inspection checklist, item, and tell the manger for
Presence of thermometer.	• are used to determine that dispensers are maintaining the milk at the proper temperature.	• The lack of a thermometer is rated as Category	 Record a milk dispenser without a thermometer on the inspection checklist, item
Proper length of the	• Dispensing tubes should be no longer thaninch from the cut-off valve.	• Improper dispensing tube length is rated as category	 Record a dispensing tube of improper length on the inspection checklist, item

Turn to page 4-6 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking milk dispensers, look for:	 Milk is a <u>potentially</u> <u>hazardous</u> food and must be kept at the proper 	 Improper temperature control of 	 Record a milk dispenser with improper temperature on the
 Maintenance of the proper temperature, which is <u>45°F or</u> <u>below</u>. 	temperature to inhibit the growth of <u>harmful</u> <u>microorganisms</u> .	milk dispensers is rated as Category <u>5.</u>	inspection checklist, item <u>03</u> , and tell the manager for <u>immediate correction</u> .
 Presence of incremented thermometers. 	Incremented thermometers are used to determine that dispensers are maintaining the milk at the proper	• The lack of a thermometer is rated as Category <u>1</u> .	• Record a milk dispenser without a thermometer o the inspection checklist, item <u>05</u> .
 Proper length of the <u>dispensing tube</u>. 	 Dispensing tubes should be no longer than <u>one-</u> <u>half</u> inch from the cut-off valve. 	 Improper dispensing tube length is rated as Category <u>2</u>. 	 Record a dispensing tube of improper length on the inspection checklist, item 09.

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure that grills are cleaned between meals. 	Unclean grills can result in cross-contamination and insect infestation.	Category <u>3</u> .	 Record the problem on the inspection checklist, item <u>23</u>.
			 Inform the manager of any violations.
QUESTION	QUESTION	QUESTION	QUESTION

Grills should be cleaned	Unclean grills can cause and	This item is rated as	Record the presence of unclean grills on the
·		Category	inspection checklist, item

Turn to page 4-8 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Grills should be cleaned <u>between meals</u> .	Unclean grills can cause <u>cross-contamination</u> and insect infestation.	This item is rated Category <u>3</u> .	Record the presence of unclean grills on the inspection checklist, item <u>23</u> .

ITEM	REASON	IMPORTANCE	ACTION
4. Check to make sure that soft drink dispensers are cleaned between meals.	Unclean soft drink dispensers attract insects and can cause insect infestation.	Category <u>3</u> .	 Record the problem on the inspection checklist, item <u>23</u>. Inform the manager of any violations.
QUESTION	QUESTION	QUESTION	QUESTION
Soft drink dispensers should be cleaned	Unclean soft drink dispensers can cause	This item is rated as Category	 Record the presence of unclean soft drink dispensers on the

Turn to page 4-10 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Soft drink dispensers should be cleaned <u>between</u> <u>meals.</u>	Unclean soft drink dispensers can cause insect infestation.	This item is rated as Category <u>3</u> .	 Record the presence of unclean soft drink dispensers on the inspection checklist, item <u>23</u>.

ITEM	REASON	IMPORTANCE	ACTION
5. Check to make sure that ice is handled with appropriate dispensing utensils, such as scoops and tongs.	Ice may be contaminated through contact with employees, diners, and surfaces. The use of proper dispensing equipment prevents this type of contamination.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>09.</u> Inform the manager of any violations.
QUESTION	QUESTION	QUESTION	QUESTION
Ice should be handled with appropriate dispensing utensils, such asand 	The use of proper ice- dispensing utensils prevents contamination from, and	This item is rated as Category	Record improper ice dispensing techniques on the inspection checklist, item

Turn to page 4-12 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Ice should be handled with appropriate dispensing utensils, such as <u>scoops</u> and <u>tongs</u> .	The use of proper ice- dispensing utensils prevents contamination from <u>employees</u> , <u>diners</u> , and <u>surfaces</u> .	This item is rated as Category <u>2</u> .	 Record improper ice dispensing techniques on the inspection checklist, item <u>09</u>.

ITEM	REASON	IMPORTANCE	ACTION
6. Check to make sure that the food is served with the appropriate utensils tongs, serving spoons, etc.).	Food-serving utensils prevent contamination from employees and diners.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>09.</u> Inform the manager of any violations
QUESTION	QUESTION	QUESTION	QUESTION
Food must be served with the appropriate utensils, such asand 	Food-serving utensils prevent contamination from and 	This item is rated as Category	 Record improper food serving techniques on th inspection checklist, item

Turn to page 4-14 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Food must be served with the appropriate utensils, such as <u>tongs</u> and <u>serving</u> <u>spoons</u> .	Food-serving utensils prevent contamination from employees and diners.		 Record improper food serving techniques on the inspection checklist, item 09.

ITEM	REASON	IMPORTANCE	ACTION
7. Check to make sure that self-service sugar, con- diments, and dressings are provided in individual packages or closed containers.	Exposed self-service items could attract insects and become contaminated.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>08</u>. Inform the manager of any violations.
QUESTION	QUESTION	QUESTION	QUESTION
Self-service sugar, condiments, and dressings should be provided in or 	Exposed sugar and dressing could attract and become	This item is rated as Category	 Record improper display of sugar, condiments, and dressings on the inspection checklist, item

Turn to page 4-16 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Self-service sugar, condiments, and dressings should provided in <u>individual packages</u> or <u>closed containers</u> .	Exposed sugar and dressing could attract insects and become contaminated.	This item is rated Category <u>2</u> .	 Record improper display of sugar, condiments, and dressings on the inspection checklist, item <u>08</u>.

INSPECT THE SERVING LINE AREA

ITEM	REASON	IMPORTANCE	ACTION
8. Check to make sure that sneeze guards, display cases, etc. are used for foods and drinks that are openly displayed.	Openly displayed foods and drinks can easily be contaminated by diners, employees, insects, etc. Protective devices, such as sneeze guards and display cases, can reduce contamination from these sources.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>08.</u> Inform the manager of any violations.
QUESTION	QUESTION	QUESTION	QUESTION
Sneeze guards and display cases should be used for foods and drinks that are	Protective devices, such as and are used to reduce contamination of openly displayed foods and drinks.	This item is rated as Category	 Record problems with openly displayed foods or drinks on the inspection checklist, item

Turn to page 4-18 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Sneeze guards and display cases should be used for foods and drinks that are openly displayed.	Protective devices, such as <u>sneeze guards</u> and <u>display</u> <u>cases</u> are used to reduce contamination of openly displayed foods and drinks.	This item is rated as Category <u>2</u> .	Record problems with openly displayed foods or drinks on the inspection checklist, item <u>08.</u>

Continue with Exercises

EXERCISES, LESSON 4

INSTRUCTIONS. Answer the following exercises by circling the lettered response that best answers the exercise, or by writing the answer in the space provided at the end of the exercise, or by marking entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: You are inspecting the serving line area at an Army food service facility. During the inspection, you observe the following:

<u>Observation 1</u>: You observe hot vegetables and meats being served from a long steam table. Employees use tongs and ladles to serve these items to customers.

<u>Observation</u> 2: You take the temperature of two vegetable and three meat dishes. The temperatures of these dishes are:

Vegetable Dish A 157°F Vegetable Dish B 160°F Meat Dish A 168°F Meat Dish B 165°F Meat Dish C 167°F

<u>Observation 3</u>: The tube on the milk dispenser is one-half inch long. The dispenser appears clean. There are no incremented thermometers. You take a temperature reading of the milk with a result of 43°F.

<u>Observation 4</u>: Openly displayed salads and custards, Jell-O, and other desserts are shielded with a sneeze guard.

<u>Observation 5</u>: Employees use tongs to serve hot pieces of meat. They use serving spoons and ladles to serve hot vegetables and soup.

<u>Observation 6</u>: Sugar, artificial sweetener, salad dressings, ketchup, and mustard are served in individual paper or plastic packets.

<u>Observation 7</u>: Patrons use their fingers to scoop ice into their glasses. No icedispensing utensil is in sight.

Observation 8: After the meal has been served, employees clean the grill and the soft drink dispenser.

Refer to these observations when answering exercises 1 through 5.

- 1. Refer to the inspection checklist on page 4-21. Record any unsatisfactory observations based upon the situation on the preceding page.
- 2. Which observation(s) would you record as unsatisfactory, if any?
- 3. If you recorded unsatisfactory observation(s), briefly indicate why they are unsatisfactory.

4. What corrective action would you suggest for any unsatisfactory observations?

- 5. How would you rate the serving area at this facility as a whole?
 - a. As satisfactory. No problems are apparent in the serving area of this facility.
 - b. As unsatisfactory. One of the deficiencies involves an improper temperature of a potentially hazardous food item and could result in a foodborne disease outbreak.
 - c. As satisfactory on a provisional basis, the unsatisfactory items are not critical and can easily be corrected.

Check Your Answers

SAMPLE	COMPREHENSIVE FOOD SERVICE INSPECTION SAMPLE																		
INSTALLATION							DING NO.					SIGNA							
PERSON IN CHARGE OF F	ACILITY							COPY	REPORT	FURNIS	HED 1	0							
											- 								
	ACILITY			1			RATIN	G			2			PUR	POSE				3
L_ 1. Troop Dining Facility		Hospit Facility		ng		1. Satisfact	•		3. Mar			1. Re	-				Reinsp		
2. Cafeteria	5. 0	Club				2. Unsatisf	actory		4. Oth (spe	ər cify)		2. Co	ourtesy	/	L	J 4.	Other	speci	fy)
3. Snack Bar		Other	(speci	fy)															
COM- MAND	FACILITY	INS	SPECT	OR		INSPECTION DATE				RESERVED									
		10		45		47 40	YR			DAY			07			0.1			
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	22	23 24	4 25	26	27	28 29	30	31	32	33	34
DESCRIP	TION			wт			DESCRIPTIO			w				DESCRIP					WТ
FOOD *01 Approved source, so evidence of spoilage		on, no		5	F00 20		NT AND UT se water: C re			2		4 Out	side st	REFUSE DIS orage area p quate conta	properl	y cons	structe		1
02 Original container, p	roperly label	ed		1	*21		n rinse: clea							T, OTHER A			ITROL		
FOOD PROTECTION *03 Potentially hazardou	s food meet	s					pressure. E			4				ed animals					4
time/temperature red storage, preparation transport; leftover p	, display, se			5	22	Wiping clo	oths: Clean,		cted in u	^{se,} 1		6 Floo	rs: co	6, AND CEII instructed, i ipair; coveri	drained			ble,	1
*04 Equipment to mainta temperatures	ain product			4	*23	and utensi	act surfaces ils: clean, s	anitize	d	3	3	dustless cleaning methods 37 Walls, ceilings, attached equipment				Ľ			
05 Thermometers provide accurate	ded, conspic	cuous,		1		between uses, free of abrasives/ detergents					constructed properly, good repair, surfaces clean, dustless cleaning methods				1				
*06 Proper tempering/that hazardous food	awing of pot	tentiall	lγ	3	24	24 Nonfood contact surfaces of equipment and utensils clean			ent 1		LIGHTING 38 Lighting adequate, fixtures shielded, protected			1					
*07 Potentially hazardou service not re-served 08 Food protected durin	d			2	25	25 Proper storage, handling of clean, sanitized equipment and utensils			1		VENTILATION 39 Rooms vented as required			1					
08 Food protected durin display, service trans		prepara	ation	2	26		vice items: tored, and d			2	•4	*40 Filters and grease extracting equipment clean and properly installed			4				
09 Handling of food/ice				2	WAT					-	DRESSING ROOMS/AREAS								
10 In use, food/ice uten PERSONNEL			a	1	*27	and cold v	oved sources vater, adequ			4	41 Clean lookers provided convenient location				1				
11 Training program rec *12 No evidence of com skin infections, cuts	municable di		s,	1 5	SEW *28		sewage and	liquid	waste	4	OTHER OPERATIONS *42 Necessary toxic items properly stored, labeled, used				4				
*13 Hands washed and opractices		hygien	ne	4	PLUN 29	/BING	maintained p	roperl		1	43 Premises: Maintained free of litter,								
14 Clean work garment no unauthorized jew				1	*30	No cross-c	connection,	potent		3	_	unnecessary articles - maintenance equipment properly stored, authorized personnel only				1			
FOOD EQUIPMENT AND U						ET AND LA	VATORY FA	CILITI			4	4 Clea	n/soile	ed linen prop	perly s	tored			1
*15 Food/ice contact sur properly designed, c located, and maintai	onstructed,			3	31		number, cor ned and inst			si- 3	4			separation (sleeping q					1
16 Nonfood contact sur designed, constructe			ed,		32	doors, goo	ns enclosed od repair, ad	equate	hand		_	6 Oth	-	cify)					
and maintained 17 Utensil washing faci operated, maintained	ility properly	desig		1		cleaner, ru	inning water ig facilities,	, temp	perature,	les 1		LLOW-l 7 Yes							
18 Accurate thermomet	ters, pressur	e gau	ges,	2		Containers	REFUSE DIS s or receptac	cles co	vered,		4								
chemical test kits pr 19 Utensils preflushed,				1	adequate number, vermin proof, emptied frequently, clean				3	3 RATING SCORE IF USED 49 (100) Less weight of items violated									
	*Critical deficiencies requiring immediate correction - Use DA Form 5161-1 for additional remarks.																		
SIGNATURE OF INSPECTO	-									ME					DAT	E			
SIGNATURE OF RECEIVER	3														DAT	E			
DA FORM 5161, A	UG 91														1		U	SAPA	V1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 1.

SOLUTIONS TO EXERCISES, LESSON 4

- **NOTE:** The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.
- 1. On the checklist, you should have:

Circled item 05 and underlined "thermometers." (chart, item 2)

Circled item 09 and underlined "ice." (chart, item 5)

- 2. Observations 3 and 7. (chart, items 2 and 5).
- 3. Observation 3 is unsatisfactory because the milk dispenser lacks an incremented thermometer. Thermometers are necessary to determine that the milk remains at 45°F or below. Observation 7 is unsatisfactory because ice should only be handled with the proper untensils, not with fingers. (chart, items 2 and 5).
- 4. For both observations 3 and 7, inform the manager. (chart, items 2 and 5).
- 5. c (chart, items 2 and 5; para 1-9b).

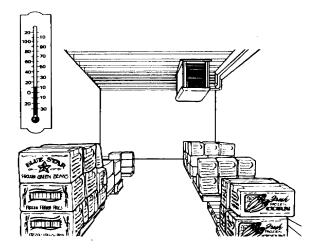
End of Lesson 4

LESSON ASSIGNMENT

LESSON 5	Inspect the Cold Storage Area.			
LESSON ASSIGNMENT	Paragraphs 5-1 and 5-2 and chart.			
LESSON OBJECTIVES	After completing this lesson, you should be able to:			
	5-1. Identify the basic items to check when inspecting the cold storage area, to include: reason for checking the items, their importance as possible causes of foodborne illness, and corrective actions.			
	5-2. Evaluate the conditions in a cold storage area described in a given situation and record any deficiencies on the inspection checklist.			
	5-3. Evaluate the described cold storage area as a whole.			
SUGGESTION	After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.			

LESSON 5

INSPECT THE COLD STORAGE AREA



5-1. INTRODUCTION

You will check the cold storage area during an inspection of a food service facility. This is a critical area since safe temperatures must be maintained for food items in cold storage. If safe temperatures are not maintained, the risk of foodborne illness is high. Lesson 5 discusses items to inspect in this area.

5-2. INSPECT COLD STORAGE AREAS

a. The chart on pages 5-3 through 5-10 presents the important items to observe when checking cold storage areas.

b. As with all the areas in a food service facility, you must be able to differentiate between major and minor defects. A minor problem does not make the entire cold storage area unsatisfactory. A major defect, however, can make the entire area a serious health hazard.

c. Answer the questions with the chart as you have done with previous lessons.

ITEM	REASON	IMPORTANCE	ACTION
 Check product temperature of potentially hazardous food items. The best method is to select several sample food items and use a food thermometer to check internal temperatures. NOTE: Disinfect the thermometer with an alcohol swab before use. 	Potentially hazardous food items must he maintained below 45°F to stop the growth of microorganisms causing foodborne disease. Holding cold food items above 45°F for more than four hours is a direct health hazard.	Category <u>5</u> .	 Determine why and how long the item has been above 45°F. If the food item has just come from the cooking process, it may not yet have cooled to 45°F. For items that have been above 45°F for more than four hours: -Record the problem on the inspection checklist, item <u>03</u>. -Recommend to the manager that veterinarians be contacted.

QUESTION	QUESTION	QUESTION	QUESTION
To check product tempera- tures, select food items and check tem- peratures.	 Potentially hazardous food items must be kept below°F. 	This item is rated as Category	• Determine andthe item has been above the required temperature
	 Foods held above the required temperature for more than hours are a direct health 		• For items that exceed time and temperature limits:
	hazard.		-Record the problem on the inspection checklist, item
			-Recommend contacting the

Turn to page 5-4 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
To check product temper- atures, select <u>several</u> <u>sample</u> food items and check <u>internal</u>	 Potentially hazardous food items must be kept below <u>45</u>°F. 	This item is rated as Category <u>5</u> .	 Determine <u>why</u> and <u>how</u> long the item has been above the required temperature.
temperatures.	 Foods held above the required temperature for more than <u>four</u> hours are a direct health hazard. 		 For items that exceed time and temperature limits:
			-Record the problem on the inspection checklist item 03.
			-Recommend contacting the veterinarians.

ITEM	REASON	IMPORTANCE	ACTION
 Check the size of containers holding bulk foods. Be sure that they are no more than four inches deep. 	Foods stored in containers more than four inches deep will not cool to 45°F easily and quickly. This could result in foodborne illness. Harmful microorganisms could remain at dangerous temperatures long enough to produce large populations of disease organisms or dangerous toxins.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>08</u>. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Containers holding bulk food items are to be no more than inches deep.	Foods stored in overly deep containers will not to 45°F easily and quickly. Due to this, harmful microorganisms have enough at dangerous to grow.	This item is rated as Category <u></u> .	Record the problem of too deep containers on the inspection checklist, item

Turn to page 5-6 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Containers holding bulk food items are to be no more than <u>four</u> inches deep.	Foods stored in overly deep containers will not <u>cool</u> to 45°F easily and quickly. Due to this, harmful microorganisms have enough <u>time</u> at dangerous <u>temperatures</u> to grow.	This item is rated as Category <u>2</u> .	Record the problem of too deep containers on the inspection checklist, item <u>08</u> .

ITEM	REASON	IMPORTANCE	ACTION
3. Check to make sure that the placement of food items in the cold storage units allows the free circulation of cold air.	Overcrowded or tightly packed food items will prevent the free circulation of cold air. This will result in uneven cooling. Inadequately cooled areas ("hot spots") may develop and encourage the growth of microorganisms, which can cause foodborne illness.	Category <u>2</u> .	 Record the problem on the inspection checklist, item <u>08</u>. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Ensure that food items are placed in a cold storage unit in a manner that allows cold to freely.	Uneven cooling due to overcrowded or tightly packed food items causes cooled areas to develop and encourages the of microorganisms which cause	This item is rated as Category	Record overcrowded or tightly packed food items on the inspection checklist, item

Turn to page 5-8 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Ensure that food Items are placed in a cold storage unit in a manner that allows cold <u>air</u> to <u>circulate</u> freely.	Uneven cooling due to overcrowded or tightly packed food items causes <u>inadequately</u> cooled areas to develop and encourages the <u>growth</u> of microorga- nisms, which cause <u>foodborne illness</u> .	This item is rated as Category <u>2</u> .	Record overcrowded or tightly packed food items on the inspection checklist, item <u>08</u> .

ITEM	REASON	IMPORTANCE	ACTION
4. Check to make sure that thermometers have been installed.	If thermometers have not been installed, there is no way to accurately know the temperature of cold storage units. Temperatures may be above 45°F, which could result in contamination and outbreaks of foodborne illness.	Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>05</u>. Bring the problem to the attention of the manager.

QUESTION	QUESTION	QUESTION	QUESTION
When checking the cold storage area, be sure that have been installed.	Without thermometers, there is no way to know whether or not the temperature of the cold storage unit is at°F or below.	This item is rated as Category <u></u> .	Record the lack of thermometers on the inspection checklist, item

Turn to page 5-10 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking the cold storage area, be sure that <u>thermometers</u> have been installed.	Without thermometers, there is no way to know whether or not the temperature of the cold storage unit is at <u>45</u> °F or below.	This item is rated as Category <u>1</u> .	Record the lack of thermometers on the inspection checklist, item <u>05</u> .

Continue with Exercises

EXERCISES, LESSON 5

INSTRUCTIONS. Answer the following exercises by marking the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by making entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: During your inspection of an Army food service facility, you examine the cold storage area and make the following observations. You perform your inspection of this area around 1530.

<u>Observation 1</u>. A large quantity of beef stew was prepared in the morning (0830) and placed in a refrigeration unit until dinner. The stew has been poured into several large, shallow containers for cooling. These containers are about 2-1/2 inches deep.

<u>Observation 2</u>. The containers of stew and other items in the refrigeration unit are spaced so that air can move freely around them.

Observation 3. There are no thermometers inside the refrigeration unit.

<u>Observation 4</u>. You check the product temperature of two containers of stew, one container of stewed fruit, and one container of cooked vegetables. The temperature of the stew is 47°F; that of the fruit is 46°F; and the vegetables have an internal temperature of about 47°F. Personnel state that the fruit and vegetables were placed in the refrigeration unit at 0930 and the stew at 0830 that morning.

Use these observations when answering exercises 1 through 6.

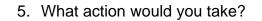
- 1. Record any unsatisfactory observations on the inspection checklist on page 5-12.
- 2. Which observations, if any, did you record as unsatisfactory?

SAMPLE	IPLE COMPREHENSIVE FOOD SERVICE INSPECTION SAMPLE																		
INSTALLATION				,			DING NO.	3	,	FACILIT									
PERSON IN CHARGE OF F	ACILITY						(COPY	REPORT	URNISH)							
											····								
	ACILITY			1			RATIN	G		2	-			PUR	POSE				3
1. Troop Dining Facility		Hospit Facility		ing		1. Satisfac			3. Març			1. Re	-			-	Reinsp		
2. Cafeteria	5.	Club				2. Unsatisf	actory		4. Othe (spec			2. Co	urtesy	/	L] 4.	Other	(speci:	fy)
3. Snack Bar	6.	Other	(speci	fy)															
COM- MAND	FACILITY	INS	SPECT	OR		PECTION ME (MIN)			TE		_			RESE	RVED				
							YR	M	r	DAY									
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	22 2	3 24	25	26	27	28 29	30	31	32	33	34
				WT			DESCRIPTIO			WT	-			DESCRIPT					WT
DESCRIP	TION				FOOL		NT AND UT		6 (con't)		GAF	BAGE	AND	REFUSE DIS		L (cor	n'tj		VV I
*01 Approved source, so evidence of spoilage		on, no		5	20	Wash, rins temperatu	se water: Cl re	ean, p	roper	2	34			orage area p quate conta					1
02 Original container, p	roperly labe	ed		1	*21		n rinse: clea							T, OTHER A			ITROL		
FOOD PROTECTION *03 Potentially hazardou	s food meet	s					pressure. Ed			4				ed animals					4
time/temperature red storage, preparation	quirements (luring		5	22		ths: Clean,	restric	ted in us	э, <u>1</u>		Floor	rs: co	5, AND CEIL	drained				
transport; leftover po *04 Equipment to mainta		_			•23		anitizing sol act surfaces		upment		-			epair; coveri leaning met		allatio	on dura	ble,	1
temperatures				4		and utensi	ls: clean, sa ises, free of	nitize	d	3	37			ings, attach				05	
05 Thermometers provise accurate	ded, conspie	uous,		1		detergents						clear		tless cleanir					1
*06 Proper tempering/that hazardous food	awing of po	entiall	lγ	3	24	Nonfood o and utensi	ontact surfa ils clean	ces of	equipme	^{nt} 1			ting ad ected	dequate, fix	tures s	hielde	d,		1
*07 Potentially hazardou service not re-served	ł			2	25	25 Proper storage, handling of clean, sanitized equipment and utensils			1	VENTILATION			1						
08 Food protected durin display, service trans		prepara	ation	2	26		vice items: i tored, and di			2	*40 Filters and grease extracting equipment				4				
09 Handling of food/ice	minimized			2	WAT		torea, and a	spens	eu	_	Clean and properly installed DRESSING ROOMS/AREAS				–				
10 In use, food/ice uten PERSONNEL	isils properly	store	d	1	*27	Safe appro	oved sources vater, adequ			4	DRE 41		n, locl	MS/AREAS kers provide	d, con	venier	nt loca	tion,	1
11 Training program rec	ords availat	le		1	SEW					-	OTHER OPERATIONS								
*12 No evidence of com skin infections, cuts		isease	s,	5	*28	Adequate disposal	sewage and	liquid	waste	4		Nece		toxic items	prope	rly sto	ored,		4
*13 Hands washed and o practices	clean, good	hygien	e	4		IBING Installed, I	maintained p	roperl	Ŷ	1	43			Maintained					
14 Clean work garment no unauthorized jew				1	*30		connection, ponage, backf		iał	3		equi		properly st					1
FOOD EQUIPMENT AND U *15 Food/ice contact sur		ntovia			TOILI 31	ET AND LA	VATORY FA number, con	CILITI			44	Clea	n/soile	ed linen prop	perly s	tored			1
properly designed, c located, and maintai	onstructed,			3	31		number, con ned and insta			3	45			separation o /sleeping qu					1
16 Nonfood contact sur designed, constructe			ed,	1	32	doors, goo	ns enclosed, od repair, ade	equate	hand			Othe		ecify)					
and maintained 17 Utensil washing faci operated, maintained			ned,	2			inning water ng facilities, v			es 1		LOW-U Yes.							
18 Accurate thermomer chemical test kits pr			ges,	2		Containers	REFUSE DIS s or receptace number, verr	les co	vered,	3	48	No							
19 Utensils preflushed,				1	emptied frequently, clean RATING SCORE IF USED														
*Critical deficiencies requi	ring immedi	ate cor	rrectio	n - Us	e DA F	orm 5161-	1 for additio	nal rer	narks.					,					
SIGNATURE OF INSPECTO	DR								TI	ИE					DAT	E			
SIGNATURE OF RECEIVER	1														DAT	E			
																		ISAPA	V1 00
DA FORM 5161, A	10 9 1																L L	SAPA	v1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 1

3. If you recorded any unsatisfactory observations, briefly explain why they are unsatisfactory.

4. Do you think that the unsatisfactory observations are related? Why?



- a. You would record the problem on the inspection checklist and inform the manager of the problem only.
- b. You would contact the base commander and recommend that the facility be closed until corrections are made.
- c. You would record the problem on the inspection checklist, tell the manager, and recommend contacting the veterinarians.
- 6. How would you evaluate the cold storage area at this facility?
 - a. As completely satisfactory. No health hazards exist.
 - b. As unsatisfactory. The problems could be the direct cause of an outbreak of foodborne illness.
 - c. As basically satisfactory. The problems observed were not serious health hazards and would contribute only indirectly to an outbreak of foodborne illness.

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 5

- **NOTE:** The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.
- 1. On the checklist, you should have:

Circled item 03 and underlined "Potentially hazardous food" "time/temperature requirements during storage." (chart, item 1)

Circled item 05 and underlined "thermometers." (chart, item 4)

- 2. Observations 3 and 4. (chart, items 4 and 1)
- 3. Observation 3 is unsatisfactory because thermometers should be installed in cold storage units. Personnel must have accurate knowledge of the temperature. Observation 4 is unsatisfactory. The temperature of these items in the refrigeration unit is above 45°F. In addition, potentially hazardous food (stew) has apparently been above 45°F for seven hours (0830 to 1530). Harmful microorganisms which could cause an outbreak of foodborne disease may be present. (chart, items 4 and 1)
- 4. Yes. Since there are no thermometers, employees would not accurately know the temperature. The temperature could easily rise above 45°F without personnel knowing that a temperature problem exists. (chart, items 1 and 4)
- 5. c. Item 03 is critical. (chart, items 1 and 4)
- 6. b (chart, item 1)

End of Lesson 5

LESSON ASSIGNMENT

LESSON 6	Inspect the Dry Storage Area.
LESSON ASSIGNMENT	Paragraphs 6-1 and 6-2 and chart.

LESSON OBJECTIVES

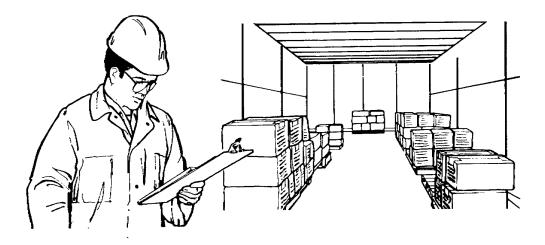
After completing this lesson, you should be able to:

- 6-1. Identify the basic items to check when inspecting the dry storage area to include: reason for checking the items, their importance as possible causes of foodborne illness, and corrective actions.
- 6-2. Evaluate the conditions in a dry storage area described in a given situation and record any deficiencies on the inspection checklist.
- 6-3. Evaluate the described dry storage area as a whole.

SUGGESTION After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.

LESSON 6

INSPECT THE DRY STORAGE AREA



6-1 INTRODUCTION

Lesson 6 deals with the inspection of dry storage areas. It is important that dry foods be kept in a safe condition while being stored. Dry foods that have become contaminated are a direct health threat. In addition, dry foods that are not fit to serve due to improper storage can result in significant financial loss.

6-2 INSPECT DRY STORAGE AREAS

a. The chart on pages 6-3 through 6-18 lists the important items to check when inspecting the dry storage area.

b. Remember that common sense is important when you inspect the dry storage area. Several minor deficiencies do not mean that the entire area is unsatisfactory. On the other hand, a direct health threat--such as leaking sewer or drain pipes--is serious enough to make the area hazardous even though other operations are satisfactory.

c. Answer the questions with the chart as you read.

INSPECT	DRY ST	ORAGE	AREA
---------	--------	-------	------

ITEM	REASON	IMPORTANCE	ACTION
 Check canned foods. Be sure that there are: 	All these defective canned products could directly cause foodborne illness.	Category <u>5</u> .	 Record the problem on the inspection checklist, item 01.
 No leakers, springers, or swellers. 	Leakers could be		Call the veterinarians.
No home-canned	contaminated.		Pull defective products off
products.	 Springers indicate possible gas production by harmful microorganisms. 		the shelf until examined by the veterinarians and approved for consumption.
	 Swellers indicate gas production or overfilling. 		 Bring the problem to the attention of the manager.
	 Home-canned foods may contain the botulism organism and are absolutely prohibited. 		

QUESTION	QUESTION	QUESTION	QUESTION
When checking canned foods, ensure that there are noor and no	Leakers, springers, and swellers are dangerous because they indicate possibleby	This item is rated as Category	When you discover defective items:Record the defect on the inspection checklist, item
	Home-canned products are absolutely because they may contain the organism.		 Remove the defective items from the shelf until they are approved by the

Turn to page 6-4 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking canned foods, ensure that there are no <u>leakers, springers</u> , or <u>swellers</u> and no <u>home-</u> canned products.	 Leakers, springers, and swellers are dangerous because they indicate possible <u>gas production</u> by harmful organisms. 	rated as Category <u>5</u> .	 When you discover defective items: Record the defect on the inspection checklist, item
	 Home-canned products are absolutely <u>prohibited</u> because they may contain the 	,	 <u>01</u>. Remove the defective items from the shelf until they are approved by the

ITEM	REASON	IMPORTANCE	ACTION
 2. Check the storage of toxic materials (cleaning solutions, insecticides, etc.). Be sure that these materials are: Clearly marked. 	When carelessly stored, these toxic items could contaminate food products and directly cause severe illness.	Category <u>4</u> .	 Record the problem on the inspection checklist, item <u>42</u>. Bring the problems to the manager's attention for immediate correction.
 Stored in a cabinet specifically designated for toxic products. 			
 Stored in a place that is separated from: -Food storage areas. 			
-Food preparation areas.			
-Food equipment and utensil storage areas.			

QUESTION	QUESTION	QUESTION	QUESTION
Toxic materials should be clearly marked. They should be stored in a special cabinet or in a place separated from	Careless storage of toxic items can result in of food products.	This item is rated as Category 	 Record improper storage of toxic products on the inspection checklist, Item
areas, areas, andareas.			 You should report the problem to the manager for

Turn to page 6-6 to check your answers.

SELF-ASSESSMENT CHECKLIST, ITEM 2

ITEM	REASON	IMPORTANCE	ACTION
Toxic materials should be clearly marked. They should be stored in a special cabinet or in a place separated from <u>food</u> <u>storage</u> areas, <u>food</u> <u>preparation</u> areas, and <u>food</u> <u>equipment and utensil</u> <u>storage</u> areas.	Careless storage of toxic items can result in <u>contamination</u> of food products.	rated as Category <u>4</u> .	 Record improper storage of toxic products on the inspection checklist, Item <u>42</u>. You should report the problem to the manager for <u>immediate correction</u>.

ITEM	Я	EASON	IMPORTANCE	ACTION
3. Check for sig rodents and infestation (d gnawing mar	rodent contar Iroppings, cause	is and insects can inate food and outbreaks of rne disease.	Category <u>4</u> .	 If signs of early infestation are present. Record the problem on the inspection checklist, item <u>35</u>. Bring the problem to the attention of the manager. If the infestation is heavy: Follow the same procedure as for a light infestation. But also follow up by calling the entomology control section.

QUESTION	QUESTION	QUESTION	QUESTION
Rodent and insect infestation is often indicated by signs such as and	Rodents and insects are dangerous because they food which can cause	This item is rated as Category 	Record the presence of an early infestation on the inspection checklist, item
	·		For a heavy infestation, follow-up by calling the

Turn to page 6-8 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Rodent and insect infestation is often indicated by signs such as <u>droppings</u> and <u>gnawing marks</u> .	Rodents and insects are dangerous because they <u>contaminate</u> food, which can cause <u>outbreaks of foodborne disease</u> .	This item is rated as Category <u>4</u> .	• Record the presence of an early infestation on the inspection checklist, item <u>35</u> .
			 For a heavy Infestation, follow up by calling the <u>entomology control</u> <u>section</u>.

ITEM	REASON	IMPORTANCE	ACTION
 4. Check the building for: Contamination from overhead facilities (sewer pipes, drain pipes, lights). 	Leakage from drain or sewer pipes will contaminate food and can cause an outbreak of foodborne illness.	• For drain/sewer pipes actually leaking, Category 4.	 For leaking drain/sewer pipes: -Record the problem on the inspection checklist, item 28. -Bring the problem to the manager's attention for immediate correction. -Require a follow-up inspection.
 Food stored under sewer pipes, drain pipes, or other sources of leakage. 		 For drain/sewer pipes not leaking but which are located over food ltems, Category 2. 	 For drain/sewer pipes that are not leaking: -Record on inspection checklist, item 08. -Bring to the attention of the manager.

QUESTION	QUESTION	QUESTION	QUESTION
Food must not be stored under, , or	Leakage from drain or sewer pipes can food and directly cause ,	Leaking drain and sewer pipes are rated as Category Drain and sewer pipes not leaking but located over foods are rated as Category	When drain or sewer pipes are leaking into food items, record the problem on the inspection checklist, item The problem must be corrected You should also require a
, or		Category Drain and sewer pipes not leaking but located over	inspection checklist, item The problem must be corrected

Turn to page 6-10 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Food must not he stored under <u>sewer pipes, drain</u> <u>pipes</u> , or <u>other sources of</u> <u>leakage</u> .	Leakage from drain or sewer pipes can <u>contaminate</u> food and directly cause <u>an outbreak</u> <u>of foodborne illness</u> .	 Leaking drain and sewer pipes are rated as Category <u>4</u>. Drain and sewer pipes not leaking but located over foods are rated as Category <u>2</u>. 	When drain or sewer pipes are leaking into food items, record the problem on the inspection checklist, item <u>28</u> . The problem must be corrected <u>immediately</u> . You should also require a <u>follow-up inspection</u> .

ITEM	REASON	IMPORTANCE	ACTION
5. Check the overhead lights to make sure that they are covered.	Broken glass from an overhead light could fall into food items and cause injury.	Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>38</u>. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION

Turn to page 6-12 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Overhead lights must be <u>covered</u> .	Broken glass from an overhead light could fall into food items and cause <u>injury</u> .	Uncovered overhead lights are rated as Category <u>1</u> .	Record the presence of uncovered overhead lights on the inspection checklist, item <u>38</u> .

ITEM	REASON	IMPORTANCE	ACTION
 Check the floor, walls, and the ceiling for cracks, crevices, or other openings. 	Openings in the floor, walls, and ceiling can harbor insects and other pests and contribute to pest Infestation.	Category <u>1</u> .	 Record the problem on the inspection checklist, item 36 and/or 37. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
When inspecting the floor, walls, or the ceiling, be sure there are no,, or other	Cracks and other openings in the floor, walls, and the ceiling can harbor and other	This item is rated as Category 	Record excessive cracks and other openings on the inspection checklist, item and/or

Turn to page 6-14 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When inspecting the floor, walls, or the ceiling, be sure there are no <u>cracks,</u> <u>crevices</u> , or other <u>openings</u> .	Cracks and other openings in the floor, walls, and the ceiling can harbor <u>insects</u> and other <u>pests</u> .	This item is rated as Category <u>1</u> .	Record excessive cracks and other openings on the inspection checklist, item <u>36</u> and/or <u>37</u> .

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure that food items are stored off the floor. 	 Eliminates hiding places for Insects and other pests. 	Category <u>2</u> .	 Record the problem on the inspection checklist, item 08.
	 Allows easy and effective cleaning. 		• Bring the problem to the attention of the manager.
	 Protects food items from splash contamination. 		
		QUESTION	
QUESTION	QUESTION	QUESTION	QUESTION
QUESTION Food items should be storedthe	QUESTION • This practice eliminatesforand	QUESTION This Item is rated as Category	When dry food items are stored on the floor, record the

Turn to page 8-16 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Food Items should he stored <u>off</u> the <u>floor</u> .	 This practice eliminates <u>hiding places</u> for <u>insects</u> and <u>other pests</u>. 	This item is rated as Category <u>2</u> .	When dry food Items are stored on the floor, record the problem on the inspection checklist, item <u>08</u> .
	 It also promotes effective cleaning and protects food Items from <u>splash</u> <u>contamination</u>. 		

ITEM	REASON	IMPORTANCE	ACTION
 8. Check to make sure that food items are placed in protective containers. Be sure that foods are either: Stored in the original shipping containers or Placed In containers with tight fitting lids or otherwise protected. 	 Dust, which may carry harmful microorganisms, will contaminate open or exposed food items. Insects and rodents are attracted to and can contaminate open or exposed food items. 	This item is rated as Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>02</u>. Bring the problem to the attention of the manager. If any food items appear to be contaminated, collect a sample for further evaluation.
QUESTION	QUESTION	QUESTION	QUESTION
For protection against dust, insect, and rodent contamination, food items should be stored in the	Exposed or open food items risk contamination from,, and	This item is rated as Category	 Record the improper packaging of dry food items in storage on the inspection checklist, item
or placed in containers with			When food items appear contaminated, collect a for further evaluation.

INSPECT DRY STORAGE AREA

Turn to page 6-18 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
For protection against dust, insect, and rodent contamination, food items should be stored in the <u>original shipping containers</u> or placed In containers with <u>tight-fitting lids (or protected</u> <u>in a similar manner)</u> .	Exposed or open food items risk contamination from <u>dust</u> , <u>insects</u> , and <u>rodents</u> .	This item is rated as Category <u>1</u> .	 Record the improper packaging of dry food items in storage on the inspection checklist, Item <u>02</u>. When food items appear contaminated, collect a <u>sample</u> for further evaluation.

Continue with Exercises

EXERCISES, LESSON 6

INSTRUCTIONS. Answer the following exercises by marking the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by making entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: You are inspecting a full-service food facility on an Army post. You enter the dry storage area and make the observations recorded below.

<u>Observation 1</u>. Food items are in either the original containers or in containers with tight lids or sealed covers.

<u>Observation 2</u>. All canned foods are commercially produced. When you examine them, you discover that some have bulged ends and others have ripped seams.

<u>Observation 3</u>. The walls, floor, and ceiling appear intact with no cracks or holes. You see no insect or rodent droppings or rodent teeth marks.

<u>Observation 4</u>. Food items are not placed under the drain or sewer pipes. The overhead light is enclosed in a metal guard.

Refer to these observations when answering exercises 1 through 3.

1. Record any deficiencies in the observations on the checklist on page 6-20.

SAMPLE	For	use o				HENSIV								on Ge	eneral.		S	AN	/IPI	E	
INSTALLATION							DING NO.			FACIL											
PERSON IN CHARGE OF F	ACILITY							COPY	REPORT	FURNIS	SHE	ED TO									
	ACILITY			1			RATIN	G			2					URPO					3
1. Troop Dining		Hospita	al Dini	_	\square	1. Satisfact			3. Mai		-		1. Re	qular	P	URP	05E	3	Reinsp	ection	-
Facility		Facility		ng		2. Unsatisf	•	П	4. Oth	•				urtesy	,				Other		
2. Cafeteria	5.								(spe	cify)											
3. Snack Bar	FACILITY	Other ((special SPECT			PECTION									DI	SER					
COM-	PACIEITT	1113	FEGI	UΠ		AE (MIN)	YR	<u> </u>		DAY					n	ESEN	VED				
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	r +	(24	25	26	27	28	29	30	31	32	33	34
DESCRIP				wт			DESCRIPTIC			14	νт				DESCF						WT
FOOD	TION			VV I	FOO				G (con't)		V I	GAR	BAGE	AND	REFUSE			_ (con	't)		~~ ~
*01 Approved source, so evidence of spoilage		on, no		5	20	Wash, rins temperatu	e water: C re	lean, p	roper		2	34			orage are quate co						1
02 Original container, p	roperly label	ed		1	*21		n rinse: cle re, concent								T, OTHE				ITROL		
FOOD PROTECTION *03 Potentially hazardou:	s food meet	s					pressure. E			· · ·	4		unau	thoriz	ed anima	als					4
time/temperature rec storage, preparation	, display, se			5	22	Wiping clo	ths: Clean		ted in u	se, .	1		Floor	s: co	6, AND C nstructe	d, dra	ained				
transport; leftover pe *04 Equipment to mainta	· · · · · · · · · · · · · · · · · · ·	-			•23		anitizing so act surface:		uipment		-				pair; cov eaning n			allatio	n dura	ble,	1
temperatures				4		between u	ls: clean, s ises, free of				3	37			ings, atta d proper					es	
05 Thermometers provi accurate	ded, conspic	cuous,		1	24	detergents			oguine				clear		tless clea						1
*06 Proper tempering/that hazardous food	awing of pot	tentiall	Y	3	24	and utensi	ontact surf Is clean	ices of	equipm		1			ting ac ected	lequate,	fixtu	res st	nielde	d,		1
*07 Potentially hazardou service not re-served	d			2	25		rage, handli quipment a				1		TILATI	ON	nted as r	equir	ed				1
08 Food protected durin display, service trans		prepara	ation	2	26		vice items: tored, and c				2		Filter	rs and	grease e	extra	cting	equip	ment		4
09 Handling of food/ice	minimized			2	WAT		toreu, anu u	ispens	eu	_					properly		lled				4
10 In use, food/ice uten	sils properly	stored	d	1	*27	Safe appro	oved source vater, adequ				4		Clea	n, lock	VIS/ARE/		, conv	/enien	t loca	tion,	1
PERSONNEL 11 Training program rec	cords availat	le		1	SEW	AGE						отн	used	ERATI	ONS						
*12 No evidence of com skin infections, cuts		iseases	s,	5	*28	Adequate disposal	sewage and	l liquid	waste	4	4		Nece		toxic ite	ms p	proper	ly sto	red,		4
*13 Hands washed and o	clean, good	hygien	e	4	PLUN 29	/BING	maintained	roperl	.,	1	1	43	Prem	nises:	Maintair						
practices 14 Clean work garment no unauthorized jew				1	*30	No cross-c	connection,	potent		+	3		equi		ry article properly only						1
FOOD EQUIPMENT AND U	ITENSILS					ET AND LA	VATORY FA	CILITI			\neg	44	Clea	n/soile	ed linen p	prope	rly st	ored			1
*15 Food/ice contact sur properly designed, c located, and maintai	onstructed,			3	31	Adequate ble, desigr	number, co ned and inst			isi-	з	45			separatio /sleeping						1
16 Nonfood contact sur designed, constructe			ed.		32		ns enclosed od repair, ad					46	Othe	r (spe	cify)						
and maintained 17 Utensil washing faci				1		cleaner, ru	inning wate g facilities,	r, temp	perature,		1		.OW-L								
operated, maintained			,	2	GAD	BAGE AND									•••••			. [
18 Accurate thermomer chemical test kits pr			jes,	2		Containers adequate i		cles co min pr	vered,		3				IF USED						
19 Utensils preflushed,	scraped, so	aked		1		amptieu Ir									weight		ems v	iolate	d		
*Critical deficiencies requi	-	ate cor	rectio	n - Us	e DA I	Form 5161-	1 for addition	nal rer													
SIGNATURE OF INSPECTO	DR								T	IME							DATE				
SIGNATURE OF RECEIVER	1																DATE				
DA FORM 5161, A	UG 91																		L	ISAPA	V1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 1.

2. a. Which of the observations are unsatisfactory, if any?

b. If any of the observations are unsatisfactory, briefly explain why they are dangerous.

c. Other than recording these problems on the checklist, what important corrective actions could you take?

3. Which of the following statements describes how you would evaluate this dry storage area as a whole?

a. The dry storage area has problems, but they are not critical. None of the unsatisfactory items are more than a Category 3 and do not pose a serious health threat.

b. The dry storage area is unsatisfactory. The problems belong to Categories 5 and 4 and could directly cause outbreaks of foodborne illness.

c. The dry storage area is satisfactory. None of the problems pose a serious health threat. Instead, they are more a matter of appearance and neatness (Category 1).

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 6

- **NOTE**: The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.
- 1. On the checklist, you should have circled item 01 and underlined "sound condition." (chart, item 1).
- 2. a. Observation 2.
 - b. Observation 2 is dangerous due to the presence of swellers and leakers among the canned food items. Swellers could indicate gas production by harmful microorganisms and leakers can easily become contaminated.
 - c. For Observation 2, call the veterinarians and pull the defective items off the shelf until they are examined and approved by the veterinarians. (chart, item 1).
- 3. b. (chart, item 1; paras 1-9a(1), 6-2b)

End of Lesson 6

LESSON ASSIGNMENT

LESSON 7	Inspect the Loading Docks/Incoming Food Areas.			
LESSON ASSIGNNMENT	Paragraphs 7-1 and 7-2 and chart.			
LESSON OBJECTIVES	After completing this lesson, you should be able to:			
	7-1. Identify the major items to inspect in the loading dock and incoming food area, to include: reasons for checking the items, their importance as possible causes of foodborne illness, and corrective actions.			
	7-2. Evaluate the conditions at a loading dock or incoming food area described in a given situation and record any deficiencies on the inspection checklist.			
	7-3. Evaluate the described loading dock/incoming food area as a whole.			
SUGGESTION	After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.			

LESSON 7



INSPECT THE LOADING DOCKS/INCOMING FOOD AREAS

7-1. INTRODUCTION

Food products arrive at the loading docks or incoming food areas. If the food becomes contaminated at this point, then precautions in other areas are useless. It is important for the safety of all subsequent food handling procedures that the incoming food areas be maintained in a safe and sanitary condition.

7-2. INSPECT THE LOADING DOCKS/INCOMING FOOD AREAS

a. The chart on pages 7-3 through 7-10 presents the important items to observe when checking loading docks or incoming food areas.

b. Again, you must use common sense and distinguish between major and minor problems. A minor problem does not make the entire area unsatisfactory. A major problem is critical since it presents a serious health threat.

c. Complete the self-assessment questions with the chart.

LOADING DOCKS/INCOMING FOOD AREA

ITEM	REASON	IMPORTANCE	ACTION
 Check that the back door is flytight (protected against entry of flies) or has an air curtain. 	If the back door is not flytight, flies and other insects will enter the facilities and contaminate	Category <u>4</u> .	 Record the problem on the inspection checklist, item 35.
nas an an cuitain.	food as well as equipment and supplies. This could result in a foodborne disease outbreak.		• Bring the problem to the attention of the manager.
			 Check inside the facility for signs of fly infestation.

QUESTION	QUESTION	QUESTION	QUESTION
When you check the back door, be sure it is or has an	A back door that is not flytight will allow and other	This item is rated as Category	If you discover that the back door is not flytight, you:
or had an	to enter the facility.		 Record this problem on the inspection checklist, item
			• Tell the
			Check the facility for signs of

Turn to page 7-4 for the correct answers.

SELF-ASSESSMENT, IT	FEM 1
---------------------	--------------

ITEM	REASON	IMPORTANCE	ACTION
When you check the back door, be sure it is <u>flytight</u> or has an <u>air curtain</u> .	A back door that is not flytight will allow <u>flies</u> and other <u>insects</u> to enter the facility.	This item is rated as Category <u>4</u> .	 When you discover that the back door is not flytight, you: Record this problem on the inspection checklist, item <u>35</u>.
			• Tell the manager.
			 Check the facility for signs of <u>fly infestation</u>.

ITEM	REASON	IMPORTANCE	ACTION
 Check the storage of solid waste. Be sure that: 	Improper storage of solid waste will attract flies and rodents. These pests may contaminate incoming food	Category <u>3</u> .	 Record the problem on the inspection checklist, item 33.
Containers have lids.	supplies. In some cases, the pests might enter the		 Bring the problem to the manager's attention.
 Enough containers are provided. 	facility itself when the contaminated food supplies are brought inside to be		 Check the inside of the facility for signs of
 Containers are clean and are collected 	stored.		infestation.
frequently enough to prevent overflow.			• If the frequency of collection is unsatisfactory, follow-up by calling the facility (post) engineer.

LOADING DOCKS/INCOMING FOOD AREA

QUESTION	QUESTION	QUESTION	QUESTION
When you check the storage of solid waste, make sure that:	Improperly stored solid waste will attract	This item is rated as Category	 Record the problem on the inspection checklist, item
Containers have		·	 Check inside the facility for signs of
• containers are provided.			 If collection frequency is inadequate, call the
Containers are and collected frequently enough to prevent			

Turn to page 7-6 for the correct answers.

ITEM	REASON	IMPORTANCE	ACTION
When you check the storage of solid waste, you check that:	Improper stored solid waste will attract <u>flies</u> and <u>rodents</u> .		 Record the problem on the inspection checklist, item <u>33</u>.
 Containers have <u>lids</u>. <u>Enough</u> containers are provided. 			• Check the inside of the facility for signs of infestation.
 Containers are <u>clean</u> and are collected frequently enough to prevent <u>overflow</u>. 			 If collection frequency is inadequate, call the <u>facility</u> <u>engineer</u>.

LOADING DOCKS/INCOMING FOOD AREA

ITEM	REASON	IMPORTANCE	ACTION
 Check to make sure that the grease trap is ade- quately maintained. Check for unpleasant odors and overflowing. 	Poor maintenance of grease traps will produce offensive odors and may attract flies and rodents. Large amounts of grease and solids overflowing into the sewer lines may cause problems for the sewage plant.	• When not over- flowing, Category 1.	 When not overflowing: -Record the problem on the inspection checklist, item 29. -Bring the problem to the attention of the manager
		• When over- flowing, Category 4.	 When overflowing: -Record the problem on the inspection checklist, item 29. -Bring the problem to the attention of the manager -If the problem is severe, you may need to call the facility engineer.
QUESTION	QUESTION	QUESTION	QUESTION
When inspecting the grease trap, check for and	A poorly maintained grease trap will produce offensiveand attract and	This item is rated as Category when the	 Inform the of this problem. When the grease trap is no

• When the grease trap is not overflowing but is poorly maintained, record the problem on the inspection checklist, item ____.

• When the grease trap is overflowing, record the problem on the inspection checklist, item _____.

Turn to page 7-8 for the correct answers.

• If large amounts of

grease and solids

problems with the _

overflow into sewer lines,

may result.

grease trap is

and Category

when

overflowing

there is

overflow.

not

ITEM	REASON	IMPORTANCE	ACTION
When inspecting the grease trap, check for <u>unpleasant</u> odors and overflowing.	 A poorly maintained grease trap will produce offensive <u>odors</u> and 	This item is rated as Category <u>1</u>	 Inform the <u>manager</u> of this problem.
	 attract <u>flies</u> and <u>rodents</u>. If large amounts of grease and solids overflow into sewer lines, problems with the <u>sewage</u> plant may result. 	when the grease trap is not over- flowing and Category <u>4</u> when there is overflow.	 When the grease trap is not overflowing but is poorly maintained, record the problem on the inspection checklist, iter <u>29</u>.
	<i>,</i>		 When the grease trap is overflowing, record the problem on the inspection checklist, item 29.

LOADING DOCKS/INCOMING FOOD AREA

ITEM	REASON	IMPORTANCE	ACTION
 Check the storage of cleaning and house- keeping equipment. Be sure that cleaning and housekeeping equip- ment is stored in a safe and orderly manner. 	Careless storage of cleaning and housekeeping equipment can cause accidents and may attract insects, rodents, and other pests.	Category <u>1</u> .	 Record the problem on the inspection checklist, item <u>43</u>. Bring the problem to the attention of the manager.

QUESTION	QUESTION	QUESTION	QUESTION
Check to determine if cleaning and housekeeping equipment is stored in a and manner.	Careless storage of cleaning and housekeeping equipment can cause and may attract ,, and other	This item is rated as Category —	You record unsatisfactory storage of cleaning and housekeeping equipment on the inspection checklist, item

Turn to page 7-9 for the correct answers.

ITEM	REASON	IMPORTANCE	ACTION
Check the storage of cleaning and housekeeping equipment. Be sure that cleaning and housekeeping equipment is stored in a <u>safe</u> and <u>orderly</u> manner.	Careless storage of cleaning and housekeeping equipment can cause <u>accidents</u> and may attract <u>insects</u> , <u>rodents</u> , and other <u>pests</u> .	This item is rated as Category <u>1</u> .	You record unsatisfactory storage of cleaning equipment on the checklist, item <u>43</u> .

Continue with Exercises

EXERCISES, LESSON 7

INSTRUCTIONS. Answer the following exercises by marking the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by making entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: You are inspecting the loading dock at a full-service food facility and make the following observations:

<u>Observation 1</u>. As you enter the area, you become aware of an unpleasant odor. You check the grease trap and discover that it is the source of odor. There appears to be some but not a lot of flies near the trap. There is no evidence of grease overflow.

<u>Observation 2</u>. You then examine the solid waste storage area. There are only two containers for the whole area. Both containers are filled to capacity and are covered with lids. Paper bags filled with garbage and or rubbish have been placed beside the containers. Some bags have torn and their contents have spilled. The manager states that the waste is collected frequently.

<u>Observation 3</u>. You note that the back door closes completely and the door screen is free of tears and holes.

Refer to this situation when answering the following exercises.

1. Which observations would you regard as unsatisfactory, if any?

2. If any observations are recorded as unsatisfactory, briefly describe why they are unsatisfactory?

3. What corrective actions would you suggest for any unsatisfactory observations?

- 4. Record any unsatisfactory observations on the inspection checklist on the following page.
- 5. Look over the unsatisfactory ratings that you have recorded on the checklist and the weights for each rating. Which of the following statements best describes how you would evaluate the loading dock area as a whole?
 - a. The loading dock area is hazardous; it has items rated as 3 and 4. These are serious problems. The item rated as 4 could even directly cause a foodborne disease outbreak.
 - b. The loading dock area is unsatisfactory. The major problem, however, can be easily corrected.
 - c. The loading dock area is completely satisfactory. No problems that could threaten health are present.

Check Your Answers

SAMPLE	SAMPLE COMPREHENSIVE FOOD SERVICE INSPECTION SAMPLE For use of this form, see TB MED 530, the proponent agency is the Office of The Surgeon General. SAMPLE																				
INSTALLATION							DING NO.			1		DESIG						_			
PERSON IN CHARGE OF F	ACILITY							COPY	REPORT	FURNIS	SHE	D TO									
				Τ.	1						<u> </u>										
				1			RATIN	G			2				F	PURP	OSE	1.0			3
1. Troop Dining Facility		Hospit: Facility		ing		 Satisfact Unsatisfact 			 3. Mai 4. Oth 	•		_	Regu Cour					-	Reinsp Other		
2. Cafeteria	5.	Club				z. Unsatisti	actory			cify)		<u> </u>	Cour	lesy			L] 4.	Other	speci	197
3. Snack Bar		Other		1.																	
COM- MAND	FACILITY	INS	SPECT	OR		PECTION /IE (MIN)			TE		_				R	ESEF	RVED				
			<u> </u>	1			YR		0	DAY]							[
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	22	23 24	4	25 2	26	27	28	29	30	31	32	33	34
DESCRIF	I I PTION			wт				N N		w	т		1		DESCI	RIPTI	ION				WT
FOOD							NT AND UT								REFUSE						
*01 Approved source, so evidence of spoilage		on, no		5	20	temperatu	se water: C re	ean, p	roper	2		c	lean;	adeo	prage ar quate co	ontair	ner w	ashing	g facilit		1
02 Original container, p	properly labe	ed		1	*21		n rinse: clea re, concentr					*35 N	vo evi	idenc	F, OTHE	ects			ITROL		
FOOD PROTECTION *03 Potentially hazardou						time, and utensils sa	pressure. E anitized.	quipm	ent/	4	Ì				ed anim					4	
time/temperature re storage, preparation	n, display, se			5	22		oths: Clean,		ted in u	se, 1	- 1	36 F	loors	: coi	, AND (d, di	rained			blo	
*04 Equipment to mainta				4	•23	Food cont	act surfaces ils: clean, s	of eq				dustless cleaning methods				1					
temperatures 05 Thermometers provi	ided, conspi	cuous,		1			uses, free of			3	3	c	constr	ucte	ngs, att d proper less cle	rly, g	lood r	epair,		es	1
*06 Proper tempering/th	awing of po	tentiall	y	3	24	Nonfood c and utensi	ontact surfa	ices of	equipm	ent 1		LIGHTI	NG		lequate,				d		
hazardous food *07 Potentially hazardou		ed for	self	2	25	25 Proper storage, handling of clean,					r	orotec	ted					,		1	
08 Food protected durin		orepara	ation			sanitized equipment and utensils					VENTILATION 39 Rooms vented as required			1							
display, service tran 09 Handling of food/ice	sport			2	26	26 Single-service items: not reused, properly stored, and dispensed			2	2	*40 Filters and grease extracting equipment clean and properly installed				4						
10 In use, food/ice uter		/ store	d	1	WAT *27		oved source	s, adeo	uate ho		-	DRESSING ROOMS/AREAS 41 Clean, lockers provided, convenient location,									
PERSONNEL 11 Training program rea	cords availat	ole		1		and cold v	vater, adequ			4	_	used			1						
*12 No evidence of com skin infections, cuts	municable d		s,	5	SEW *28		sewage and	liquid	waste	4		OTHER OPERATIONS *42 Necessary toxic items properly stored, labeled, used				4					
*13 Hands washed and practices		hygien	е	4	PLUN 29	/BING	maintained r	roneri	v	1		43 Premises: Maintained free of litter, unnecessary articles - maintenance									
14 Clean work garment no unauthorized jew				1	*30	No cross-c	connection,	ootent		3	,	e		nent	properly						1
FOOD EQUIPMENT AND U					тош		VATORY FA		ES	Ť	-	44 (Clean/	soile	d linen j	prope	erly st	ored			1
*15 Food/ice contact su properly designed, c located, and mainta	constructed,			з		Adequate	number, con ned and inst	venie	nt, acces	^{isi-} 3	3				separatio /sleeping						1
16 Nonfood contact su designed, construct			ed,		32		ns enclosed od repair, ad					46 (Other	(spe	cify)						
and maintained 17 Utensil washing fac				1		cleaner, ru	inning wate Ig facilities,	, temp	perature,			FOLLO									
operated, maintaine	d, and instal	led		2	GAR	BAGE AND	REFUSE DIS	POSA	L						••••••						
18 Accurate thermome chemical test kits p			ges,	2		Containers adequate	s or receptae number, ver	cles co min pr	vered,	з	,										
	19 Utensils preflushed, scraped, soaked 1 emptied frequently, clean RATING SCORE IF USED 49 (100) Less weight of items violated																				
*Critical deficiencies requi	-	ate cor	rectio	n - Us	e DA I	Form 5161-	1 for additic	nal rer								,					
SIGNATURE OF INSPECTO	OR								T	IME							DAT	E			
SIGNATURE OF RECEIVER	3								1								DATI	E			
DA FORM 5161, A	AUG 91																		ι	JSAPA	V1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 4.

SOLUTIONS TO EXERCISES, LESSON 7

- **NOTE**: The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.
 - 1. Observations 1 and 2. (chart, item 3 and item 2)
 - 2. Observation 1 is unsatisfactory because there is an unpleasant odor coming from the grease trap, and flies are near it. Observation 2 is unsatisfactory because the number of containers appears to be inadequate and solid waste has spilled onto the floor. (chart, items 3 and 2).
 - 3. You would bring both problems to the manager's attention for correction. In addition, you would check for signs of rodents and insects. (chart, items 3 and 2)
 - 4. On the checklist, you should have:

Circled item 29 and underlined "maintained."

Circled item 33 and underlined "adequate number."

(chart, items 3 and 2)

5. b (chart, items 2 and 3)

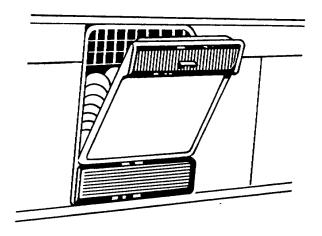
End of Lesson 7

LESSON ASSIGNMENT

LESSON 8	Inspect the Dishwashing Machine and Dishwashing Procedures.			
LESSON ASSIGNMENT	Paragraphs 8-1 and 8-2 and chart.			
LESSON OBJECTIVES	After completing this lesson, you should be able to:			
	8-1. Identify the basic items to check when inspecting the dishwashing area, to include: the reason for checking the items, their importance as possible causes of foodborne illness, and corrective actions.			
	8-2. Evaluate the conditions in a dishwashing area described in a given situation and record any deficiencies on the inspection checklist.			
	8-3. Evaluate the described dishwashing area as a whole.			
SUGGESTION	After studying the assignment, complete the exercises at the end of this lesson. These exercises will help you to achieve the lesson objectives.			

LESSON 8

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES



8-1. INTRODUCTION

Lesson 8 discusses the items to check when inspecting the dishwashing machine and the dishwashing procedures. A malfunctioning dishwashing machine can be one of the events that contribute to an outbreak of foodborne illness. It is important that this machine reach required temperatures, so that dishes are properly cleaned, sanitized, and dried.

8-2. INSPECT THE DISHWASHING AREA AND THE DISHWASHING MACHINE

a. The chart on pages 8-3 through 8-18 lists important items to check when inspecting dishwashing machines.

b. As with other areas in a food service facility, you must use common sense and recognize the difference between critical and minor problems.

c. Answer the questions with the chart as you read.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

ITEM	REASON	IMPORTANCE	ACTION
 Check the sanitization rinse of the dishwashing machine. Be sure the temperature at the rinse manifold is at least 180°F. In order to check this, ask that the machine be run through one cycle. NOTE: If you check the dishes, dish temperature will be somewhat lower (170°F to 175°F). 	The temperature must be high enough to kill microorganisms that cause foodborne illnesses.	Category <u>4</u> .	 Record the problem on the inspection checklist, item <u>21</u>. Bring the problem to the attention of the manager for immediate correction.
QUESTION	QUESTION	QUESTION	QUESTION
For the sanitization rinse to be hot enough, the temperature at the rinse manifold should be at least °F and the temperature of the dishes should be °F to °F	The sanitization rinse should be hot enough to the microorganisms that cause foodborne illness.	This item is rated as Category 	 Record a problem with the sanitization rinse on the inspection checklist, item Tell the manager so that the problem can he corrected

Turn to page 8-4 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
For the sanitization rinse to be hot enough, the temperature at the rinse manifold should be at least <u>180</u> °F and the temperature of the dishes should he <u>170</u> °F to <u>175</u> °F.	The sanitization rinse should be hot enough to <u>kill</u> the microorganisms that cause foodborne illness.	This item is rated as Category <u>4</u> .	 Record a problem with the sanitization rinse on the inspection checklist, item <u>21</u>. Tell the manager so that the problem can he corrected <u>immediately</u>.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

ITEM	REASON	IMPORTANCE	ACTION
2. Check the thermometers and pressure gauges on the dishwashing machine. Be sure they are present and in good repair.	Thermometers and pressure gauges must he present and in good repair in order to accurately know whether the dishwasher is providing adequate temperatures and pressures.	Category <u>2</u> .	 Record the lack of thermometers and pressure gauges on the inspection checklist, item 18. Bring the problems to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Check the dishwashing machine for the presence of and which are in 	Without accurate thermo- meters and pressure gauges, one could not tell whether the dishwasher is providing adequate and	This item is rated Category	 Record the lack of thermometers and pressure gauges on the inspection checklist, item

Turn to page 8-6 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Check the dishwashing machine for the presence of <u>thermometers</u> and <u>pressure</u> <u>gauges</u> , which are in <u>good</u> <u>repair</u> .	Without accurate thermometers and pressure gauges, one could not tell whether the dishwasher is providing adequate <u>temperatures</u> and <u>pressures</u> .	This item is rated as Category <u>2</u> .	Record a lack of thermometers and pressure gauges on the inspection checklist, item <u>18</u> .

ITEM	REASON	IMPORTANCE	ACTION
 Check the wash water and the rinse water of the dishwashing machine. Be sure that the water is clean and 	 Proper temperatures inhibit the growth of harmful microorga- nisms. 	Category <u>2</u> .	Record dirty water or improper temperatures on the inspection checklist, item <u>20</u> .
that the temperatures are as follows:	Clean water reduces the chances of contamination.	•	of the preventive medicine branch at the
 Wash water150°F to 160°F. 			facility schedule an evaluation of the dishwashing machine by
 Rinse waterat least 160°F. 			a 91S20.
To check the temperature, ask that the machine be run through one cycle.		•	 Bring the problem to the attention of the manager.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

QUESTION	QUESTION	QUESTION	QUESTION
Check that the wash water of the dishwashing machine is between°F and °F and that the rinse water is °F or above.	Wash and rinse water that is properly heated will inhibit the of harmful microorganisms. Clean water will reduce the	This item is rated as Category	You record improper temperatures or dirty water in item of the inspection checklist.
	chances of		You can also request the preventive medicine NCOIC to schedule an of the dishwashing machine.

Turn to page 8-8 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Check that the wash water of the dishwashing machine is between 150° F and 160° F and that the rinse water is 160° F or above.	Wash and rinse water that is properly heated will inhibit the <u>growth</u> of harmful microorganisms. Clean water will reduce the chances of <u>contamination</u> .	This item is rated as Category <u>2</u> .	 You record improper temperatures or dirty water in item <u>20</u> of the inspection checklist. You can also request the preventive medicine NCOIC to schedule an <u>evaluation</u> of the dishwashing machine.

ITEM	REASON	IMPORTANCE	ACTION
4. Check the inside of the dishwashing machine. Ensure there are no lime deposits and that the wash and rinse nozzles are clean.	 Lime deposits can cause machine malfunction and inadequate cleaning of dishes. Unclean wash and rinse nozzles will prevent the spray from reaching all areas of the dishwashing machine. 	Category <u>2</u> .	 Record a problem with the interior of the ma- chine on the inspection checklist, item 17. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
When checking inside the dishwashing machine, determine that there are no deposits and that the and nozzles are	 Lime deposits can result in machine If wash and rinse nozzles are unclean, the spray cannot reach all of the dishwashing machine. 	This item is rated as Category	Record lime deposits or malfunctioning nozzles on the inspection checklist, item

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

Turn to page 8-10 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking inside the dishwashing machine, determine that there are no <u>lime</u> deposits and that the	• Lime deposits can result in machine malfunction.	This item is rated as Category <u>2</u> .	Record lime deposits or malfunctioning nozzles on the inspection checklist, item <u>17</u> .
<u>wash</u> and <u>rinse</u> nozzles are <u>clean</u> .	 If wash and rinse nozzles are unclean, the spray cannot reach all <u>areas</u> of the dish- washing machine. 		

ITEM	REASON	IMPORTANCE	ACTION
5 Check dishes that have already been washed.Make sure that they are clean and dry.	 Clean, dry dishes will not support the growth of harmful microorganisms. Clean, dry dishes are also an indication that overall machine and operator performance are satisfactory. 	Category <u>2</u> .	 Record problems with washed dishes on the inspection checklist, item <u>17</u>. Bring the problem to the attention of the manager
QUESTION	QUESTION	QUESTION	QUESTION
Washed dishes should be and	Clean, dry dishes will not theof harmfuland	This item is rated as Category	 Record inadequately washed and dried dishes on the inspection

also indicate that overall

machine performance is

checklist, item ____.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

Turn to page 8-12 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Washed dishes should be <u>clean</u> and <u>dry</u> .	Clean, dry dishes will not <u>support</u> the <u>growth</u> of harmful <u>microorganisms</u> and also indicate that overall machine performance is <u>satisfactory</u> .	This item is rated as Category <u>2</u> .	 Record inadequately washed and dried dishes on the inspection checklist, item <u>17</u>.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

	ITEM	REASON	IMPORTANCE	ACTION
6.	Check to make sure that machine operating instructions and operator's manual are available.	Specific operating instructions for each type of machine must be available as a reference. The machine must be properly operated to produce clean, sanitized, dry dishes.	Category <u>2</u> .	Record the absence of operating instructions on the inspection checklist, item <u>17</u> .
QL	JESTION	QUESTION	QUESTION	QUESTION
av ma	achine operating should be ailable. The anual should also be esent.	Operating instructions serve as a An improperly operated dishwashing machine will not produce, dishes.	This item is rated as Category <u></u> .	Record the absence of operating instructions on the inspection checklist, item

Turn to page 8-14 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
Machine operating <u>Instructions</u> should be available. The <u>operator's</u> manual should also be present.	Operating instructions serve as a <u>reference</u> . An improperly operated dishwashing machine will not produce <u>clean</u> , <u>sanitized</u> , <u>dry</u> dishes.	This item is rated as Category <u>2</u> .	Record the absence of operating instructions on the inspection checklist, item <u>17</u> .

ITEM	REASON	IMPORTANCE	ACTION
7. Check for NSF (National Sanitation Foundation) seal of approval.	 Dishwashing machines used in Army food service facilities must meet NSF standards. This requirement ensures compliance with recognized design standards. 	Category <u>2</u> .	Record the use of a dishwashing machine that does not have NSF approval on the inspection checklist, item 17.
QUESTION	QUESTION	QUESTION	QUESTION
When checking the dishwashing machine, look for the seal of approval.	Dishwashing machines in the Army must meet NSF	This item is rated as Category	 Record the presence of dishwashing machines without NSF approval on the inspection checklist, item

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

Turn to page 8-16 to check your answers.

ITEM	REASON	IMPORTANCE	ACTION
When checking the dishwashing machine, look for the <u>NSF</u> seal of approval.	Dishwashing machines in the Army must meet NSF standards.	This item is rated as Category <u>2</u> .	 Record the presence of dishwashing machines without NSF approval on the inspection checklist, item <u>17</u>.

INSPECT THE DISHWASHING MACHINE AND DISHWASHING PROCEDURES

ITEM	ITEM REASON		ACTION
8. Check to make sure that personnel perform preflushing, scraping, and soaking procedures.	These procedures help to keep the dishwashing machine water clean by removing food particles, grease, and other dirt. They also encourage responsible practices on the part of the employee.	Category <u>1</u> .	 Record a problem with preflushing, scraping, and soaking procedures on the inspection checklist, item <u>19</u>. Bring the problem to the attention of the manager.
QUESTION	QUESTION	QUESTION	QUESTION
Personnel should perform , and procedures prior to actual dishwashing.	These preliminary procedures help to keep the dishwashing machine clean.	This item is rated as Category	Record a problem with these procedures on the inspection checklist, item

Turn to page 8-18 to check your answers.

SELF-ASSESSMENT, ITEM 8

ITEM	REASON	IMPORTANCE	ACTION
Personnel should perform <u>preflushing, scraping</u> , and <u>soaking</u> procedures prior to actual dishwashing.	These preliminary procedures help to keep the dishwashing machine <u>water</u> clean.	This item is rated as Category <u>1</u> .	Record a problem with these procedures on the inspection checklist, item <u>19</u> .

Continue with Exercises

EXERCISES, LESSON 8

INSTRUCTIONS. Answer the following exercises by marking the lettered response that best answers the exercise, by writing the answer in the space provided at the end of the exercise, or by making entries on the form provided. After you have completed all the exercises, turn to "Solutions to Exercises" at the end of the lesson and check your answers. For each exercise answered incorrectly, reread the material referenced with the solution.

SITUATION: You are inspecting the dishwashing area at an Army food service facility. You check the dishwashing machine and observe employee activities. Your inspection results in the following observations:

<u>Observation 1</u>. During the sample run of the dishwashing machine, you check the temperature of the wash water and the rinse water. The wash water is 157°F and the rinse water is 163°F. There are pieces of food in the wash and rinse water.

<u>Observation 2</u>. You look at a variety of dishes that have already been washed. They are all dry; food particles have stuck and dried on the surfaces of cups and bowls.

<u>Observation 3</u>. You observe that employees quickly flush dirty dishes brought into the dishwashing area. None of the employees scrape or soak the dirty dishes.

<u>Observation 4</u>. The dishwashing machine has the NSF sign of approval. Employees can provide you with the operator's manual for this particular dishwashing machine.

Refer to these observations when answering exercises 1 through 5.

1. Record any unsatisfactory observations on the inspection checklist on page 8-20.

SAMPLE	SAMPLE COMPREHENSIVE FOOD SERVICE INSPECTION For use of this form, see TB MED 530, the proponent agency is the Office of The Surgeon General. SAMPLE																				
INSTALLATION							DING NO.			FACIL											
PERSON IN CHARGE OF F	ACILITY							COPY	REPORT	FURNIS	SHE	ED TO									
	ACILITY			1		RATING 2 PURPOSE							3								
1. Troop Dining		Hospita	al Dini	_	\square	1. Satisfact			3. Mai		2		1. Re	qular	P	PURPOSE 3				-	
Facility		Facility		ng		2. Unsatisf	•	П	4. Oth	•				urtesy	,				Other		
2. Cafeteria	5.								(spe	cify)											
3. Snack Bar	FACILITY	Other ((special SPECT			PECTION			T F						DI	CED					
COM-	PACIEITT	1113	FEGI	UΠ		AE (MIN)	YR	<u> </u>		DAY	RESERVED										
4 5 6 7 8 9 10	11 12	13	14	15	16	17 18	19 20	21	r +	(24	25	26	27	28	29	30	31	32	33	34
DESCRIP				wт			DESCRIPTIC			14	VТ				DESCF						WT
FOOD	TION			VV I	FOO				G (con't)		V I	GAR	BAGE	AND	REFUSE			_ (con	't)		~~ ~
*01 Approved source, so evidence of spoilage		on, no		5	20	Wash, rins temperatu	e water: C re	lean, p	roper		2	34			orage are quate co						1
02 Original container, p	roperly label	ed		1	*21		n rinse: cle re, concent								T, OTHE				ITROL		
FOOD PROTECTION *03 Potentially hazardou:	s food meet	s					pressure. E			· · ·	4		unau	thoriz	ed anima	als					4
time/temperature rec storage, preparation	, display, se			5	22	Wiping clo	ths: Clean		ted in u	se, .	1		Floor	s: co	6, AND C nstructe	d, dra	ained				
transport; leftover pe *04 Equipment to mainta	· · · · · · · · · · · · · · · · · · ·	-			•23		anitizing so act surface:		uipment		-	in good repair; covering installation durable dustless cleaning methods			ble,	1					
temperatures				4		between u	ls: clean, s ises, free of				3	37 Walls, ceilings, attached equipment constructed properly, good repair, surfact				es					
05 Thermometers provi accurate	ded, conspic	cuous,		1	24	detergents			oguine				clear		tless clea						1
*06 Proper tempering/that hazardous food	awing of pot	tentiall	Y	3	24	and utensi	ontact surf Is clean	ices of	equipm		1				lequate,	fixtu	res st	nielde	d,		1
*07 Potentially hazardou service not re-served	d			2	2 25 Proper storage, handling of clean, sanitized equipment and utensils 1 VENTILATION 39 Rooms vented as requi			equir	ed				1								
08 Food protected durin display, service trans		prepara	ation	2	26	26 Single-service items: not reused,				2		Filter	rs and	grease e	extra	cting	equip	ment		4	
09 Handling of food/ice	minimized			2	WAT	properly stored, and dispensed WATER							properly		lled				4		
10 In use, food/ice uten	sils properly	stored	d	1		*27 Safe approved sources, adequate hot and cold water, adequate pressure				4	DRESSING ROOMS/AREAS 41 Clean, lockers provided, convenient location, used					1					
PERSONNEL 11 Training program rec	cords availat	le		1		SEWAGE				OTHER OPERATIONS											
*12 No evidence of com skin infections, cuts		iseases	s,	5	*28	Adequate disposal	sewage and	l liquid	waste	4	4	*42 Necessary toxic items properly stored, labeled, used					4				
*13 Hands washed and clean, good hygiene			e	4	PLUN 29	/BING	maintained	roperl	.,	1	1	43	Prem	nises:	Maintair						
practices 14 Clean work garment no unauthorized jew				1	*30	No cross-c	connection,	potent		+	3		equi		ry article properly only						1
FOOD EQUIPMENT AND U	ITENSILS					ET AND LA	VATORY FA	CILITI			\neg	44	Clea	n/soile	ed linen p	prope	rly st	ored			1
*15 Food/ice contact sur properly designed, c located, and maintai	onstructed,			3	31	Adequate ble, desigr	number, co ned and inst			isi-	з	45			separatio /sleeping						1
16 Nonfood contact sur designed, constructe			ed.		32		ns enclosed od repair, ad					46	Othe	r (spe	cify)						
and maintained 17 Utensil washing faci				1		cleaner, ru	inning wate g facilities,	r, temp	perature,		1		.OW-L								
operated, maintained			,	2	GAD	BAGE AND									•••••			. [
18 Accurate thermomer chemical test kits pr			jes,	2		Containers adequate i	s or recepta number, ver	cles co min pr	vered,		3										
19 Utensils preflushed,	19 Utensils preflushed, scraped, soaked 1 RATING SCORE IF USED 49 (100) Less weight of items violated																				
*Critical deficiencies requi	-	ate cor	rectio	n - Us	e DA I	Form 5161-	1 for addition	nal rer													
SIGNATURE OF INSPECTO	DR								T	IME							DATE				
SIGNATURE OF RECEIVER	1																DATE				
DA FORM 5161, A	UG 91																		L	ISAPA	V1.00

Comprehensive Food Service Inspection (DA Form 5161) for exercise 1.

2. Enter a check by any observation(s) that you have recorded as unsatisfactory.

Observation 1	
Observation 2	
Observation 3	

Observation 4

3. Could the unsatisfactory observations be related? If so, how?

4. What would you suggest to the manager as the basic corrective action for these problems?

5. You would best evaluate the dishwashing machine area at this food service facility as:

a. Unsatisfactory with a high risk of causing an outbreak of foodborne illness.

b. Completely satisfactory. You discovered no problems during your inspection.

c. Basically satisfactory. There are minor problems, which could be corrected without much difficulty.

Check Your Answers on Next Page

SOLUTIONS TO EXERCISES, LESSON 8

NOTE: The wording of your answers can differ from the wording of the solutions. However, the same ideas must be expressed.

1. On the checklist, you should have:

Circled item 20 and underlined "wash, rinse water: clean." (chart, item 3)

Circled item 17 and underlined "maintained." (chart, item 5)

Circled item 19 and underlined "scraped, soaked." (chart, item 8)

- 2. Observation 1 X Observation 3 X Observation 3 X Observation 4 (chart, items 3, 5, and 8)
- 3. Yes. Personnel do not satisfactorily scrape and soak dirty dishes before placing them in the dishwashing machine. Unremoved food particles come off in the machine water or remain on the dishes. (chart, item 8)
- 4. Require personnel to preflush, scrape, and soak dirty dishes. (chart, item 8)
- 5. c. None of the problems are rated above 2. (chart, items 3, 5, and 8; para 8-2b).

End of Lesson 8

APPENDIX A

This appendix is provided in case you have trouble reading the item, description, weight, and/or reference paragraph number (TB MED 530) columns of DA Form 5161, Comprehensive Food Service Inspection. An asterisk (*) denotes a critical deficiency requiring immediate attention. Items 01, 03, 04, 06, 07, 12, 13, 15, 21, 23, 27, 28, 30, 34, 35, 40, and 42 are so marked.

<u>FOOD</u>

*01	Approved source, sound condition, no evidence of spoilage.	5	2-1, 2-2
02	Original container, properly labeled.	1	2-1, 2-7, 2-23
FOC	DD PROTECTION		
*03	Potentially hazardous food meets time/temper- ature requirements during storage, preparation, display, service, transport; leftover policy.	5	2-2 thru 2-9, 2-13, 2-17, 2-19, 2-22, 2-24, 2-31, 2-32, 7-15, 8-2.
*04	Equipment to maintain product temperature.	4	2-7 thru 2-9, 2-27, 2-32.
05	Thermometers provided, conspicuous, accurate.	1	2-5, 2-8, 2-9 2-27, 2-32.
*06	Proper tempering/thawing of potentially hazardous food.	3	2-18, 2-19, 2-22.
*07	Potentially hazardous foods offered for self- service not reserved.	2	2-22, 2-28 thru 2-31.
08	Food protected during storage, preparation, display, service, transport.	2	2-2, 2-3, 2-6 thru 2-8 2-10, 2-11, 2-15 thru 2-17, 2-19, 2-23, 2-24, 2-27, 2-31, 2-32, 2-35, 4-10, 6-7, 6-23, 7-1, 7-11, 7-14, 8-9, 10-9, 10-22.
09	Handling of food (ice) minimized.	2	2-2, 2-10, 2-19, 2-25, 2-26
10	In use, food (ice) utensils properly stored.	1	2-3, 2-5, 2-19, 2-25, 2-26

PERSONNEL

11	Training program records available.	1	3-6
*12	No evidence of communicable diseases, skin infections, cuts, burns.	5	3-2
*13	Hands washed and clean, good hygiene practices.	4	3-4, 3-5, 4-32, 5-22, 10-15, 10-20
14	Clean work garments; hair restraints; no unauthorized jewelry, watches.	1	3-4
FOO	DD EQUIPMENT AND UTENSILS		
*15	Food (ice) contact surfaces are nontoxic, properly designed, constructed, installed, located, and maintained.	3	2-5, 2-7, 4-1 thru 4-14, 4-16, 4-17, 4-19, 4-21, 4-31, 4-34, 5-24, 5-35, 8-3
16	Nonfood contact surfaces properly designed, constructed, installed, located, and maintained.	1	2-27, 4-2, 4-3, 4-9, 4-10, 4-13, 4-15, 4-16, 4-19, 4-20, 4-31, 4-34, 5-24, 5-35, 8-3.
17	Utensil washing facility properly designed, operated, maintained, and installed.	2	4-10, 4-22, 4-26, 4-27, 4-29.
18	Accurate thermometers, pressure gauges, chemical test kits provided/used.	2	4-26, 4-27
19	Utensils preflushed, scraped, soaked.	1	4-26, 4-27
20	Wash, rinse water: clean, proper temperature.	2	4-26, 4-27
*21	Sanitization rinse: clean, correct temperature, concentration, exposure, time, and pressure. Equipment/utensils sanitized.	4	2-7, 2-10, 2-11, 2-17, 2-19, 4-22, 4-26, 4-27, 7-2, 8-5

FOOD EQUIPMENT AND UTENSILS (cont)

22	Wiping cloths: clean, restricted in use, stored in sanitizing solution.	1	4-23
*23	Food contact surfaces of equipment, utensils: clean sanitized between uses, free of abrasives/detergents.	3	2-7, 2-10, 2-11, 2-19, 4-22, 4-26, 4-27, 7-2, 7-14, 8-5, 10-23
24	Nonfood contact surfaces of equipment and utensils clean.	1	4-22, 7-11, 7-14
25	Proper storage, handling of clean, sanitized equipment and utensils.	1	2-37, 3-4, 4-28, 4-30 thru 4-33, 6-7, 6-23, 7-13
26	Single-service items not reused, properly stored, and dispensed.	1	4-6, 4-8, 4-32, 4-33, 7-3, 8-4
WA	TER		
*27	Safe approved sources, adequate hot and cold water, adequate pressure.	4	4-26, 4-27, 5-1 thru 5-7, 5-23, 5-24, 7-6, 7-13, 8-5, 10-19
<u>SEV</u>	VAGE		
*28	Adequate sewage and liquid waste disposal.	4	5-8,5-24,7-7,7-8, 7-14,8-6
<u>PLL</u>	IMBING		
29	Installed, maintained properly.	1	2-25,5-9,5-12 thru 5-14,6-16, 7-7
*30	No cross-connection, potential back siphonage, backflow.	3	2-7, 5-10, 5-11, 5-13, 6-5

TOILET AND LAVATORY FACILITIES

31	Adequate number, convenient, accessible, designed, and installed properly.	3	5-15, 5-16, 5-21 thru 5-23, 8-7
32	Toilet rooms enclosed, self-closing doors, good repair, adequate hand cleaner, running water, temperature, hand-drying facilities, waste receptacles.	1	5-17, 5-18, 5-34, 8-7
<u>Gaf</u>	RBAGE AND REFUSE DISPOSAL		
33	Containers or receptacles covered, adequate number, vermin proof, emptied frequently, clean.	3	5-24 thru 5-26
*34	Outside storage area properly constructed, clean; adequate container washing facilities.	1	5-25
INS	ECT, RODENT, OTHER ANIMAL CONTROL		
*35	No evidence of insects/rodentsunauthorized animals.	4	5-25, 5-27 thru 5-34, 6-13, 6-31, 8-9, 10-16, 1 0-19 thru 10-21
<u>FLC</u>	ORS, WALLS, AND CEILINGS		
36	Floors: constructed, drained properly, in good repair, covering installation, durable, dustless cleaning methods.	1	5-25, 6-2 thru 6-7, 6-12 thru 6-16, 7-13, 8-8
37	Walls, ceilings, attached equipment: constructed properly, good repair, surfaces clean, dustless cleaning methods.	1	5-26, 6-8 thru 6-15, 8-9
<u>LIG</u>	HTING		
38	Lighting adequate, fixtures shielded, protected.	1	6-17, 6-18

VENTILATION

39	Rooms vented as required.	1	5-20, 6-19, 6-20
*40	Filters and grease extracting equipment clean and properly installed.	4	6-21, 6-22
<u>DRI</u>	ESSING ROOMS/AREAS		
41	Clean, lockers provided, convenient location.	1	6-23, 6-24
<u>OT</u> ł	HER OPERATIONS		
*42	Necessary toxic items properly stored, labeled, used.	4	2-36 thru 2-42, 4-23, 4-26, 4-27, 4-29, 5-7
43	Premises. Maintained free of litter, unnecessary articles; maintenance equipment properly stored, authorized personnel only.	1	6-26, 6-30
44	Clean/soiled linen properly stored.	1	5-35, 6-28, 6-29
45	Complete separation of food operations from living/sleeping quarters, laundry.	1	6-27, 6-28
46	Other (specify)		

46 Other (specify).

COMMENT SHEET

SUBCOURSE MD0182 Food Service Sanitation and Inspections II EDITION 100

Your comments about this subcourse are valuable and aid the writers in refining the subcourse and making it more usable. Please enter your comments in the space provided. ENCLOSE THIS FORM (OR A COPY) WITH YOUR ANSWER SHEET **ONLY** IF YOU HAVE COMMENTS ABOUT THIS SUBCOURSE..

FOR A WRITTEN REPLY, WRITE A SEPARATE LETTER AND INCLUDE SOCIAL SECURITY NUMBER, RETURN ADDRESS (and e-mail address, if possible), SUBCOURSE NUMBER AND EDITION, AND PARAGRAPH/EXERCISE/EXAMINATION ITEM NUMBER.

PLEASE COMPLETE THE FOLLOWING ITEMS:

(Use the reverse side of this sheet, if necessary.)

1. List any terms that were not defined properly.

2.	List any errors. paragraph <u>error</u> <u>corre</u>	ection
-	List any suggestions you have to impro	ove this subcourse.
ŀ.	Student Information (optional)	PRIVACY ACT STATEMENT (AUTHORITY: 10USC3012(B) AND (G))
SS	me/Rank N dress	PURPOSE: To provide Army Correspondence Course Program students a means to submit inquiries and comments.
el	nail Address ephone number (DSN) S/AOC	subcourse authors at service school from accessing

U.S. ARMY MEDICAL DEPARTMENT CENTER AND SCHOOL

Fort Sam Houston, Texas 78234-6130