CRM LESSON PLAN REPORT

REACT TO CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR (CBRN) HAZARD
031-C1019 / 20.0 ©

Approved
16 Nov 2020

Effective Date: 16 Nov 2020

SCOPE:

Students will be able to respond to a Chemical, Biological,Radiological, and Nuclear (CBRN) attack or hazard.

SECTION I. ADMINISTRATIVE DATA

All Course Masters/POIs Including This Lesson

Courses

Course Number	Version	Title	Phase	Status
9E-F63		Course Created on Thu Jan 14 14:07:29 EST 2021	N/A	Analysis
9E-F64 (RC)	2.2	AMEDD DCC (RC)	N/A	Analysis
9E-F63	2.2	AMEDD DCC	N/A	Analysis

POIs

POI Number	Version	Title	Phase	Status
9E-F63	2.2 ©	AMEDD Direct Commission	0	Analysis
9E-F64 (RC)	2.2 ©	AMEDD Direct Commission	0	Analysis

Task(s) Taught(*) or Supported

Task Number	Task Title	Status
Individual		
031-COM-1001 (*)	React to a Nuclear Attack	Approved
031-COM-1003 (*)	Mark CBRN-Contaminated Areas	Approved
031-COM-1004 (*)	Protect Yourself From Chemical And Biological (CB) Contamination Using Your Assigned Protective Mask	Approved
031-COM-1006 (*)	Decontaminate Your Skin	Approved
031-COM-1008 (*)	Identify Liquid Chemical Agents using M8 Paper	Approved
031-COM-1009 (*)	Detect Liquid Chemical Agents using M9 Detector Paper	Approved
031-COM-1005 (*)	Protect Yourself From CBRN Injury/Contamination by Assuming MOPP Level 4	Approved
031-COM-1007 (*)	React To Chemical Or Biological (CB) Hazard/Attack	Approved
031-COM-1010 (*)	Maintain Your Assigned Protective Mask	Approved
031-COM-1011 (*)	Decontaminate Individual Equipment	Approved
031-COM-1012 (*)	Conduct Personal Hydration While Wearing Your Assigned Protective Mask	Approved

Reinforced Task(s)

Task Number	Task Title	Status

Knowledge

Knowledge Id	Title	Taught	Required
K0604	Knowledge of The Army Maintenance Management System	No	Yes
K26010	Knowledge of basic decontamination procedures	Yes	Yes
K25911	Know how decontaminate casualties	No	Yes
K25915	Know how to assume appropriate MOPP levels depending on the type of possible contamination	Yes	Yes
K25919	Know how to decontaminate all critical surfaces	Yes	Yes
K25920	Know how to decontaminate gloves	Yes	Yes
K25927	Know how to doff gloves	Yes	Yes
K26019	Knowledge of CBRN exposure signs and symptoms	Yes	Yes
K26023	Knowledge of chemical detection equipment	Yes	Yes
K25926	Know how to doff boots	Yes	Yes
K25928	Know how to doff in the proper order	Yes	Yes
K25929	Know how to doff the JSLIST suit	Yes	Yes
K25930	Know how to identify the symptoms of contamination	Yes	Yes
K25939	Know how to perform PMCS on the CBRN equipment	Yes	Yes
K25941	Know how to perform troubleshooting	No	Yes
K25982	Know the actions of before, during, and after a CBRN attack procedures	Yes	Yes
K25988	Know the masking procedures	Yes	Yes
K25979	Know how to wear MOPP gear	Yes	Yes
K25943	Know how to perform unmasking procedures	Yes	Yes

Skill

Skill Id	Title	Taught	Required
S4667	Be able to perform PMCS on M50 series Protective Mask	Yes	Yes
S4692	Ability to Use the M256 Series Detector Kit	Yes	Yes
S4510	Be able to decontaminate glove.	Yes	Yes
S4552	Be able to perform masking procedures	Yes	Yes
S4576	Be able to use M8 paper to determine if contamination is present	Yes	Yes
S4480	Ability to use decontamination equipment and techniques	Yes	Yes
S4605	Be able to conduct unmasking procedures	Yes	Yes
S4600	Be able to conduct individual gear Decontamination	Yes	Yes
S4672	Be able to prepare for Decontamination	Yes	Yes
S4643	Be able to implement decontamination techniques	Yes	Yes
S4530	Be able to don the JSLIST suit	Yes	Yes
S4526	Be able to don MOPP level 2.	Yes	Yes
S4695	Be able to fill out DA Form 2404	No	Yes
S4635	Be able to identify defective parts on M50 series Protective Mask	Yes	Yes
S4525	Be able to don MOPP level 1.	Yes	Yes
S4527	Be able to don MOPP level 3.	Yes	Yes
S4528	Be able to don MOPP level 4.	Yes	Yes
S4524	Be able to doff the mask.	Yes	Yes
S4522	Be able to doff in the proper order.	Yes	Yes
S4523	Be able to doff the JSLIST suit	Yes	Yes
S4691	Ability to use M8 Paper	Yes	Yes

Administrative/ Academic Hours

The administrative/academic (50 min) hours required to teach this lesson are as follows:

Academic	Resident Hours / Methods		
Yes	3 hrs	9 mins	Demonstration
Yes	6 hrs	5 mins	Practical Exercise (Hands-On/Written)
Yes	0 hrs	35 mins	Discussion (Small or Large Group)
Total Hours(50 min):	9 hrs	49 mins	

Instructor Action Hours

The instructor action (60 min) hours required to teach this lesson are as follows:

	Hours/Actions		
	1 hrs	0 mins	Classroom Setup
	1 hrs	0 mins	Training Event Clean-up/Breakdown (non-FTX)
	2 hrs	0 mins	Training Event Prep/Setup (non-FTX)
Total Hours (60 min):	4 hrs	0 mins	

Test Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Prerequisite Lesson(s)

Hours	Lesson Number Version	Lesson Title
None		

Training Material Classification

Security Level: This course/lesson will present information that has a Security Classification of: U - Unclassified.

Foreign Disclosure Restrictions

FD3. This training product has been reviewed by the developers in coordination with the USACBRNS, Foreign Disclosure (FD) Representative and MSCoE foreign disclosure officer. This training product cannot be used to instruct international military students.

References

Number	Title	Date
ALARACT 051/2013	Safety Alert on Mask Confidence Training (MCT) Procedures Using O-Chorobenzylidene Malononitrile (CS) Capsules	14 Mar 2013
ATP 3-11.32	MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR PASSIVE DEFENSE	13 May 2016
ATP 3-11.37	Multi-Service Tactics, Techniques, and Procedures for Chemical, Biological, Radiological, and Nuclear Reconnaissance and Surveillance	25 Mar 2013
ATP 4-25.13	Casualty Evacuation	15 Feb 2013
DA FORM 1594	Daily Staff Journal or Duty Officer's Log.	01 Dec 2019
DA FORM 2404	EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET	01 Feb 2011
DA FORM 5988-E	EQUIPMENT MAINTENANCE AND INSPECTION WORKSHEET (EGA)	01 Mar 1991
ECBC-SP-036	Guidelines for Mass Casualty Decontamination During a HAZMAT/Weapon of Mass Destruction Incident, Volumes I and II	01 Aug 2013
FM 3-11	Chemical, Biological, Radiological, and Nuclear Operations	23 May 2019
ISBN: 978-0-16-081532-4	MEDICAL ASPECTS OF CHEMICAL WARFARE	01 Jan 2018
PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual.	22 Aug 2005
STANAG 2083	Commander's Guide on the Effects From Nuclear Radiation Exposure During War	02 Sep 2009
STP 21-1-SMCT	SOLDIER`S MANUAL OF COMMON TASKS, WARRIOR SKILLS, LEVEL 1	07 Nov 2019
TM 10-8415-220-10	OPERATOR MANUAL FOR JOINT SERVICE LIGHTWEIGHT INTEGRATED SUIT TECHNOLOGY (JSLIST) CHEMICAL PROTECTIVE ENSEMBLE {TM 8415-10/3;SS200-AP-MMO-010}	28 Jul 2008
TM 3-4240-346-10	OPERATORS MANUAL FOR CHEMICAL-BIOLOGICAL MASK: FIELD, M40A1 (NSN 4240-01-370-3821-SMALL) (4240-01-370-3822-MEDIUM) (4240-01-370- 3823-LARGE); CHEMICAL-BIOLOGICAL MASK: COMBAT VEHICLE, M42A2 (4240-01-4100	15 May 2015
TM 3-4240-542-13&P	"Operator and Field Maintenance Manual for Mask, Chemical-Biological: Joint Service General Purpose, Field, M50 PURPOSE, FIELD, M50"	30 May 2008
TM 3-6505-001-10	OPERATOR's MANUAL FOR REACTIVE SKIN DECONTAMINATION LOTION (RSDL)	17 Apr 2007
TM 3-6665-311-10	OPERATORS MANUAL FOR PAPER, CHEMICAL AGENT DETECTOR: M9 (NSN 6665-01-226-5589) {TO 11H2-2-21}	31 Aug 1998
TM 3-6665-426-10	Operator’s Manual for Detector Kit, Chemical Agent: M256A2 (NSN: 6665-01-563-7473)	02 Nov 2009
TM 3-6665-439-10	Technical Manual Operator Manual Decontamination Kit, Individual Equipment: M334 NSN 4230-01-643-8267	31 Aug 2017
TM 3-9905-002-10	Technical Manual Operator's Manual for Sign Kit, Contamination: CBRN, M328 (NSN: 9905-01-567-7295) {NAVY SS200-A1-MMO-010}	10 Nov 2011
TO 11H2-14-5-1	Paper, Chemical Agent, VGH, ABC-M8	01 Apr 2002

Student Study Assignment

None

Instructor Requirements

All individuals assigned to instructor duties must have successfully completed a TRADOC-approved instructor training program as part of the initial certification. Proponent Instructor certification requirements are in accordance with USACBRNS Instructor Certification Policy, and TRADOC Regulation 350-70.

Support Personnel Requirements

None

Additional Support Personnel Requirements

Name	Student Ratio	Qty	Man Hours
Assistant Instructor (AI) Remarks:	1:25		
Medic NCOIC Remarks: Qualified Combat Medic (MOS 68W) with ambulance, his/her protective mask, resuscitation equipment, and litter. NOTE: A Combat Lifesaver can be used in lieu of a 68W Combat Medic if authorized by the Local Range SOP.	0:0	1	8.0

Equipment Required for Instruction

ID - Name	Student Ratio	Instructor Ratio	Spt	Qty	Exp
4210-00-165-4703 - Extinguisher, Fire Remarks:	0:0	0:0	No	2	No
4230-01-643-8267 - Decontamination Kit, Individual Equipment: M334 Remarks:	1:1	0:0	No	1	Yes
4240-01-512-4434 - Mask, Chemical Biological, Joint Service,General Purpose, Field: M50 Medium Remarks: Be sure to have enough of various sizes to fit all Soldiers.	1:1	0:0	No	1	No
4240-01-529-2289 - CANISTER,CHEMICAL-BIOLOGICAL MAS Remarks:	2:1	0:0	No	2	No
6530-00-783-7205 - Litter, Folding, Folding Pole, Aluminum Pole, 90 X 22-3/8 X 6-3/4 Inch Remarks:	0:0	0:0	No	2	No
6545-00-922-1200 - First Aid Kit, General Purpose Remarks:	0:0	0:0	No	1	No
6665-00-050-8529 - Paper, Chemical Agent Detector: M8 Remarks:	1:1	0:0	No	1	Yes
6665-01-112-1644 - Simulator, Detector Tickets, Chemical Agent Remarks:	1:5	0:0	No	1	Yes
6665-01-226-5589 - Paper, Chemical Agent Detector Remarks:	1:1	0:0	No	1	No
6695-01-475-0994 - Thermometer, Infrared Remarks:	0:0	0:0	No	1	No
6910-01-507-5141 - Training Aid, Reactive Skin Decontamination Lotion: RSDL 21ML 60S Remarks:	1:1	0:0	No	1	Yes
7210-00-718-8325 - Washcloth, Cotton, 12 Inch Wide, 12 Inch Long Remarks:	1:1	0:0	No	1	No
7240-01-094-4305 - Pail, Utility, Plastic, Snap-On Lid, 4-1/2 - 5-1/2 Gallon Remarks:	1:10	0:0	No	0	No
7310-00-205-1020 - Hot Plate, Electric Remarks:	0:0	0:0	No	2	No
7920-00-061-0037 - Brush, Scrub, Curved End, without Handle, 2.25-2.75 Inches Wide, 6.00-6.625 Inches Long Remarks:	1:1	0:0	No	0	No
8305-00-267-3015 - Cloth, Cheesecloth Remarks:	1:1	0:0	No	1	No
8415-01-138-2498 - Gloves, Chemical Protective, Type II, Black, Rubber Butyl, Size Medium Remarks: Be sure to have enough of various sizes to fit all Soldiers.	1:1	0:0	No	1	No
8415-01-553-0037 - Coat, Chemical Protective, Large Regular Remarks: Be sure to have enough of various sizes to fit all Soldiers.	1:1	0:0	No	1	No
8430-01-536-5416 - Overboot, Lightweight, CBRN, Large Remarks: Be sure to have enough of various sizes to fit all Soldiers.	1:1	0:0	No	1	No
8465-01-529-0599 - CARRIER,CHEMICAL-BIOLOGICAL MASK Remarks:	1:1	0:0	No	1	No

8465-01-643-6221 - Chemical, Biological, Radiological, Nuclear Hydration System, Training Kit Remarks:	1:1	0:0	No	1	No
8515-01-444-2325 - Trouser, Chemical Protective, Large Regular Remarks: Be sure to have enough of various sizes to fit all Soldiers.	1:1	0:0	No	1	No
9905-01-567-7295 - Sign Kit, Contamination, M328 Remarks:	1:5	0:0	No	1	No

(Note: Asterisk before ID indicates a TADSS.)

Materials Required

Instructor Materials:

1. All applicable references from the list.
2. Applicable equipment

NOTE: M40 Mask: LIN # M12418, Item # 4240-01-258-0062 (Medium)
M42 Mask: LIN # M18526, Item # 4240-01-258-0065 (Medium)
M45 Mask: LIN # M12736, Item # 4240-01-414-4051 (Medium)
M48 Mask: LIN # M13515, Item # 4240-01-386-4686 (Medium)
M50 Mask: LIN # M12986, Item # 4240-01-512-4434 (Medium)
M51 Mask: LIN # M13236, Item # 4240-01-512-4429 (Medium)

3. Lesson plan.
4. Performance evaluation score sheet.

Student Materials:

1. MOPP gear (JSLIST)

2. Chemical protective mask

3. Tactical field gear

Classroom, Training Area, and Range Requirements

ID - Name	Quantity	Student Ratio	Setup Mins	Cleanup Mins
17120-M-1200-30 Classroom, Multipurpose, 1200 Square Feet, 30 Students Remarks:		1:25	0	0
17170-300 Gas Chamber, 300 Square Foot Remarks:	1	0:0	0	0

Ammunition Requirements

DODIC - Name	Exp	Student Ratio	Instruct Ratio	Spt Qty
K765 - Riot Control Agent CS Capsule Remarks:	Y	0:0	0:0	5

Instructional Guidance/ Conduct of Lesson

NOTE: Before presenting this lesson, instructors must thoroughly prepare by studying this lesson and identified reference material.

Instructor Guidance on Slide Use. Slides are not required in order to present this lesson; however, if the instructor would like to use slides to enhance the instruction, s/he can choose to use them.

NOTE: Slide use will be limited to what is absolutely necessary. You may locally produce and maintain slides for use at various points during instruction to supplement/enhance your instruction as needed.

Instructors must read and adhere to the Army Learning Model, as described in TRADOC PAM 525-8-2.

This Lesson Plan has been developed and shall be delivered with the scope of facilitating the progress of Continuous Adaptive Learning Model, in particular:
Using 21st Century Soldier Competencies as an integral part learning activities outcomes
Enabling a learner-centric environment
Focusing on students' career span framework
Enabling adaptive functioning and behavior

Proponent Lesson Plan Approvals

Name	Rank	Position	Date
gerald.allen.miller	Not available	Approver	16 Nov 2020

SECTION II. INTRODUCTION

Method of Instruction: Discussion (Small or Large Group)
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH (1:25)
Time of Instruction: 15 mins

Motivator

Develop a Concrete Experience which involves all of the students and engages the affective domain. Utilize activities, discussion, or scenarios that directly relate to the content of the lesson and allow for critical and creative thinking to occur. Consider the below as an example for a Concrete Experience:

Have all Soldiers remain seated and close their eyes. It is important that they close their eyes prior to other instructions and throughout the 9 seconds. On the command GO, you will have 9 seconds to retrieve your driver's license (if no license, then military ID) and hold it over your head. It must be only that item held over your head, no entire wallet or purse. To avoid injury, remain at your seat so as not to hurt one another. Time them and have them freeze in place when time elapses. Have them open their eyes and look around to see how everyone did. Not all students should be successful and may have the wrong item held up.

During the publish and process phase, direct discussion towards the value of practice, rehearsal, preparation, and planning.

Terminal Learning Objective

NOTE. Inform the students of the following Terminal Learning Objective requirements.
At the completion of this lesson, you [the student] will:

Action:	React to Chemical, Biological, Radiological, and Nuclear (CBRN) Hazard
Conditions:	In a classroom environment, given assigned protective mask, M8 and M9 detector paper, Joint Service Light Integrated Suit Technology (JSLIST) Chemical Protective Ensemble, CBRN protective footwear and gloves, full hydration system, training Reactive Skin Decontamination Lotion(RSDL), M334 Decontamination Kit, DA Form 2404 or DA Form 5988E, soapy water, rinse water, sanitization solution, stiff bristle brush, dry lint free cloth, applicable Technical Manuals (TMs), serviceable replacement mask filters, M328 CBRN Marking Set, and a scenario in which you hear or see indicators of a CBRN or Toxic Industrial Chemical (TIC) hazard/attack while wearing tactical field gear.
Standards:	React to CBRN attack or hazard with 100% accuracy. Maintain assigned protective mask with 100% accuracy. Protect yourself from a CB agent with your assigned protective mask without error and within 9 seconds. Perform Protection for Yourself from CBRN Contamination with MOPP Level 4, complete all steps in sequence and within 8 minutes. Conduct hydration using the Multi-Purpose Hydration System (MPHS) while wearing assigned protective mask with 100% accuracy. Decontaminate

	self and equipment with all steps conducted in sequence and without error. Deploy M8, M9 detector paper with 100% accuracy. Employ a Marker Kit for CBRN-Contaminated Areas with 100% accuracy.
Learning Domain - Level:	Cognitive - Applying
No JPME Learning Areas Supported:	None

Safety Requirements

In a training environment, leaders must perform a risk assessment IAW ATP 5-19, Risk Management. Leaders will complete a DD Form 2977, Deliberate Risk Assessment Worksheet, during the planning and completion of each task and sub-task by assessing mission, enemy, terrain and weather, troops and support available-time available, and civil considerations, (METT-TC). NOTE: During MOPP training, leaders must ensure personnel are monitored for potential heat injury. Local policies and procedures must be followed during times of increased heat category in order to avoid heat related injury. Consider the MOPP work/rest cycles and water replacement guidelines IAW FM 3-11.32. Ensure all SAFETY NOTES that are contained in Equipment Operator's Manual, lesson plan and individual tasks linked to the lesson plan are listed on the lesson's Deliberate Risk Management Worksheet DD Form 2977, and control measures are emplaced to ensure Soldier's are not harmed, and equipment is not damaged.

The gas chamber is a room that has a controlled concentration of CS (orto-chlorobenzylidenemalononitrile) gas, more commonly known as tear gas. Tear gas is often used for self defense and for riot control; it is an irritant that reacts with the moisture in the skin and eyes causing aninstant intense burning sensation; specifically, it irritates mucous membranes in the eyes, nose, mouth and lungs, causing tearing, sneezing, coughing, nasal discharge, difficulty breathing, dizziness, and disorientation.

Before entering the Chamber ensure:

No students with known CS Allergies enter the chamber.

No students with contacts enter the chamber.

Immediately upon exiting the gas chamber, Soldiers must do the following:

Avoid touching and/or rubbing eyes

Keep eyes open

Take deep breaths of air with arms over the head

Risk Assessment

Level

Low - Eye Injuries

Assessment: Conduct checks and reminders.

Controls: Soldiers remove contact lenses prior to practical exercise.

Leader Actions: Identify Soldiers who wear contact lenses.

Low - Extreme temperatures.

Assessment: Instructor conducts inspections.

Controls: Conduct safety brief

Monitor temperature.

Modify uniform.

Heat or ventilate classroom.

Remain hydrated.

Leader Actions: Discuss during initial safety briefs.

Mention during periodic safety reminders.

Conduct daily checks.

Low - Wildlife in the Training Area.

Assessment: Periodic training area inspections.

Controls: Conduct safety brief

Identify soldiers with allergies to insect bites, and make sure they carry epi-kits

CLS available

Leader Actions: Conduct safety brief

Low - Uneven Terrain

Assessment: Instructors assess the primary movement areas.

Controls: Conduct safety brief

CLS available

Keep dismounted movement on level areas as much as possible.

Leader Actions: Conduct safety brief

Low - CS Reactions.

Assessment: Instructor observations and analysis.

Controls: Calculate appropriate CS concentrations.

Restrict direct exposure times to 15 seconds or less.

Monitor decontamination area.

Quickly evacuate soldiers from chamber if danger signs appear

CLS will be in the chamber at all times

Water jugs will be available

Leader Actions: Conduct safety brief and observe Soldiers in the recovery area as well as the chamber.

Low - Respiratory Distress Response to CS.

Assessment: Instructor observations and screening.

Controls: Cadre identify Soldiers with known allergies or respiratory concerns prior to CS training. Emergency vehicle is on site for any Soldier with emergency response needs to CS.

Leader Actions: Identify Soldiers.

Soldiers with allergy will not conduct CS training.

Cadre brief route to hospital to Soldiers and medical personnel.

Environmental Considerations

NOTE: Instructor should conduct a risk assessment to include environmental considerations IAW the current environmental considerations publication, and ensure students are briefed on hazards and control measures.

It is the responsibility of all Soldiers and DA civilians to protect the environment from damage.

Environmental protection is not just the law, it is also the right thing to do. It is a continual process that starts with deliberate planning. Always be alert to ways to protect our environment during training and missions. In doing so, you will contribute to the sustainment of our training resources while protecting people and the environment from harmful effects.

Ensure DECON line residue is recovered, as appropriate. Contact the local environmental office for proper disposal procedures

Ensure all test kit residue is recovered. Contact the local environmental office for proper disposal procedures.

If using the M40-series masks, there are two Mask Canisters, the C2 and the C2A1.

The C2 canister contains Chromium VI, and damaged or unusable canisters are considered Hazardous Waste. (Chromium VI is a known carcinogen if inhaled or swallowed).

The C2A1 canister is chromium-free but must continue to be disposed of in accordance with State and Local Environmental Laws.

DO NOT throw away damaged or unusable canisters as ordinary trash.

DO turn in damaged or unusable canisters to your hazardous waste management office or Defense Reutilization and Marketing Office (DRMO).

If using the M50-series mask, there are twin M61 filters used with the M50/M51 facepiece assembly for CBRN protection, one positioned on each side of the mask. The M61 filter assembly bodies are constructed from injection-molded plastic. The M61 filters contain an activated carbon media and a high efficiency particulate filter. The M61 filters do not contain or generate hazardous materials (i.e., explosive, toxic, radioactive, carcinogenic or otherwise dangerous), but must continue to be disposed of in accordance withFederal, State, and Local environmental laws.

Instructional Lead-in

Publish and Process the Concrete Experience using questioning and guided discussion. Engage with thought-provoking and open-ended questions to spur discussion and generate

critical and creative thinking. Consider questions such as the below:

Question: What happened?

Question: Why did it go the way that it did?

Question: How do you feel about the responses or input or scenario?

Question: Why are these ideas of any significance to you?

Question: Why did it turn out the way that it did? Were there ways to improve the outcome?

This block of instruction will provide you with the basic knowledge and skills you will need to react to a CBRN hazard or attack.

As we proceed through this lesson, we will apply the Operational Environment (OE) variables as appropriate. Political, Military, Economic, Social, Information, Infrastructure, Physical Environment, and Time.

NOTE: If this is the first time that OE and its variables have been mentioned, the instructor will need to define OE and OE variables.

SECTION III. PRESENTATION

NOTE: Inform the students of the Enabling Learning Objective requirements.

A. ENABLING LEARNING OBJECTIVE

ACTION:	Maintain assigned protective mask
CONDITIONS:	In a training or classroom environment given your assigned protective mask, cleaning materials, the applicable operator technical manual (TM), and DA Form 5988-E or DA Form 2404.
STANDARDS:	Perform operator level Preventive Maintenance Checks and Services (PMCS) on assigned protective mask, recording all deficiencies with 100% accuracy, and without damaging equipment.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO A - LSA 1. Learning Step / Activity ELO A - LSA 1. Inspect your protective mask and accessories according to the PMCS tables located in the operator TM (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	15 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldier. The Soldier will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.
Each Soldier will perform the Before, During and After PMCS.

a. Check the canister/filters. (This procedure should be performed before and after combat or training missions).

(1) Check the canister against replacement criteria (see TM).

(2) Check the canister (especially around seams) for cracks, dents, or holes. Check the air intake to make sure it is not clogged with dirt.

(3) Check for damaged threads on the canister.

(4) Shake the canister and listen for signs of loose absorbent particles.

b. Check the eyelens/lenses, eyerings, and outserts. (This procedure should be performed before and after a combat or training mission).

(1) Remove the outserts from the facepiece.

(2) Check the eyelens/lenses for cracks, cuts, scratches, or stains that may affect vision, eyerings, and outserts.

(3) Check the eyerings for distortion or corrosion and inspect bonding around each eyelens.

(4) Check the rubber rings for tears, looseness, brittle spots, soft or sticky spots, or cracked rims.

c. Check the facepiece.

(1) Visually inspect the inside surfaces of the facepiece for dirt, mud, and greasy or oily substances.

(2) Check the facepiece for holes, tears, and splits by holding it in front of a light source. Look closely at the edges of the facepiece. Check for soft or sticky spots.

(3) Check the silicone rubber next to the eyelens/lenses to be sure it will not pull away from the facepiece. Check all facepiece housings to be sure the silicone is not pulling away.

d. Check the head harness.

(1) Put on the facepiece and check the head harness for loss of elasticity.

(2) Check for dirt. Check the straps for cuts, tears, missing parts, or deterioration such as mildewing or fraying.

e. Check the buckles.

(1) Look at the buckles for bends, cracks, or corrosion. Pull on the head harness straps and make sure the buckles hold the straps tight.

(2) Check for missing or broken buckles.

(3) Make sure the finish on buckle(s) is not chipped or scratched exposing bare metal.

f. Check the outlet valve disk and outlet valve cover.

(1) Grasp the tab at the bottom of the outlet valve cover and lift the bottom portion of the outlet valve cover. Check to see if the outlet valve disk is present and not curled or distorted. Rotate the outlet valve disk to make sure it is not sticking.

(2) Look at the outlet valve disk/inlet valve disk for nicks, tears, or rips. Wipe off any moisture from the outlet valve disk with a clean cloth. Smooth the outlet valve disk so that it lies flat on the outlet valve seat.

(3) Check the outlet valve seat for dirt.

(4) Check the outlet valve cover or outlet valve cover assembly for cuts, tears, or holes. Look at the inside of the outlet valve cover for dirt or moisture. Wipe off any dirt or moisture with a soft, clean, dry cloth.

g. Check the internal/external drink tubes.

(1) Ensure that the internal drink tube and external drink tube are present. Look for cracks or cuts in the internal/external drink tubes.

(2) Check the internal drink tube for proper alignment.

(3) Check the external drink tube for solid connections.

(4) Ensure that the internal or external drink tube is not clogged by connecting the M1 canteen cap (or water canteen cap if using M50/M51) and blowing air through the system.

(5) Ensure that the drinking system does not leak.

h. Check the airflow deflector.

(1) Ensure that the airflow deflector is securely mounted inside the facepiece and that both flanges on the airflow deflector are intact in the mounting holes of the facepiece.

(2) Check the mounting holes for cuts or tears.

i. Check the inlet valve.

(1) Check that the inlet valve disk and valve body are present and properly mounted on the post of the airflow deflector.

(2) Blow on the inlet valve disk to make sure it is not stuck to the valve body.

(3) Check the inlet valve disk for cuts, holes, or tears.

(4) Check the inlet valve disk for dirt.

j. Check the nosecup assembly.

(1) Ensure that the nosecup and nosecup valve sets are free of dirt. Check the nosecup for cracks, cuts, or holes.

(2) Ensure that the nosecup is not pulled away from the back of the front voicemitter housing. Gently try to pull the nosecup away from the front voicemitter housing to make sure the nosecup is held securely.

(3) Ensure that the nosecup valve disks are present. Rotate the nosecup valve disks to be sure they are not stuck and check that the nosecup valve disks are not curled or torn.

(4) Ensure that the nosecup valve disks are seated on the inside of the nosecup.

k. Check the voicemitters.

(1) Check the retaining rings on the front voicemitter and side voicemitter for corrosion, cracks, or nicks. Try to tighten the retaining rings by hand to check for looseness.

(2) Check the front voicemitter and side voicemitter for dents, cracks, or punctures. Make sure the four beads in the center of each voicemitter are facing outward.

l. Check the carrier.

(1) Empty the carrier and check for dirt, sharp edges, torn straps, or missing hardware. Make sure that there are no pencil or pen marks on the carrier, with the exception of corrections reflecting true size or model number description of the mask inside. No other markings are authorized.

(2) Check for mildew, solvents, or abrasive materials that may harm facepiece. Check the seams for broken stitches.

(3) Check the hook and pile fasteners for dirt. If dirty, clean them with a stiff-bristle brush. Make sure the hook and pile fasteners are secure on the flap.

m. Check the waterproof bag.

(1) Check the waterproof bag for cracks, tears, holes, and brittleness.

(2) Check that the rubber bands are not sticky, broken, or brittle.

n. Check the optical inserts (if issued). Inspect the frame and lenses of the optical inserts for breaks or disconnection from facepiece.

o. Reassemble your mask.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed conducting the proper PMCS steps for your assigned mask.

ELO A - LSA 2. Learning Step / Activity ELO A - LSA 2. Perform operator level "light" cleaning of your assigned protective mask IAW the operator TM (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: When you clean the facepiece assembly, use only potable water. See your CBRN NCO for supplies or assistance if needed.

a. Remove M50 or M51 mask from mask carrier.

b. If installed, remove Vision Correction Assembly.

c. Remove clear outsert from mask if attached .

d. Remove the sunlight and laser outserts, if issued, from the outsert pocket on the mask carrier.

e. Remove head harness.

f. Remove filters, inlet disk valves, self-sealing disk valves and air deflectors from filter

mounts.

g. If installed, remove the audio frequency amplifier adapter.

h. Remove outlet valve cover assembly and outlet disk valve.

i. If cleaning a M51 mask, remove the microphone, microphone adapter, communications lead and protective hood.

j. Remove greasy or oily substances from the mask by wiping with an outsert pouch.

k. Conduct the light cleaning.

(1) Dip an outsert pouch in warm soapy water and wring pouch almost dry. Clean outlet valve cover assembly, outlet disk valve, inlet disk valves, air deflectors, self-sealing disk valves, audio frequency amplifier adapter and head harness with the outsert pouch.

(2) Rinse by dipping the outsert pouch in warm clear water, wring pouch almost dry and wipe the mask and components with the clean water. Allow to air dry.

l. Dry facepiece, outlet disk valve cover assembly, three (3) inlet/outlet disk valves, two (2) self-sealing disk valves, and two (2) air deflectors with a dry outsert pouch and allow to air dry. Hang head harness to air dry.

m. Clean eyelens and outserts with dry outsert pouch.

n. If cleaning a M51 mask, clean the microphone, microphone adapter and communications lead with outsert pouch.

o. If installed, clean the audio frequency amplifier adapter with outsert pouch.

p. Clean the drinking system.

q. Once all parts are dry, begin the reassembly.

(1) Reinstall head harness.

(2) Reinstall inlet disk valves, self-sealing disk valves, and air deflectors on filter mounts.

NOTE: Ensure the air deflectors are aligned with the air deflector alignment posts and fit securely over the filter mount clamp rings.

(3) Wrap the external drink tube around the front module assembly, and replace the drink coupler in its receptacle.

(4) Reinstall the filters.

(5) Reinstall vision correction assembly, if used.

(6) If cleaning a M51 mask, reinstall the microphone, microphone adapter, communications lead, and protective hood.

(7) Reinstall the audio frequency amplifier adapter, if required.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed the process for a light cleaning to your assigned mask.

ELO A - LSA 3. Learning Step / Activity ELO A - LSA 3. Record uncorrected deficiencies on DA Form 5988-E or DA Form 2404 IAW DA Pam 750-8 (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Record deficiencies for the canister/filters. (This procedure should be performed before and after combat or training missions).

(1) Check the canister against replacement criteria (see TM).

(2) If the canister is cracked, dented on a seam, has holes, or if the air intake is clogged with dirt, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the threads on the canister are damaged, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E. or DA Form 5988E.

(4) If loose particles rattle or dust falls out when the canister is shaken, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

b. Record deficiencies for the eyelens/lenses, eyerings, and outserts. (This procedure should be performed before and after a combat or training mission).

(1) If the eyelens/lenses are cracked, cut, scratched, or discolored enough to affect vision, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the eyerings are bent, corroded, bonding around eyelens is not secure or appears to be coming loose, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the rubber rings are torn, cracked, loose, or sticky, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

c. Record deficiencies for the facepiece.

(1) If the facepiece is dirty, clean with warm soapy water, rinse and dry.

(2) If the silicone rubber has holes, tears, nicks, splits, or soft or sticky spots which may allow air to enter the facepiece,record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the eyelens/lenses or housings pull away from the facepiece, record equipment as NOT READY/AVAILABLEon your DA Form 2404 or DA Form 5988E.

d. Record deficiencies for the head harness.

(1) If the head harness will not hold the facepiece firmly against the face, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the head harness or skull cap is cut, torn, frayed, has missing parts, or has deteriorated, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

e. Record deficiencies for the buckles.

(1) If the buckles are bent, cracked, corroded, or will not hold straps, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the buckles are missing or broken, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the bare metal is exposed and/or there are signs of rubber deterioration, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

f. Record deficiencies for the outlet valve disk and outlet valve cover.

(1) If the outlet valve disk is missing, distorted, or sticky record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the outlet valve disk is nicked, torn, ripped, cannot be cleaned, or will not seat properly, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the outlet valve is dirty and cannot be clean, if it is nicked or cracked, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(4) If the outlet valve cover is cut, torn, has holes, or outlet valve cover assembly cover is broken, cracked or will not seat firmly over outlet valve, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

g. Record deficiencies for the internal/external drink tubes.

(1) If the internal or external drink tube is missing, cracked, or cut, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the drink tube is misaligned, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the connections are loose, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(4)If the internal or external drink tube is clogged, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(5) If the drinking system leaks, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

h. Record deficiencies for the airflow deflector.

(1) If the airflow deflector is not mounted properly in the facepiece, if the flanges are broken or will not mount in the facepiece or show signs of deterioration, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the mounting holes in facepiece are cut or torn, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

i. Record deficiencies for the inlet valve.

(1) If the inlet valve disk or valve body is missing or is not mounted properly on the post of the airflow deflector, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the inlet valve is stuck to valve body, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the inlet valve is cut or torn, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(4) If the inlet valve disk is dirty, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

j. Record deficiencies for the nosecup assembly.

(1) If the nosecup is dirty, cracked, cut, or has holes in it; or if the nosecup valve seats are dirty, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the nosecup is pulled away from the front voicemitter housing, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If the nosecup valve disks are missing, curled, torn, or stuck to nosecup valve seat, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(4) If the nosecup valve disks are seated on the outside of the nosecup, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

k. Record deficiencies for the voicemitters.

(1) If the retaining rings are corroded, cracked, nicked, or loose, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the front voicemitter and/or side voicemitter is dented, cracked, punctured, or installed backward, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

l. Record deficiencies for the carrier.

(1) If the carrier is dirty, straps are torn or hardware is missing, or if there are sharp edges inside the carrier that could damage the mask, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If mildew or abrasive materials are present, if the carrier is soaked with solvent, or if the seams are broken or stitching is loose, causing a hole in the seam, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(3) If dirty, clean them with a stiff-bristle brush. Make sure the hook and pile fasteners are secure on the flap. If the hook and pile fasteners are loose or clogged with dirt, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

m. Record deficiencies for the waterproof bag.

(1) If the waterproof bag is torn, has holes, or is brittle, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

(2) If the rubber bands are sticky, broken, or brittle, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

n. Record deficiencies for the optical inserts (if issued). If frame or lenses are broken, or inset is disconnected from facepiece, record equipment as NOT READY/AVAILABLE on your DA Form 2404 or DA Form 5988E.

NOTE: If the frame or lenses are broken, replace; if disconnected, reinstall.

o. Record deficiencies for your mask.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we discussed the process of recording deficiencies on you mask with a DA Form 5988-E or a DA Form 2404.

ELO A - LSA 4. Learning Step / Activity ELO A - LSA 4. Provide the completed DA Form 5988-E or DA Form 2404 to your supervisor (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Submit paperwork in accordance with local SOP.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning

Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.

a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.

b. Ask questions similar to the following:

Question 1:
What does this mean to me?

Question 2:
How will you use the knowledge gained from this lesson in future assignments.

Question 3:
What has surprised you about the content?

Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?

Question 5:
What do you think is the most important part?

Answer: There are no right answers as such for these questions.

Review Summary:

During this LSA, we discussed turning in your maintenance findings.

ELO A - LSA 5. Learning Step / Activity ELO A - LSA 5. Inspect your protective mask according to the PMCS tables from the operator TM (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	20 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Foreign National Soldiers are not allowed to perform this Practical Exercise.

Ensure Soldiers have a enough room between one another, and the equipment to execute the practical exercise.

During this Practical Exercise, you will demonstrate maintenance procedures. Soldiers must, without damaging the mask, perform PMCS and accurately record all deficencies on DA Form 2404 (or DA Form 5988E). Make sure that the mask is clean, dry, and stowed properly.

Instructor Resources:
Assigned protective mask with hood and carrier
Container of warm, soapy water
Container of warm water
Container of clear water
Clean rags
Cheesecloth
Small cleaning brush
Isopropyl alcohol
Optical lense cleaning compound
Replacement canisters/filters
DA Form 2404/DA Form 5988E

Student Resources:
Assigned protective mask with hood and carrier
Notepad
Pen/pencil

a. Check canister/filters.

(1) Check canister/filters against replacement criteria.

(2) Check canister/filters (especially around seams) for cracks, dents, or holes. Check air intake to make sure it is not clogged with dirt.

(3) Check for damaged threads on canister.

(4) Shake canister/filters and listen for signs of loose absorbent particles.

b. Check eye lenses, eye rings, and outserts.

(1) Remove outserts from facepiece. Check eyelenses for cracks, cuts, scratches, or discoloration that affect vision.

(2) Check eyerings for distortion or corrosion.

(3) Check both sets of outsert lenses for cracks, chips, or discoloration that affects your vision. Check rubber rings for tears, looseness, brittle spots, soft or sticky spots, or cracked rims.

c. Check hood.

(1) Remove hood from facepiece.

(2) Examine hood (NOT against a light source) for the following defects:

(a) Cuts, holes, or tears.

(b) Sticky or gummy areas.

(c) Peeled or worn coating.

(d) Straps, cord, or hardware missing, frayed, or torn.

(e) Loose stitching on hook and pile fasteners or dirt in hook and pile fasteners.

d. Check facepiece.

(1) Visually inspect inside surfaces of facepiece for dirt, mud, and greasy or oily substances.

(2) Check facepiece for holes, tears, and splits by holding in front of a light source. Look closely at edges of facepiece. Check for soft or sticky spots.

(3) Check silicone rubber next to eyelenses to be sure eyelenses will not pull away from facepiece. Also check all facepiece housings to be sure silicone is not pulling away.

e. Check head harness.

(1) Put on facepiece and check head harness for loss of elasticity.

(2) Check for dirt. Check straps for cuts, tears, missing parts, or deterioration such as mildewing or fraying.

f. Check buckles.

(1) Look at buckles for bends, cracks, or corrosion. Pull on head harness straps and

make sure buckles hold straps tight.

(2) Check for missing or broken buckles.

(3) Make sure finish on buckle(s) is not chipped or scratched exposing bare metal.

g. Check outlet valve disk and outlet valve cover.

(1) Grasp tab at bottom of outlet valve cover and lift bottom portion of outlet valve cover. Check to see if outlet valve disk is present and not curled or distorted. Rotate outlet valve disk to make sure it is not sticking.

(2) Look at outlet valve disk for nicks, tears, or rips. Wipe off any moisture from outlet valve disk with clean cheesecloth. Smooth outlet valve disk so that it lies flat on outlet valve seat.

(3) Check outlet valve seat for dirt.

(4) Check outlet valve cover for cuts, tears, or holes. Look at inside of outlet valve cover for dirt or moisture. Wipe off any dirt or moisture with a soft, clean, dry cloth.

h. Check internal/external drink tubes.

(1) Check that the internal drink tube and external drink tube are present. Look for cracks or cuts in internal/external drink tubes.

(2) Check internal drink tube for proper alignment.

(3) Check external drink tube for solid connections.

(4) Check that internal or external drink tube is not clogged by connecting M1 canteen cap/ CamelBak and blowing air through system.

(5) Check that drinking system does not leak.

i. Check airflow deflector.

(1) Check that airflow deflector is securely mounted inside facepiece, and that both flanges on the airflow deflector are in the mounting holes of the facepiece and not broken.

(2) Check mounting holes for cuts or tears.

j. Check inlet valve.

(1) Check that inlet valve disk and valve body are present and properly mounted on post of airflow deflector.

(2) Blow on inlet valve disk to make sure it is not stuck to valve body.

(3) Check inlet valve disk for cuts, holes, or tears.

(4) Check for dirty inlet valve disk.

k. Check nosecup assembly.

(1) Check that nosecup and nosecup valve sets are free of dirt. Check nosecup for cracks, cuts, or holes.

(2) Check that nosecup is not pulled away from back of front voicemitter housing. Gently try to pull nosecup away from front voicemitter housing to make sure nosecup is held securely.

(3) Check that nosecup valve disks are present. Rotate nosecup valve disks to be sure they are not stuck; check that nosecup valve disks are not curled or torn.

(4) Check that nosecup valve disks are seated on the inside of nosecup.

l. Check voicemitters.

(1) Check retaining rings on front voicemitter and side voicemitter for corrosion, cracks, or nicks. Try to tighten retaining rings by hand to check for looseness.

(2) Check front voicemitter and side voicemitter for dents, cracks, or punctures. Make sure the four beads in the center of each voicemitter are facing outward.

m. Check carrier.

(1) Empty carrier and check for dirt, sharp edges, torn straps, or missing hardware. Make sure there are no pencil or pen marks on the carrier, with the exception of changing the size or model number to reflect true description of the mask inside. No other markings are authorized.

(2) Check for mildew, solvents, or abrasive materials which may harm facepiece. Check seams for broken stitches.

(3) Check hook and pile fasteners for dirt. If dirty, clean with a stiff-bristle brush. Make sure hook and pile fasteners are secure on flap.

n. Check accessories.

(1) Check waterproof bag for cracks, tears, holes, and brittleness.

(2) Check that rubber bands are not sticky, broken, or brittle.

(3) Check that operator cards are present, text is not discolored, and binding prevents cards from being turned or bound together (M50/M51).

o. Check optical inserts (if issued). Inspect optical inserts for broken lens, frame, or disconnection from facepiece.

p. Reassemble your mask.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we performed maintenance on your assigned mask.

CHECK ON LEARNING (ELO A): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider using the below for questions.

Question: What are the forms that can be used for recording deficencies?

Answer: DA 2404 or DA 5988-E.

REFERENCE: DA PAM 750-8.

REVIEW SUMMARY(ELO A): During this ELO, we covered the inspection and cleaning of your assigned mask as well as recording and submitting your maintenance findings.

B. ENABLING LEARNING OBJECTIVE

ACTION:	Perform Protection Steps From Chemical And Biological (CB) Contamination Using Your Assigned Protective Mask
CONDITIONS:	In a classroom or training area, you are given your assigned protective mask and a mask carrier.
STANDARDS:	Protect yourself from CB agent contamination with your assigned protective mask within 9 seconds then giving the alarm with 100% accuracy.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: Contact lenses (soft or hard) may not be worn with CB Masks. Inadequate oxygen supply to the corneal surface, exposure to dust, dirt, and smoke or gas may cause serious vision loss or eye damage. Soldiers requiring vision correction are provided optical inserts for their protective masks by their unit medical facility.

NOTE: Filters must be installed prior to donning mask. Filters must be changed out one at a time. The warfighter will be unable to breathe if both filters are removed from his/ her mask. Lack of oxygen for more than 30 seconds could lead to injury or death.

NOTE: Before stowing the mask, ensure that the cheek straps are not positioned below the M61 filters. Cheek straps positioned below the filters may stretch the mask causing improper chin placement; may induce buckling in the brow region causing improper seal; or may cause the cheek straps to catch underneath the filters delaying donning times resulting in illness or death.

NOTE: Soldier must complete steps 1 through 3, in sequence, within 9 seconds.

a. Stop Breathing and close eyes.

b. Remove helmet, put helmet between legs above knees or hold rifle between legs and place helmet on the muzzle.

NOTE: If helmet falls continue to mask.

c. Take off glasses and place in helmet, if applicable.

d. Open the mask carrier with left hand.

e. Grasp the mask assembly with right hand, and remove it from the carrier.

f. Place chin in the chin pocket, and press the face piece tight against face.

g. Hold mask assembly tightly against face.

h. Grasp the harness tab, pull overhead and down the head harness as far as possible.

NOTE: Ensuring the head harness is centered on the crown of the head and the temple straps are approximately parallel to the ground.

i. Grasp the loose end of the cheek straps, one at a time, and pull until strap feels tight.

NOTE: Both straps should be approximately equal length when complete. Also the temple and forehead straps have already been adjusted during fitting do not tighten.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we covered the steps to don your assigned protective mask.

ELO B - LSA 2. Learning Step / Activity ELO B - LSA 2. Clear mask assembly (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

a. Seal the outlet disk valve by placing one hand over the outlet valve cover assembly.

b. Blow out hard to ensure that any contaminated air is forced out around the edges of the face piece.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed clearning the protective mask.

ELO B - LSA 3. Learning Step / Activity ELO B - LSA 3. Seal mask assembly (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

a. Cover both filter inlet ports with the palms of your hands and breathe in.

b. Ensure mask assembly collapse against the face.

c. Resume breathing.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed sealing the mask assembly.

ELO B - LSA 4. Learning Step / Activity ELO B - LSA 4. Give the alarm (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

a. Shout, "Gas, Gas, Gas."

b. Give the appropriate hand-and-arm signal per unit SOP.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed giving the alarm.

ELO B - LSA 5. Learning Step / Activity ELO B - LSA 5. Close mask carrier (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: It is important to close your mask carrier to mitigate any unnecessary contamination.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed closing the mask carrier.

ELO B - LSA 6. Learning Step / Activity ELO B - LSA 6. Don the mask hood, if applicable (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: the Soldier is using the mask in conjunction with the joint-service, lightweight integrated suit technology (JSLIST), he/she skips this step (the mask lacks a hood because it is built in on the JSLIST).Be careful when pulling on the hood because it could snag and tear on the buckles of the head harness. Be careful not to break face piece seal when pulling protective hood over your head.

a. Place hands up under the protective hood, stretch elasticized portion and raise protective hood up and over filters.

b. Carefully pull excess protective hood material over head, neck and shoulders.

c. Grasp underarm straps.

d. Bring the male end of each underarm strap and fasten to female end.

e. Tighten underarm straps.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: In this LSA, we discussed how to don the hood.

ELO B - LSA 7. Learning Step / Activity ELO B - LSA 7. Put on the helmet and secure gear (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: For combat vehicle crewman (CVC) helmet, perform the following steps:

1. Disconnect the boom microphone from the helmet,

2. Connect the mask microphone to the receptacle in the helmet,

3. Grasp the helmet next to the ear cups with the hand, and spread the helmet as far as possible,

4. Place the helmet overhead, tilting the helmet forward slightly so that the first contact when putting it on is with the forehead surface of the mask and

5. Rotate the helmet back and down over the head until it is seated in position. Make sure you don’t break seal of the mask.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: In this LSA, we discussed putting your helmet and personal equipment back on.

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: After donning your protective gear continue with your mission.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.

a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.

b. Ask questions similar to the following:

Question 1:
What does this mean to me?

Question 2:
How will you use the knowledge gained from this lesson in future assignments.

Question 3:
What has surprised you about the content?

Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?

Question 5:
What do you think is the most important part?

Answer: There are no right answers as such for these questions.

Review Summary: In this LSA, we discussed continuing the mission.

ELO B - LSA 9. Learning Step / Activity ELO B - LSA 9. Perform masking and unmasking procedures using your assigned protective mask (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	15 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Do not wear contact lenses when performing this task.

NOTE: Ensure Soldiers have a enough room between one another, and the equipment to execute the practical exercise.

During this Practical Exercise, you will demonstrate masking procedures. Soldiers must don, clear, seal their assigned protective mask within 9 seconds. They will then properly conduct unmasking procedures.

Instructor Resources:
M50/M51 Joint Service General Purpose Mask

Student Resources:
Assigned mask
IBA/IOTV
Army Combat Helmet

a. Stop breathing, and close your eyes.

b. Remove your helmet.

(1) Put your helmet between your legs (above your knees) or hold your rifle between your legs and place your helmet on the muzzle. If you drop your helmet, continue to mask.

(2) Remove your helmet and place it in a convenient location. Avoid placing it on a contaminated surface, if possible.

c. Take off your glasses, if worn.

d. Open the mask carrier with one hand.

e. Grasp the mask assembly with your other hand, and remove it from the carrier.

f. Put your chin in the chin pocket, and press the face piece snugly against your face.

g. Grasp the tab, and pull the head harness over your head. Ensure that your ears are between the temple straps and the cheek straps. Ensure that the head harness is pulled far enough over your head so that the forehead straps are tight.

h. Use one hand to tighten the cheek straps, one at a time, while holding the head pad centered on the back of your head with the other hand. Ensure that the straps lay flat against your head.

i. Seal the outlet valve by pushing in on the center of the outlet valve cover with one hand.

j. Blow out hard to ensure that any contaminated air is forced out around the edges of the face piece.

k. Cover the inlet port of the filter canister with the palm of your hand, and inhale.

l. Ensure that the face piece collapses against your face and remains so while you hold your breath, which indicates that the mask is airtight.

m. Remove any hair, clothing, or other matter between your face and the mask if the face piece does not collapse to your face.

n. Notify your chemical, biological, radiological and nuclear (CBRN) noncommissioned officer (NCO) if the mask still does not collapse.

o. Resume breathing.

p. Put on your helmet. If you have the combat vehicle crewman (CVC) helmet, perform the following steps:

(1) Disconnect the boom microphone from the helmet.

(2) Connect the mask microphone to the receptacle in the helmet.

(3) Grasp the helmet next to the ear cups with your hand, and spread the helmet as far as possible.

(4) Place the helmet over your head, tilting the helmet forward slightly so that the first contact when putting it on is with the forehead surface of the mask.

(5) Rotate the helmet back and down over your head until it is seated in position.

q. Close your mask carrier.

r. Continue your mission.

s. Doff the mask for storage.

(1) Remove helmet.

(2) If equipped, disconnect detachable microphone cable connection from CVC helmet and remove helmet.

(3) Using both hands, grasp the elastic gathering around neck at the back of the quick doff hood, and raise it above your head and pull to front of mask assembly.

(4) Loosen cheek straps.

(5) Place one hand on the front voicemitter to hold mask assembly on face and with other hand grasp head harness tab and pull the head harness over the front of the mask assembly and remove mask assembly.

(6) Replace helmet.

(7) Store the mask in the carrier.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we performed donning and doffing of the protective mask.

CHECK ON LEARNING (ELO B): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below for use.

Question: What is the first step of masking procedures?

Answer: Hold your breath and close your eyes.

REFERENCE: ATP 3-11.32

REVIEW SUMMARY(ELO B): During this ELO, we discussed the procedures and process for protecting yourself with your assigned mask.

C. ENABLING LEARNING OBJECTIVE

ACTION:	Conduct Personal Hydration While Wearing Your Assigned Protective Mask
CONDITIONS:	In a training or classroom environment, simulating a Soldier having reacted to a contaminated environment. You are wearing your assigned protective mask and the Multipurpose Personal Hydration System (MPHS) filled with water and the appropriate mask adapter (Type A or Type M) is stored in your mask carrier. Given either Reactive Skin Decontamination Lotion (RSDL) or a M334 Decontamination Kit, Individual Equipment.
STANDARDS:	Conduct Personal Hydration while wearing your assigned protective mask by following all steps in sequence with 100% accuracy and without being becoming a casualty.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO C - LSA 1. Learning Step / Activity ELO C - LSA 1. Drink water while wearing a M40-Series Protective Mask (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: This LSA is performed by protective mask series. DO NOT perform the entire task only the part for you assigned protective mask.

NOTE: The only authorized drinking system in a contaminated environment is the MPHS. The 1-qt, 2-qt, and the steel cold weather canteens are no longer authorized for use in a CBRN environment. The MPHS may be used for up to 30 days once it's removed from its packaging and will protect contents for up to six hours in a CBRN environment. In a high threat situation Soldiers should keep the MPHS full of water. Refilling it in a toxic environment risks exposure tocontamination.

NOTE: If your MPHS begins leaking while operating in a contaminated environment, DO NOT USE! Never use mask adapters that have been used for training in a contaminated environment. When issued a MPHS, stow or discard mask adapters that have been used for training. Do not connect the quick disconnect coupling (QDC) to the MPHS until you are certain that all surfaces are free of contamination.

NOTE: To prevent possible leakage around mask assembly, DO NOT pull on external drink tube when removing connection to the MPHS. Care should be taken not to break the mask seal while turning the internal drink tube lever on the front module assembly for the M50-Series Mask and while pressing in on the outlet valve cover for the M40-

Series Mask. Always turn the water valve to the OFF position when not drinking. Failure to do so may cause water to flood the mask."

a. Turn the water valve lever to the OFF position by rotating it forward (or up) and toward the bite valve.

b. Depress the link button on the link connector and remove bite valve. Store the bite valve in your mask carrier.

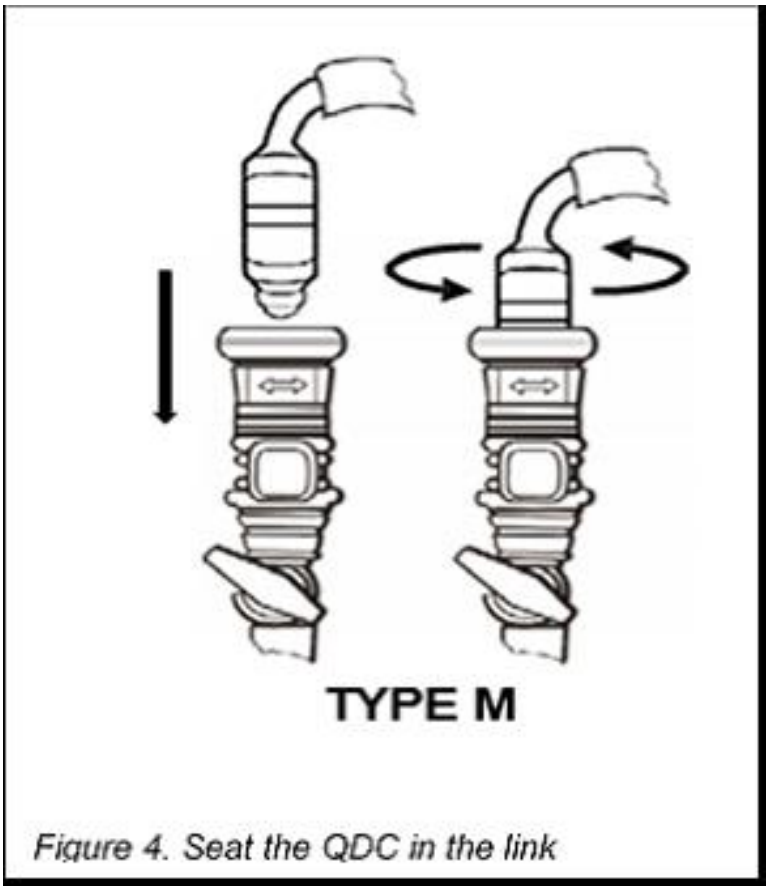

Figure 4. Seat the QDC in the link

M40 Adapter
Type M Adapter

c. Install the Type M mask adapter into the link connector by pressing it into the link connector until it clicks.

(1) Check the mask adapter and link connector for contamination using M8 paper (before clicking them together).

(2) Decontaminate using the RSDL or M334, if contaminated, then click together.

d. Steady the mask with one hand and remove the drink coupler from its retainer on the outlet valve cover.

e. Firmly push the drink coupler into the Protective Mask Adapter and rotate ½ turn to seat the connection.

NOTE: DO NOT drink if you do not feel resistance. Some resistance while drinking is normal, if resistance is not felt, drinking system may be leaking. Notify CBRN NCO as soon as mission allows. If this occurs while using in a suspected contaminated environment, a replacement must be obtained.

f. Press in on the front of the outlet valve cover until the internal drink tube can be grasped between your teeth.

g. Open the link connector by rotating the water valve lever backward (or down) to the ON position.

h. To drink, suck in on the internal drink tube (like when using a straw). Water flows only when you draw on the internal drink tube with the valve in the on position.

i. When finished, rotate the lever to the OFF position.

j. Keep the drinking system connected to the mask and continue the mission.

NOTE: If the drinking system becomes disconnected, check for contamination, decontaminate as necessary (using either the RSDL or M334), and then reconnect.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: In this LSA, we discussed personal hydration while wearing your protective mask.

ELO C - LSA 2. Learning Step / Activity ELO C - LSA 2. Drink water while wearing a M50-Series or Joint Service Aircrew Mask (JSAM) (MPU 5 or 6) Protective Mask (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: This LSA is performed by protective mask series. DO NOT perform the entire task only the part for you assigned protective mask.

NOTE: The only authorized drinking system in a contaminated environment is the Multipurpose Personal Hydration System (MPHS). The 1-qt, 2-qt, and the steel cold weather canteens are no longer authorized for use in a CBRN environment. The MPHS may be used for up to 30 days once it's removed from its packaging and will protect contents for up to six hours in a CBRN environment. In a high threat situation Soldiers should keep the MPHS full of water. Refilling it in a toxic environment risks exposure tocontamination.

NOTE: If your MPHS begins leaking while operating in a contaminated environment, DO NOT USE! Never use mask adapters that have been used for training in a contaminated environment. When issued a MPHS, stow or discard mask adapters that have been used for training. Do not connect the quick disconnect coupling (QDC) to the MPHS until you are certain that all surfaces are free of contamination.

NOTE: To prevent possible leakage around mask assembly, DO NOT pull on external drink tube when removing connection to the MPHS. Care should be taken not to break the mask seal while turning the internal drink tube lever on the front module assembly for the M50-Series Mask and while pressing in on the outlet valve cover for the M40-Series Mask. Always turn the water valve to the OFF position when not drinking. Failure to do so may cause water to flood the mask."

a. Turn the water valve lever to the OFF position by rotating it forward (or up) and toward the bite valve or mask adapter.

b. Depress the link button on the link connector and remove bite valve. Store the bite valve in your mask carrier.

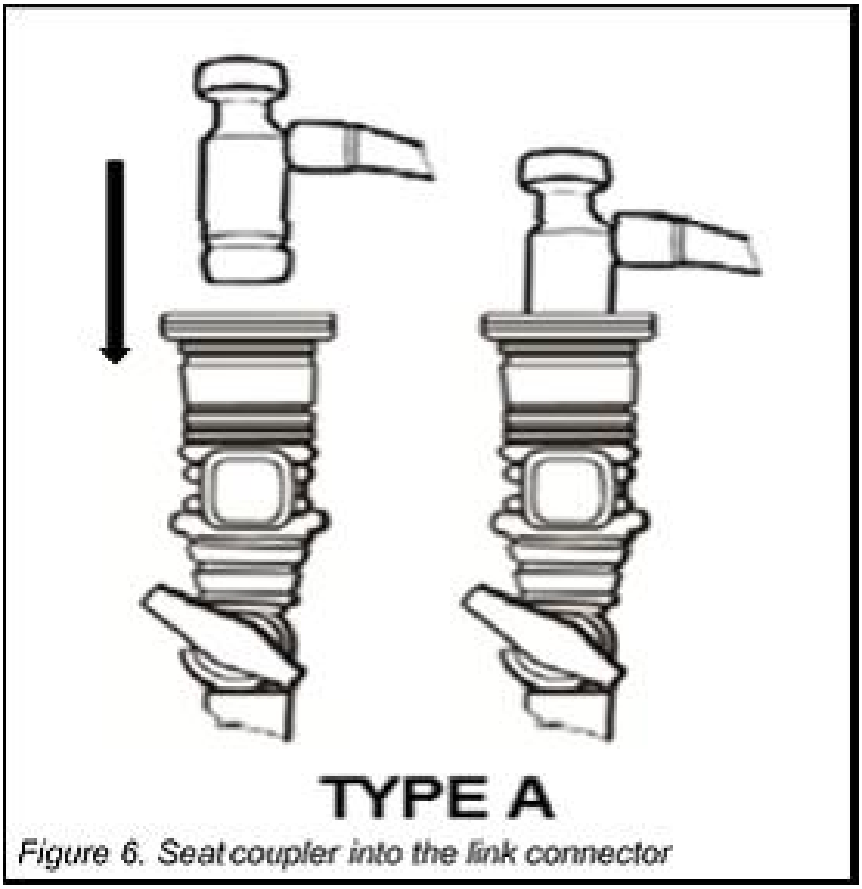

Figure 6. Seat coupler into the link connector

M50 Adapter
Type A Adapter

c. Install the Type A mask adapter into the link connector by pressing it into the link connector until it clicks.

(1) Check the mask adapter and link connector for contamination using M8 paper (before clicking them together).

(2) Decontaminate using the RSDL or M334, if contaminated, then click together.

d. Steady mask with one hand and pull drink coupler out of the coupler receptacle below the front module main body.

e. Firmly push the protective mask drink coupler into the Protective Mask Adapter until it clicks.

NOTE: DO NOT drink if you do not feel resistance. Some resistance while drinking is normal, if resistance is not felt, drinking system may be leaking. Notify CBRN NCO as soon as mission allows. If this occurs while using in a suspected contaminated environment, a replacement must be obtained.

f. Open the link connector by rotating the water valve lever backward (or down) to the ON position.

g. Turn drink tube lever on the front module assembly upward, until it stops and is fully opened, positioning the internal drink tube to the front of mouth, then grasp the internal drink tube between your lips.

h. To drink, suck in on the internal drink tube (like using a straw). Water flows only when you draw on the internal drink tube with the valve in the on position.

i. When finished, rotate the water lever to the OFF position, then rotate the drink tube lever on front module assembly downward to return (stow) the internal drink tube back to its original position.

j. Keep the drinking system connected to the mask and continue the mission.

NOTE: If the drinking system becomes disconnected, check for contamination, decontaminate as necessary (using either the RSDL or M334), and then reconnect.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.

a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.

b. Ask questions similar to the following:

Question 1:
What does this mean to me?

Question 2:
How will you use the knowledge gained from this lesson in future assignments.

Question 3:
What has surprised you about the content?

Question 4:

What do you anticipate to be the most difficult aspect of what you learned today?

Question 5:
What do you think is the most important part?

Answer: There are no right answers as such for these questions.

Review Summary:

During this LSA, we discussed hydrating while wearing your assigned mask.

ELO C - LSA 3. Learning Step / Activity ELO C - LSA 3. Drink water while wearing a M50-Series Protective Mask (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

During this Practical Exercise, you will demonstrate the procedures to drink water while masked. will use the correct adapter to connect their MPHS to their assigned mask and then successfully move water through the drinking tube to hydrate themselves.

Instructor Resources:
M50/M51 Joint Service General Purpose Mask
MPHS filled with water

Student Resources:
M50/M51 Joint Service General Purpose Mask
MPHS filled with water

NOTE: DO NOT drink if you do not feel resistance. Some resistance while drinking is normal, if resistance is not felt, drinking system may be leaking. Notify CBRN NCO as soon as mission allows. If this occurs while using in a suspected contaminated environment, a replacement must be obtained. If water is leaking from the drinking tube, disconnect the adaper to avoid the mask filling with water.

a. Turn the water valve lever to the OFF position by rotating it forward (or up) and toward the bite valve or mask adapter.

b. Depress the link button on the link connector and remove bite valve. Store the bite valve in your mask carrier.

c. Install the Type A mask adapter into the link connector by pressing it into the link connector until it clicks.

(1) Check the mask adapter and link connector for contamination using M8 paper (before clicking them together).

(2) Decontaminate using the RSDL or M334, if contaminated, then click together.

d. Steady mask with one hand and pull drink coupler out of the coupler receptacle below the front module main body.

e. Firmly push the protective mask drink coupler into the Protective Mask Adapter until it clicks.

f. Open the link connector by rotating the water valve lever backward (or down) to the ON position.

g. Turn drink tube lever on the front module assembly upward, until it stops and is fully opened, positioning the internal drink tube to the front of mouth, then grasp the internal drink tube between your lips.

h. To drink, suck in on the internal drink tube (like using a straw). Water flows only when you draw on the internal drink tube with the valve in the on position.

i. When finished, rotate the water lever to the OFF position, then rotate the drink tube lever on front module assembly downward to return (stow) the internal drink tube back to its original position.

j. Keep the drinking system connected to the mask and continue the mission.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we practiced drinking water while wearing our assigned protective mask.

CHECK ON LEARNING (ELO C): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below-listed questions.

Question: What is the approved hydration system for use with your protective mask?

Answer: The Multipurpose Personal Hydration System (MPHS).

REFERENCE: ATP 3-11.32

Question: What adapter is used for the M40 and M50 series masks?

Answer: M40 = M-adapter, M50 = A-adapter.

REFERENCE: ATP 3-11.32

REVIEW SUMMARY(ELO C): During this ELO, we discussed the methods and tools to remain hydrated while wearing your assigned protective mask.

D. ENABLING LEARNING OBJECTIVE

ACTION:	Perform Protection for Yourself From CBRN Injury with MOPP Level 4
CONDITIONS:	In a simulated contaminated environment, given the Joint-Service, Lightweight, Integrated Suit Technology (JSLIST), your assigned protective mask, CBRN over boots, and CBRN protective gloves. You are in MOPP level 0.
STANDARDS:	Protect yourself from CBRN injury by assuming MOPP level 1 thru 4 in sequence with 100% accuracy and within eight minutes.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO D - LSA 1. Learning Step / Activity ELO D - LSA 1. Assume MOPP Level 1 by donning the JSLIST over garments (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: When directed to MOPP 1, Soldiers immediately don the JSLIST overgarment (coat and trousers). In hot weather, the overgarment jacket can be left open and the overgarment can be worn directly over underwear. Other IPE making up the individual MOPP gear (e.g., footwear covers, protective helmet cover, mask, and gloves) are readily available or carried. Personnel carry M8 and M9 paper, nerve agent antidotes, and decontamination kits or keep them at hand. Personnel must remove contact

lenses and wear protective eyeglasses.

NOTE: There are seven MOPP Levels:

Mask Only -as stated, mask only

MOPP Ready -personnel carry their protective masks along with the loadcarrying equipment (LCE}. Individual MOPP gear is labeled and stored no farther back than a logistic site, like a brigade support area (BSA), and is ready to be brought forward when needed (within 2 hours)

MOPP 0 -personnel carry MOPP gear and Protective Mask in carrier.

MOPP 1-4

a. Don the JSLIST over garment trousers.

(1) Extend your toes downward, put one leg into the trousers, and pull them up. Repeat the procedure for your other leg.

(2) Close the slide fastener, and fasten the two fly opening snaps.

(3) Pull the suspenders over your shoulders, and fasten the snap couplers.

(4) Adjust the suspenders to ensure that the trousers fit comfortably.

NOTE: The trouser length can be adjusted by raising or lowering the suspenders.

(5) Adjust the waistband hook-and-pile fasteners for a snug fit.

c. Don the JSLIST over garment coat.

(1) Don the coat, and close the slide fastener up as far as your chest

(2) Secure the front closure hook-and-pile fasteners up as far as your chest.

(3) Pull the bottom of the coat down over the trousers.

(4) Pull the loop out and away from the over garment coat, and bring it forward between the legs.

(5) Pull on the loop until the bottom of the coat fits snugly over the trousers.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we covered MOPP level 1.

ELO D - LSA 2. Learning Step / Activity ELO D - LSA 2. Assume MOPP Level 2 by donning the over boots (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

a. Don the over boots over the combat boots.

b. Adjust and secure the strap-and-buckle fasteners.

c. Pull the trouser legs over the over boots.

d. Secure the hook-and-pile fasteners on each ankle to fit snugly around the boot.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed assuming MOPP level 2.

ELO D - LSA 3. Learning Step / Activity ELO D - LSA 3. Assume MOPP Level 3 by donning chemical-protective mask IAW task 031-COM-1004 (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant

Instructor will ensure that Soldiers perform each step correctly.

NOTE: The hood provided with the chemical protective mask is not required when using the JSLIST (JSLIST hood provides the required head and neck protection)

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we discussed assuming MOPP level 3.

ELO D - LSA 4. Learning Step / Activity ELO D - LSA 4. Assume MOPP Level 4. Don the gloves (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

NOTE: MOPP Level 4 should be assumed within 8 minutes.

a. Push the sleeve cuffs up your arm.

b. Put on the glove liners (inserts).

c. Put on the gloves (black rubber).

d. Pull the sleeve cuffs over the top of the gloves.

e. Secure the MOPP gear by zipping all zippers and closing all closures.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.

a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.

b. Ask questions similar to the following:

Question 1:
What does this mean to me?

Question 2:
How will you use the knowledge gained from this lesson in future assignments.

Question 3:
What has surprised you about the content?

Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?

Question 5:
What do you think is the most important part?

Answer: There are no right answers as such for these questions.

Review Summary:

In this LSA, we discussed assuming MOPP level 4.

ELO D - LSA 5. Learning Step / Activity ELO D - LSA 5. Assume MOPP 4 (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	40 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Have Soldiers remove and store contact lenses before conducting this practical exercise.

During this Practical Exercise, you will demonstrate the procedures to assume MOPP 4. Students will be required to demonstrate the steps to: Assume MOPP Level 1, Assume MOPP Level 2 by donning the over boots, Don the chemical-protective mask to assume MOPP Level 3, and Assume MOPP Level 4 within 8 minutes.

Instructor Resources:
M50/M51 Joint Service General Purpose Mask
Gloves
JSLIST
Boots

Student Resources:
M50/M51 Joint Service General Purpose Mask
Gloves
JSLIST
Boots

a. Assume MOPP Level 1.

NOTE: Complete Steps in sequence within eight minutes.

(1) Don the JSLIST over garment trousers.

(a) Extend your toes downward, put one leg into the trousers, and pull them up. Repeat the procedure for your other leg.

(b) Close the slide fastener, and fasten the two fly opening snaps.

(c) Pull the suspenders over your shoulders, and fasten the snap couplers.

(d) Adjust the suspenders to ensure that the trousers fit comfortably.

NOTE: The trouser length can be adjusted by raising or lowering the suspenders.

(e) Adjust the waistband hook-and-pile fasteners for a snug fit.

(2) Don the JSLIST over garment coat.

(a) Don the coat, and close the slide fastener up as far as your chest

(b) Secure the front closure hook-and-pile fasteners up as far as your chest.

(c) Pull the bottom of the coat down over the trousers.

(d) Pull the loop out and away from the over garment coat, and bring it forward between the legs.

(e) Pull on the loop until the bottom of the coat fits snugly over the trousers.

b. Assume MOPP Level 2 by donning the over boots.

(1) Don the over boots over the combat boots.

(2) Adjust and secure the strap-and-buckle fasteners.

(3) Pull the trouser legs over the over boots.

(4) Secure the hook-and-pile fasteners on each ankle to fit snugly around the boot.

c. Don the chemical-protective mask to assume MOPP Level 3.

NOTE: The hood provided with the chemical protective mask is not required when using the JSLIST (JSLIST hood provides the required head and neck protection)

d. Assume MOPP Level 4 within 8 minutes.

(1) Push the sleeve cuffs up your arm.

(2) Put on the glove liners (inserts).

(3) Put on the gloves (black rubber).

(4) Pull the sleeve cuffs over the top of the gloves.

(5) Secure the MOPP gear by zipping all zippers and closing all closures.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we assumed MOPP level 4.

CHECK ON LEARNING (ELO D): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below questions.

Question: How many MOPP levels are there and what are they called?

Answer: Seven total: Mask Only, MOPP Ready, MOPP Zero, MOPP 1-4.

REFERENCE: ATP 3-11.32.

Question: If you are in MOPP 1, what action takes you to MOPP 2?

Answer: Add chemical protective boots.

REFERENCE: ATP 3-11.32.

REVIEW SUMMARY(ELO D): During this ELO, we discussed the various levels of MOPP.

E. ENABLING LEARNING OBJECTIVE

ACTION:	Conduct Decontamination Procedures For Your Skin.
CONDITIONS:	In a simulated contaminated environment in MOPP Level 2. You are given a chemical protective mask, chemical protective gloves, chemical protective overboots, a poncho, load-bearing equipment (LBE) or load-bearing vest, Interceptor Body Armor (IBA), the Improved Outer Tactical Vest (IOTV), and Reactive Skin Decontamination Lotion (RSDL).
STANDARDS:	Decontaminate your skin using the RSDL, with 100% accuracy. Start the steps to decontaminate your skin within 1 minute after contamination and finish within 2 minutes.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO E - LSA 1. Learning Step / Activity ELO E - LSA 1. Don protective mask and hood (Generalize New Information).

Method of Instruction: Demonstration
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH (1:25)*
Time of Instruction:
Media Type: Conference/Demonstration
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is derived from the parent learning object

NOTE:

Do not pull the drawstrings. Do not fasten the shoulder straps if yourhood has them.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed donning your protective mask for immediate protection.

ELO E - LSA 2. Learning Step / Activity ELO E - LSA 2. Seek overhead cover (Generalize New Information).

Method of Instruction: Demonstration
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH (1:25)*

Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: If overhead cover is not available, use a poncho for protection against further contamination.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we discussed seeking overhead cover.

ELO E - LSA 3. Learning Step / Activity ELO E - LSA 3. Decontaminate your hands, face, and the inside of your mask (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	20 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: For training purposes, use the Training RSDL.

NOTE: The Primary Instructor will announce and describe the step to perform, and the Assistant Instructor will demonstrate the step to the Soldiers. Soldiers will then perform the step as demonstrated by the Assistant Instructor, while the Instructor and Assistant Instructor will ensure that Soldiers perform each step correctly.

a. Assume MOPP Level 3 without securing the hook-and-pile fastener tape or drawcord on the integrated hood.

NOTE: Decontaminate your skin within 1 minute of contamination.

b. Decontaminate your hands, face, and the inside of your mask using RSDL.

DANGER: Do not mix RSDL with solid, undiluted high-test hypochlorite (HTH) or super tropical bleach (STB). Heat and/or fire may result.

WARNING: Under no circumstances should the training RSDL be used in place of the RSDL during actual combat operations. The training lotion does not contain active ingredients.

(1) Remove one RSDL packet from your carrying pouch.

(2) Tear it open quickly at any notch.

(3) Remove the applicator pad from the packet, and save the packet as the remaining lotion can be added to the applicator pad, if required.

(4) Thoroughly scrub the exposed skin of your hand, palm, and fingers with the applicator pad.

NOTE: The applicator pad can be used from either side and may be gripped in any manner allowing the applicator pad to be applied to the skin.

(5) Switch the applicator pad to the other hand, and repeat the procedure.

DANGER: In real life situations, death or injury may result if you breathe toxic agents while doing the following steps. If you need to breathe before you finish, reseal your mask, clear it, check it, get your breath, and then resume the decontaminating procedure.

(6) Stop breathing, close eyes, grasp mask beneath chin and pull mask away from chin enough to allow one hand between the mask and your face. Hold the mask in this position during steps b(1)(g) through b(1)(m).

NOTE: Do not discard the applicator pad at this time. If you were masked with your hood secured when you became contaminated, stop. Put on your protective gloves, and proceed to step b(1)(r). If you were not masked with the hood secured when you became contaminated, continue decontaminating the exposed skin.

(7) Thoroughly scrub the exposed skin of your face with lotion from the applicator pad.

(8) Thoroughly scrub across your forehead.

(9) Beginning at one side, scrub up and down across your cheeks, nose, chin, and closed mouth. Avoid ingesting.

(10) Scrub under the chin from the ear along the jawbone to the other ear to coat your skin with lotion.

(11) Turn your hand over and scrub the inside surfaces of the mask that may touch your skin. Be sure to include the drinking tube.

(12) Keep the applicator.

(13) Seal your mask immediately, clear it, and check it.

(14) Use the applicator and any remaining lotion in the packet. Without breaking the mask seal, scrub the applicator pad across the forehead, exposed scalp, the skin of the neck, ears, and throat.

(15) Secure the hood.

(16) Thoroughly scrub your hands with lotion again

(17) Assume MOPP Level 4 by putting on protective gloves.

WARNING: Do not discard the RSDL packaging or applicator pads into containers that contain HTH or STB. Heat and/or fire may result.

(18) Use any remaining lotion to spot decontaminate weapons, personal equipment, and canteen cap that may have become contaminated.

(19) Allow RSDL to remain on skin for at least 2 minutes to destroy the chemical agent.

NOTE: Discard the used packet(s) and applicator pad(s) by leaving them in place.

(20) Remove the decontaminating lotion with soap and water when operational conditions permit, such as an "All Clear" directive or after detailed troop decontamination.

Note: Upon completion of training and evaluation, ensure that Soldiers have adequate mask cleaning supplies and water to clean training RSDL off of their protective mask.

c. Notify your supervisor of the location of the used decontaminating materials, and await guidance on disposal procedures.

Check on Learning:	Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.
Review Summary:	During this LSA, we discussed decontaminating your skin.

ELO E - LSA 4. Learning Step / Activity ELO E - LSA 4. Decontaminated hands, face, and the inside of mask (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	30 mins
Media Type:	Practical Exercise
Other Media:	Unassigned

NOTE: Do not use any reactive chemicals or solvents during the training that can cause harm to the Soldiers. Have them wear their issued MOPP gloves when handling any M334 kits.

NOTE: Dispose of waste IAW the TM for the M334 and IAW local policy.

During this Practical Exercise, you will demonstrate the procedures to decontaminate individual equipment. Students will be required to demonstrate the steps necessary to conduct decontamination with M334 Decontamination Kit. Students must perform all steps correctly and sequentially to satisfactorily complete this PE.

Instructor Resources:
JSLIST complete ensemble
IBA/IOTV
Poncho
Reactive Skin Decontamination Lotion
M50 protective mask

Student Resources:
JSLIST complete ensemble
IBA/IOTV
Reactive Skin Decontamination Lotion
Assigned protective mask

NOTE: Divide the students in small groups. Issue training RSDL to each group. Inform the students that they will perform the procedures required to decontaminate their skin using the RSDL .

NOTE: Instruct the students to assume MOPP3 along with their IBA/IOTV. Inform the students that they will take turns until each student will have the opportunity to decontaminate his/her skin following the directions provided. Monitor the students to see that correct procedures are used. As students proceed through the practical exercise, if they perform a step incorrectly or out of sequence, stop them and provide immediate feedback.

DANGER: Do not mix RSDL with solid, undiluted high-test hypochlorite (HTH) or super tropical bleach (STB). Heat and/or fire may result.

a. Assume MOPP Level 3 without securing the hook-and-pile fastener tape or drawcord on the integrated hood.

b. Decontaminate your skin within 1 minute of contamination.

(1) Decontaminate your hands, face, and the inside of your mask using RSDL.

WARNING: Under no circumstances should the training RSDL be used in place of the RSDL during actual combat operations. The training lotion does not contain active ingredients.

(a) Remove one RSDL packet from your carrying pouch.

(b) Tear it open quickly at any notch.

(c) Remove the applicator pad from the packet, and save the packet as the remaining lotion can be added to the applicator pad, if required.

(d) Thoroughly scrub the exposed skin of your hand, palm, and fingers with the applicator pad.

NOTE: The applicator pad can be used from either side and may be gripped in any manner allowing the applicator pad to be applied to the skin.

(e) Switch the applicator pad to the other hand, and repeat the procedure.

DANGER: In real life situations, death or injury may result if you breathe toxic agents while doing the following steps. If you need to breathe before you finish, reseal your mask, clear it, check it, get your breath, and then resume the decontaminating procedure.

(f) Stop breathing, close eyes, grasp mask beneath chin and pull mask away from chin enough to allow one hand between the mask and your face. Hold the mask in this position during steps b(1)(g) through b(1)(m).

NOTE: Do not discard the applicator pad at this time. If you were masked with your hood secured when you became contaminated, stop. Put on your protective gloves, and proceed to step b(1)(r). If you were not masked with the hood secured when you became contaminated, continue decontaminating the exposed skin.

(g) Thoroughly scrub the exposed skin of your face with lotion from the applicator pad.

(h) Thoroughly scrub across your forehead.

(i) Beginning at one side, scrub up and down across your cheeks, nose, chin, and closed mouth. Avoid ingesting.

(j) Scrub under the chin from the ear along the jawbone to the other ear to coat your skin with lotion.

(k) Turn your hand over and scrub the inside surfaces of the mask that may touch your skin. Be sure to include the drinking tube.

(l) Keep the applicator.

(m) Seal your mask immediately, clear it, and check it.

(n) Use the applicator and any remaining lotion in the packet. Without breaking the mask seal, scrub the applicator pad across the forehead, exposed scalp, the skin of the neck, ears, and throat.

(o) Secure the hood.

(p) Thoroughly scrub your hands with lotion again
(q) Assume MOPP Level 4 by putting on protective gloves.

WARNING: Do not discard the RSDL packaging or applicator pads into containers that contain HTH or STB. Heat and/or fire may result.

(r) Use any remaining lotion to spot decontaminate weapons, personal equipment, and canteen cap that may have become contaminated.

(2) Allow RSDL to remain on skin for at least 2 minutes to destroy the chemical agent.

(3) Remove the decontaminating lotion with soap and water when operational conditions permit, such as an "All Clear" directive or after detailed troop decontamination.

Note: Upon completion of training and evaluation, ensure that Soldiers have adequate mask cleaning supplies and water to clean training RSDL off of their protective mask.

c. Notify instructor that you have completed the PE.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we performed decontamination of the face, hands, and mask.

CHECK ON LEARNING (ELO E): Conduct a check on learning by developing questions that solicit student

feedback on the major ideas covered during this ELO. Consider the questions below.

Question: How long should RSDL be left standing on the skin to appropriately react with the chemical agent?

Answer: At least 2 minutes.

REFERENCE: ATP 3-11.32.

Question: If overhead cover is not available, what could be used to help prevent further contamination?

Answer: A poncho.

REFERENCE: ATP 3-11.32.

REVIEW SUMMARY(ELO E): During this ELO, we discussed decontaminating yourself from a chemical agent.

F. ENABLING LEARNING OBJECTIVE

ACTION:	Conduct Decontamination of Individual Equipment.
CONDITIONS:	In a simulated contaminated environment in MOPP Level 4, given helmet, load bearing vest, Interceptor Body Armor (IBA) or Improved Outer Tactical Vest (IOTV), and a M334 Decontamination Kit, Individual Equipment.
STANDARDS:	Decontaminate your individual equipment using an M334 Decontamination Kit, complete all steps in sequence, without error and within 15 minutes of contamination.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO F - LSA 1. Learning Step / Activity ELO F - LSA 1. Decontaminate all contaminated individual equipment (Generalize New Information).

Method of Instruction: Demonstration
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH (1:25)*
Time of Instruction: 5 mins
Media Type: Conference/Demonstration
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is derived from the parent learning object

a. Open the M334 at either end where the kit is notched.

WARNING: Avoid inhalation, ingestion, and contact with eyes and skin. M334 is NOT to be used for personal skin decontamination. See TC 4-02.1 for Army first aid procedures. Failure to heed this warning may result in injury to personnel. Keep M334 individual wipe away from heat/sparks/open flames/hot surfaces. Failure to heed this warning may result in injury to personnel.

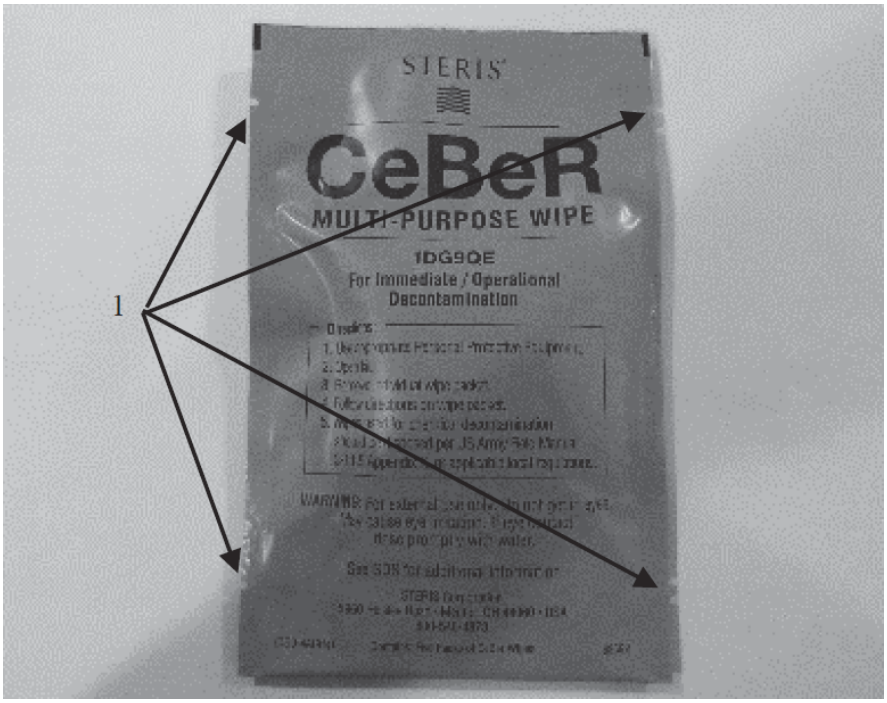

Figure 1
M334 Decontamination Kit

b. Remove one M334 Packet from the kit

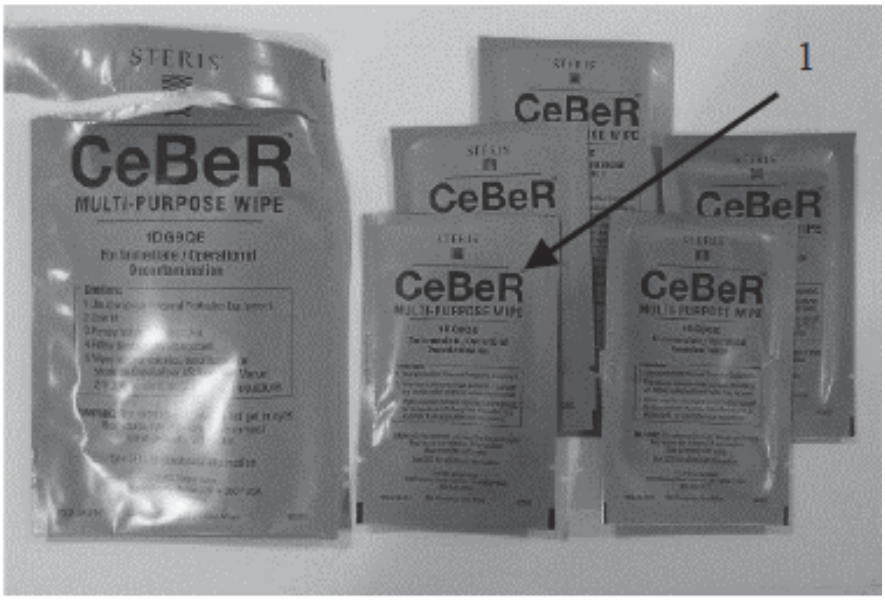

Figure 2
M334 Decontamination Packets

c. Open an M334 packet at the notch on the packet.

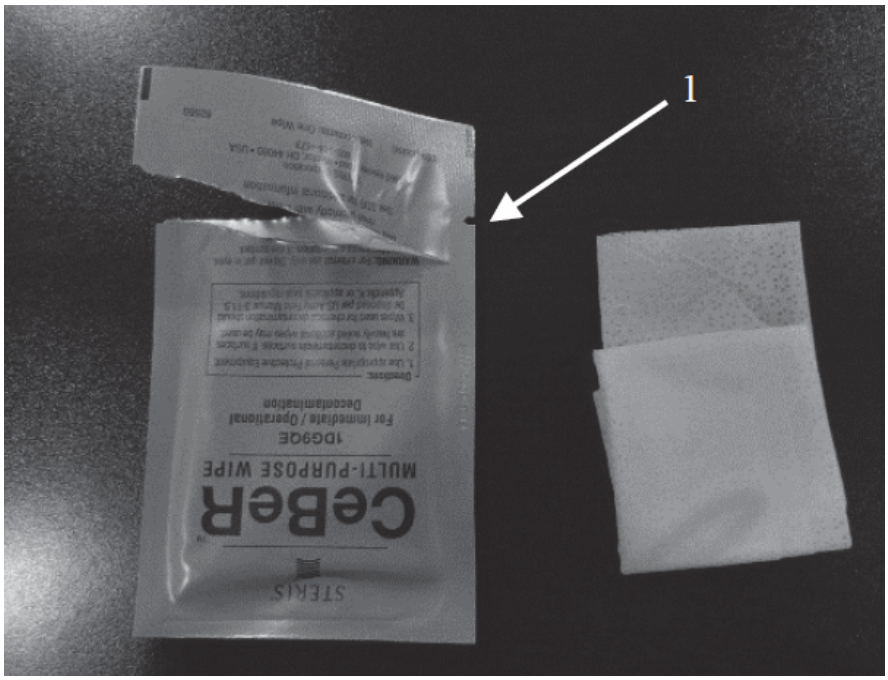

Figure 3
Tear Notch on M334 Packet

d. Remove the individual wipe from the packet and unfold it completely.

e. Decontaminate all contaminated individual equipment by wiping the surface using sweeping motions away from the body.

f. Take care not to spread any contamination to any area that has been visually determined as clean.

NOTE: M334 individual wipe may leave behind a film on decontaminated surfaces. This film may alter how certain surfaces (i.e. optics, reflectivesurfaces) process light. Refer to the decontaminated equipment's TM for cleaning procedures, as some surfaces may require specific procedures to avoid damaging the surface. In the absence of cleaning procedures, a lens cloth has been found to be an effective means of removing any film left behind by the M334 individual wipe.

NOTE: Allow solvent to fully evaporate from equipment surfaces before sampling with detectors. Use of chemical detectors on items recently decontaminated with the M334 individual wipe could potentially cause false negatives or false positives if surface is sampled while wet with solvent. Failure to heed this warning mayresult in injury or death to personnel.

Check on Learning:	Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.
Review Summary:	During this LSA, we discussed decontaminating your equipment.

ELO F - LSA 2. Learning Step / Activity ELO F - LSA 2. Check for signs of remaining contamination (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Check for signs of remaining contamination after all suspected areas have been wiped.

b. Droplets from the M334 individual wipe tend to evaporate fairly quickly. If liquid contamination is still suspected or detected, get another M334 packet and repeat steps 3-6.

NOTE: The wipe may be folded/refolded as necessary to maximize use of the clean areas of the wipe, to obtain the proper grip, and to ensure even contact pressure. When wiping, pay special attention to areas that are hard to reach, such as cracks,

crevices, and absorbent materials. To avoid premature evaporation of the solvent, do not open a new M334 packet until needed.

NOTE: Wipes used to decontaminate CWAs must be handled and disposed as hazardous waste. Wipes will be contaminated once used for decontamination. Failure to heed this warning may result in injury or death to personnel.

NOTE:
Dispose of contaminated waste material IAW unit SOP and local and federal regulation s. Wipes used to decontaminate CWAs must be handled and disposed as hazardous waste. Wipes will becontaminated once used for decontamination.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we discussed checking for remaining contaminant.

ELO F - LSA 3. Learning Step / Activity ELO F - LSA 3. Decontaminate all contaminated individual equipment (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	30 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Do not use any reactive chemicals or solvents during the training that can cause harm to the Soldiers. Have them wear their issued MOPP gloves when handling any M334 kits.

NOTE: Dispose of waste IAW the TM for the M334 and IAW local policy.

During this Practical Exercise, you will demonstrate the procedures to decontaminate individual equipment. Students will be required to demonstrate the steps necessary to conduct decontamination with M334 Decontamination Kit. Students must perform all steps correctly and sequentially to satisfactorily complete this PE.

Instructor Resources:
Any simulant to replicate a contaminant.

Student Resources:
Individual Equipment.

M334 packet.

1. Open the M334 at either end where the Kit is notched.

NOTE: Avoid inhalation, ingestion, and contact with eyes and skin. M334 is NOT to be used for personal skin decontamination. See TC 4-02.1 for Army first aid procedures. Failure to heed this warning may result in injury to personnel. Keep M334 individual wipe away from heat/sparks/open flames/hot surfaces. Failure to heed this warning may result in injury to personnel.

2. Remove one M334 packet from the kit.

3. Open an M334 packet at a notch on the packet.

4. Remove the individual wipe from the packet and unfold completely.

5. Decontaminate all contaminated individual equipment by wiping the surface using sweeping motions away from the body. Take care not to spreadany contamination to any area that has been visually determined as clean.

NOTE: M334 individual wipe may leave behind a film on decontaminated surfaces. This film may alter how certain surfaces (i.e. optics, reflective surfaces) process light. Refer to the decontaminated equipment's TM for cleaning procedures, as some surfaces may require specific procedures to avoid damaging the surface. In the absence of cleaning procedures, a lens cloth has been found to be an effective means of removing any film left behind by the M334 individual wipe.

NOTE: Allow solvent to fully evaporate from equipment surfaces before sampling with detectors. Use of chemical detectors on items recently decontaminated with the M334 individual wipe could potentially cause false negatives or false positives if surface is sampled while wet with solvent.

6. Check for signs of remaining contamination after all suspected areas have been wiped. Droplets from the M334 individual wipe tend to evaporate fairly quickly. If liquid contamination is still suspected or detected, get another M334 packet and repeat steps 3-6.

NOTE: The wipe may be folded/refolded as necessary to maximize use of the clean areas of the wipe, to obtain the proper grip, and to ensure even contact pressure. When wiping, pay special attention to areas that are hard to reach, such as cracks, crevices, and absorbent materials. To avoid premature evaporation of the solvent, do not open a new M334 packet until needed.

NOTE: Wipes used to decontaminate CWAs must be handled and disposed as

hazardous waste. Wipes will becontaminated once used for decontamination.

7. Dispose of contaminated waste material IAW unit SOP and local and federal regulations.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we conducted decontamination of individual equipment.

CHECK ON LEARNING (ELO F): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the questions below.

Question: Once you have decontaminated your individual equipment, what should you do?

Answer: Check for remaining contamination.

REFERENCE: TM 3-6665-439-10.

REVIEW SUMMARY(ELO F): During this ELO, we performed decontamination of individual equipment through the use of M334 Decontamination Kit.

G. ENABLING LEARNING OBJECTIVE

ACTION:	Detect Liquid Chemical Agents using M9 Detector Paper
CONDITIONS:	You are in a simulated tactical environment or an area with suspected liquid chemical contamination given a roll of M9 detector paper.
STANDARDS:	Detect liquid chemical agents with M9 paper with 100% accuracy.
LEARNING DOMAIN - LEVEL:	Cognitive - Remembering
No JPME LEARNING AREAS SUPPORTED:	None

ELO G - LSA 1. Learning Step / Activity ELO G - LSA 1. Attach M9 detector paper to your MOPP gear (Generalize New Information).

Method of Instruction: Demonstration
Mode of Delivery: Resident Instruction
Instr Type (I:S Ratio): Military - ICH (1:25)*
Time of Instruction: 5 mins
Media Type: Conference/Demonstration
Other Media: Unassigned
Security Classification: This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is derived from the parent learning object

NOTE: M9 detector paper will not detect chemical agent vapors. Paper band must not be too tight because it will tear with movement. However, it must not be too loose because it may slip down. If assistance is available, let your buddy tear off and attach your detector paper to your MOPP gear.

a. If you are left handed, place a strip of M9 detector paper around your left upper arm, right wrist, and left ankle with approximately 1 inch overlaps.

b. If you are right-handed, place a strip of M9 detector paper around your right upper arm, left wrist, and right ankle with approximately 1 inch overlaps.

NOTE: These are the places where a moving Soldier will most likely brush against a surface (such as undergrowth) that is contaminated with a liquid chemical agent.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed attaching M9 paper to your MOPP gear.

ELO G - LSA 2. Learning Step / Activity ELO G - LSA 2. Attach M9 paper to equipment (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	2 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Place M9 paper with 1.5 inch tab for easy removal where it will come into contact with contaminated objects.

b. Place M9 paper where it will be visible to the operator.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed attaching M9 paper to your equipment.

ELO G - LSA 3. Learning Step / Activity ELO G - LSA 3. Check for surface liquid agent contamination (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	2 mins

NOTE: M8 and M9 detector paper will not detect chemical-agent vapors.

NOTE: Always wear protective gloves when touching M9 detector paper. Do not get M9 detector paper in or near your mouth or on your skin.

a. Check for surface liquid agent contamination by taking a piece of M9 paper and blotting the surface of equipment, ground, or vegetation around suspected area.

b. Be aware of what can provide false readings or impact the use.

(1) Firing weapons lubricated with lubricating oil, semi-fluid; lubricant, small arms; or lubricant, semifluid, automatic weapons (LSA) may cause false positive responses on the olive drab (OD) detector paper.

(2) Heat may cause detector paper to turn red and cause false readings. Keep detector paper away from hot surfaces such as vehicle hoods, weapon barrels, or cannon assemblies.

(3) Do not attach M9 detector paper to hot, dirty, oily, or greasy surfaces because it may give false positive readings.

(4) Do not rub or scrape detector paper across rough surfaces. Scuff marks will cause false readings.

(5) A color blind person may see a red spot as gray or black. Spots must be checked by a person who is not color blind.

(6) When dispenser is not in use, place in plastic storage bag to prevent contamination.

(7) Do not check M9 detector paper with colored light because you will not see liquid chemical agent red spots.

NOTE: If pink, red, red-brown, red-purple, or any shade of red streaks or spots are detected assume that you have been exposed to a liquid chemical agent. Blue, yellow, green, gray, or black spots are not from a liquid chemical agent.

c. Monitor the M9 detector paper constantly for any color change. If you observe a color change, immediately do the following:

(1) Don your protective mask.

(2) Give the alarm.

(3) Decontaminate as necessary.

(4) Assume MOPP 4.

NOTE: Use other types of chemical agent detectors kits (such as M8 paper or M256A2 kit) to verify the test results.

d. Notify your supervisor.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed checking for surface contamination.

ELO G - LSA 4. Learning Step / Activity ELO G - LSA 4. Detect liquid chemical agents using M9 Chemical Detection Paper (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	20 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Always wear protective gloves when touching M9 detector paper. Do not get M9 detector paper in or near your mouth or on your skin. The M9 detector paper dye may cause cancer, but the risk is small because very little dye is used.
NOTE: Ensure all test kit residue is recovered. Contact the local environmental office for proper disposal procedures.
During this Practical Exercise, you will demonstrate the procedures to identify chemical agents using M9 detector paper. Students will be required to demonstrate the steps necessary to detect and identify chemical agents contamination using M9 detector paper. Students must perform all steps correctly and sequentially to satisfactorily complete this PE.
Instructor Resources:
JSLIST ensemble
M50-series Protective Mask
M9 paper
Chemical agent simulants (i.e antifreeze, household cleaner, ammonia brake fluid, or diesel fuel)

Stick or eyedropper
Nonporous material/object (i.e. vehicle, entrenching tool, or helmet).
Student Resources:
JSLIST ensemble
Assigned Protective Mask
M9 paper (1 roll per 5 students)

1. Attach M9 detector paper to your MOPP gear.

NOTE: M9 detector paper will not detect chemical agent vapors. Paper band must not be too tight because it will tear with movement. However, it must not be too loose because it may slip down. If assistance is available, let your buddy tear off and attach your detector paper to your MOPP gear.

a. If you are left handed, place a strip of M9 detector paper around your left upper arm, right wrist, and left ankle with approximately 1 inch overlaps.

b. If you are right-handed, place a strip of M9 detector paper around your right upper arm, left wrist, and right ankle with approximately 1 inch overlaps.

NOTE: These are the places where a moving Soldier will most likely brush against a surface (such as undergrowth) that is contaminated with a liquid chemical agent.

2. Attach M9 paper to equipment.

a. Place M9 paper with 1.5 inch tab for easy removal where it will come into contact with contaminated objects.

b. Place M9 paper where it will be visible to the operator.

3. Check for surface liquid agent contamination by taking a piece of M9 paper and blotting the surface of equipment, ground, or vegetation around suspected area.

4. Monitor the M9 detector paper constantly for any color change.

NOTE: If pink, red, red-brown, red-purple, or any shade of red streaks or spots are detected assume that you have been exposed to a liquid chemical agent. Blue, yellow, green, gray, or black spots are not from a liquid chemical agent.

5. Use other types of chemical agent detectors kits (such as M8 paper or M256A2 kit) to verify the test results.

6. Notify supervisor or the results.

Check on Learning:

Conduct a check on learning by developing questions that

solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we performed locating liquid chemical agent contamination using M9 paper.

CHECK ON LEARNING (ELO G):

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA. Consider the questions below.

Question: What size of M9 paper tabs should you use on your MOPP gear?

Answer: One inch.

REFERENCE: TM 3-6665-311-10

REVIEW SUMMARY(ELO G):

During this ELO, we discussed using M9 paper to detect liquid chemical agents by attaching it to your equipment and by directly testing surfaces.

H. ENABLING LEARNING OBJECTIVE

ACTION:	Identify Liquid Chemical Agents using M8 Paper
CONDITIONS:	You are in a simulated tactical environment or an area with suspected liquid chemical contamination, given a booklet of M8 detector paper.
STANDARDS:	Identify liquid chemical agents using M8 Paper with 100% accuracy.
LEARNING DOMAIN - LEVEL:	Cognitive - Remembering
No JPME LEARNING AREAS SUPPORTED:	None

ELO H - LSA 1. Learning Step / Activity ELO H - LSA 1. Identify liquid chemical agents with M8 detector paper using the active method (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: If you see a liquid that you suspect could be a chemical agent, or if you observe a color change on the M9 detector paper, assume MOPP 4 immediately.

a. Remove a sheet of M8 paper from the book (use one-half sheet if it is perforated).

NOTE: You may want to put the paper on the end of a stick or another object and then blot the paper on the suspected liquid agent.

CAUTION: M8 paper is subject to false positive indications caused by many substances. Do not scrub, or rub M8 paper on suspected contaminated surfaces.

b. Dip the paper into the suspected liquid agent or blot the suspected area to be tested with the paper.

NOTE: Do not touch the liquid with protective glove.

WARNING: Some decontaminants will give false positive results on the M8 detector paper. The M8 detector paper may indicate positive results if used in an area where decontaminants have been used.

c. Observe the M8 detector paper for a color change. Identify the contamination by comparing any color change on the M8 detector paper to the color chart on the inside front cover of the booklet.

(1) A yellow-gold color indicates the presence of a nerve (G) agent.

(2) A red-pink color indicates the presence of a blister (H) agent.

(3) A dark green color indicates the presence of a nerve (V) agent.

(4) Any other color or no color change indicates that the liquid cannot be identified using M8 detector paper.

NOTE: Ensure to keep the M8 paper booklet stored in a place to avoid wetting.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed the active method for using M8 paper.

ELO H - LSA 2. Learning Step / Activity ELO H - LSA 2. Identify liquid chemical agents with M8 detector paper using the passive method (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (*) is derived from the parent learning object

a. Remove a sheet of M8 paper from the booklet.

b. Secure the sheet to any object in an area which would most likely receive contamination.

c. Periodically inspect the paper for color changes. Identify the contamination by comparing any color change on the M8 detector paper to the colorchart on the inside front cover of the booklet.

d. Observe the M8 detector paper for a color change. Identify the contaminant by comparing any color change on the M8 detector paper to the color chart on the inside front cover of the booklet.

(1) A yellow-gold color indicates the presence of a nerve (G) agent.

(2) A red-pink color indicates the presence of a blister (H) agent.

(3) A dark green color indicates the presence of a nerve (V) agent.

(4) Any other color (or no color change) indicates that the liquid cannot be identified using M8 detector paper.

NOTE: Ensure to keep the M8 paper booklet stored in a place to avoid wetting.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed the passive method of using M8 paper.

ELO H - LSA 3. Learning Step / Activity ELO H - LSA 3. Store the booklet (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

Note: Marked as (*) is derived from the parent learning object

a. Store the booklet of M8 detector paper in a manner which will prevent wetting.

b. Remain in MOPP4 even if the liquid cannot be identified. If available, use other types of chemical-agent detector kits to verify the test results.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we discussed storing the M8 paper.

ELO H - LSA 4. Learning Step / Activity ELO H - LSA 4. Notify your supervisor (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Notify your supervisor of the test results.

NOTE: M8 detector paper reacts positively to petroleum products, ammonia, and decontaminating solution number 2 (DS2). M9 detector paper reacts positively to petroleum products, insecticides, and antifreeze. M9 detector paper only detects (does not identify) chemical agents; use M8 detector paper to verify all readings. If you observe a color change on M8 or M9 detector paper, assume it is a liquid chemical agent. When conducting agent tests at night, remove any colored lenses because they may provide a false negative response. Confirm the presence of contamination by using all means of chemical-agent detection available in your area of operation, including a visual check of your surroundings.

b. If you determine that your reading is a false positive, perform the following actions before giving the all clear signal:

(1) Ensure that every attempt has been made to recheck the area.

(2) Contact your higher headquarters (HQ) or the person in charge, and report the negative results.

(3) Await further guidance. The higher HQ contacts all adjacent/attached units to check the status of contamination in their areas. If all units report the absence of contamination, the information is reported up the chain of command.

(4) Annotate the above actions on DA Form 1594.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple

question to the student of how they will use the new information from the GNI step.
a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.
b. Ask questions similar to the following:
Question 1:
What does this mean to me?
Question 2:
How will you use the knowledge gained from this lesson in future assignments.
Question 3:
What has surprised you about the content?
Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?
Question 5:
What do you think is the most important part?
Answer: There are no right answers as such for these questions.

Review Summary: During this LSA, we discussed reporting your findings.

ELO H - LSA 5. Learning Step / Activity ELO H - LSA 5. Identify liquid chemical agent contamination using M8 paper (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	20 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Always wear protective gloves when touching M8 detector paper. Do not get M8 detector paper in or near your mouth or on your skin.
NOTE: Ensure all test kit residue is recovered. Contact the local environmental office for proper disposal procedures.
During this Practical Exercise, you will demonstrate the procedures to identify chemical agents using M8 detector paper. Students will be required to demonstrate the steps necessary to detect and identify chemical agents contamination using M8 detector paper. Students must perform all steps correctly and sequentially to satisfactorily complete this PE.

Instructor Resources:

JSLIST ensemble
M50-series Protective Mask
M8 paper
Chemical agent simulants (i.e antifreeze, household cleaner, ammonia brake fluid, or diesel fuel)
Stick or eyedropper
Nonporous material/object (i.e. vehicle, entrenching tool, or helmet).
Student Resources:
JSLIST ensemble
Assigned Protective Mask
M8 paper
Stick or CBRN Marker stick

1. Identify liquid chemical agents with M8 detector paper using the active method.
    a. Remove a sheet of M8 paper from the book (use one-half sheet if it is perforated).

NOTE: You may want to put the paper on the end of a stick or another object and then blot the paper on the suspected liquid agent.

CAUTION: M8 paper is subject to false positive indications caused by many substances. Do not scrub, or rub M8 paper on suspected contaminated surfaces.

    b. Dip the paper into the suspected liquid agent or blot the suspected area to be tested with the paper.

NOTE: Do not touch the liquid with protective glove.

WARNING: Some decontaminants will give false positive results on the M8 detector paper. The M8 detector paper may indicate positive results if used in an area where decontaminants have been used.

    c. Observe the M8 detector paper for a color change. Identify the contamination by comparing any color change on the M8 detector paper to the color chart on the inside front cover of the booklet.
        (1) A yellow-gold color indicates the presence of a nerve (G) agent.
        (2) A red-pink color indicates the presence of a blister (H) agent.
        (3) A dark green color indicates the presence of a nerve (V) agent.
        (4) Any other color or no color change indicates that the liquid cannot be identified using M8 detector paper.
2. Identify liquid chemical agents with M8 detector paper using the passive method.
    a. Remove a sheet of M8 paper from the booklet.
    b. Secure the sheet to any object in an area which would most likely receive contamination.
    c. Periodically inspect the paper for color changes. Identify the contamination by comparing any color change on the M8 detector paper to the colorchart on the inside front cover of the booklet.
3. Store the booklet of M8 detector paper in a manner which will prevent wetting.
4. Use other types of chemical-agent detector kits (such as the M256A2 Kit) to verify

the test results.

5. Notify your supervisor of the test results.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we performed identification of liquid chemical agent contamination with M8 paper.

CHECK ON LEARNING (ELO H):

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below questions.

Question: What color changes to M8 paper indicate the presence of a chemical agent?

Answer:

A yellow-gold color indicates the presence of a nerve (G) agent.
A red-pink color indicates the presence of a blister (H) agent.
A dark green color indicates the presence of a nerve (V) agent.

Question: What does it mean when the color change is other than what is listed for the 3 agent reactions or renders no change in color?

Answer: Any other color or no color change indicates that the liquid cannot be identified using M8 detector paper.

REFERENCE: TO 11H2-14-5-1

REVIEW SUMMARY(ELO H):

During this ELO, we discussed the methods of using M8 paper, reading the reactions, and reporting those findings.

I. ENABLING LEARNING OBJECTIVE

ACTION:	Employ a Marker Kit for CBRN-Contaminated Areas
CONDITIONS:	You in a simulated environment where CBRN weapons have been deployed. The simulated contamination has been located and identified in an area. You are given a M328 Chemical, Biological, Radiological, and Nuclear (CBRN) marking kit, and appropriate Individual Protective Equipment (IPE).
STANDARDS:	Employ a minimum of three markers that correctly represent the type of contamination, completed with

	required information written on the sign at line of sight distances depending on terrain while in MOPP 4 with 100% accuracy.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO I - LSA 1. Learning Step / Activity ELO I - LSA 1. Employ CBRN Markers (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Employ the ATOM marker for Radiological or Nuclear contamination.

(1) Place markers at the location where a dose rate of 1 centigray per hour (cGyph) or more is measured.

(2) Place markers so that the word "ATOM" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

NOTE: case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(a) Date-time group (DTG) (Local/Zulu (L/Z)) of reading. If the DTG is not known, print "unknown".

(b) Dose rate.

(c) DTG (L/Z) of detonation/release, if known. If the DTG is not known, print "unknown".

b. Employ the ATOM marker for Toxic Industrial Radiological (TIR).

NOTE: In case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(1) Place markers at the location where a dose rate of 2 micrograys per hour (Gyph) or more is measured.

(2) Place markers so that the word "ATOM" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

NOTE: case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(a) DTG (L/Z) of reading. If the DTG is not known, print "unknown".

(b) Dose rate.

(c) DTG (L/Z) of detonation/release, if known. If the DTG is not known, print "unknown".

c. Employ the BIO marker for Biological Agent’s.

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "BIO" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

d. Employ the GAS marker for Persistent Chemical Agent’s.

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "GAS" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

e. Employ the TOXIC marker for Toxic Industrial Chemical (TIC) or Toxic Industrial Biological (TIB).

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "TOXIC" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

Check on Learning:	Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.
Review Summary:	During this LSA, we discussed employing markers by hazard type.

ELO I - LSA 2. Learning Step / Activity ELO I - LSA 2. Emplace secondary markers (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Emplace two additional markers, at a minimum, using procedures from LSA 1. Place markers 10 to 100 meters apart, depending on terrain, ensuring all markers are

line-of-sight visible.

b. When marking a contaminated area in open terrain (that is, desert, plains, rolling hills), raise the markers to a desired height that permits approaching military forces to view the markers at distances up to 200 meters.

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.
a. Determine if the students have learned the material presented by soliciting general
questions, getting answers from the students, and correcting any misunderstandings.
b. Ask questions similar to the following:
Question 1:
What does this mean to me?
Question 2:
How will you use the knowledge gained from this lesson in future assignments.
Question 3:
What has surprised you about the content?
Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?
Question 5:
What do you think is the most important part?
Answer: There are no right answers as such for these questions.

Review Summary:

During this LSA, we discussed emplacing additional contamination markers.

ELO I - LSA 3. Learning Step / Activity ELO I - LSA 3. Employ CBRN Marking Kit (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	10 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Students must perform a practical exercies to accurately mark a CBRN

Contaminated Area. They must perform all of the below steps with 100% accuracy and in order. They will need a JSLIST ensemble, assigned protective mask, and CBRN Marking Set. The Instructor should develop a scenario where the Soldiers have encountered a contaminated area and are required to perform marking identification based upon the scenario and findings they are given for a Chemical, Biological, Radiological, or Nuclear contamination.

1. Employ CBRN Markers (based on contamination type).

a. Employ the ATOM marker for Radiological or Nuclear contamination.

(1) Place markers at the location where a dose rate of 1 centigray per hour (cGyph) or more is measured.

(2) Place markers so that the word "ATOM" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

NOTE: case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(a) Date-time group (DTG) (Local/Zulu (L/Z)) of reading. If the DTG is not known, print "unknown".

(b) Dose rate.

(c) DTG (L/Z) of detonation/release, if known. If the DTG is not known, print "unknown".

b. Employ the ATOM marker for Toxic Industrial Radiological (TIR).

NOTE: In case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(1) Place markers at the location where a dose rate of 2 micrograys per hour (Gyph) or more is measured.

(2) Place markers so that the word "ATOM" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

NOTE: case of limited space on the front surface of the sign, as a minimum, the name/symbol of the agent (if known) and/or the dose rate/concentration (if known) is to be written on the front surface. Any other details may be written on the back surface.

(a) DTG (L/Z) of reading. If the DTG is not known, print "unknown".

(b) Dose rate.

(c) DTG (L/Z) of detonation/release, if known. If the DTG is not known, print "unknown".

c. Employ the BIO marker for Biological Agent’s.

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "BIO" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

d. Employ the GAS marker for Persistent Chemical Agent's.

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "GAS" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

e. Employ the TOXIC marker for Toxic Industrial Chemical (TIC) or Toxic Industrial Biological (TIB).

(1) Place markers 200 meters before the location where contamination is detected.

(2) Place markers so that the word "TOXIC" faces away from the contamination at waist height right-angled apex downward.

(3) Print the following information clearly on the front of the markers:

(a) Name of agent/symbol, if known. If unknown, print "unknown".

(b) Concentration levels, if known. If unknown, print "unknown".

(c) DTG (L/Z) of detection. If the DTG is not known, print "unknown".

(d) DTG (L/Z) of detonation/release. If the DTG is not known, print "unknown".

2. Emplace two additional markers, at a minimum, using procedures from step 1.

a. Place markers 10 to 100 meters apart, depending on terrain, ensuring all markers are line-of-sight visible.

b. When marking a contaminated area in open terrain (that is, desert, plains, rolling hills), raise the markers to a desired height that permits approaching military forces to view the markers at distances up to 200 meters.

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we performed the marking of a CBRN contaminated area.

CHECK ON LEARNING (ELO I):

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below

questions:

Question: How far apart should markers be placed?

Answer: 10 to 100 meters apart, depending on terrain, ensuring all markers are line-of-sight visible.

REFERENCE: ATP 3-11.37.

REVIEW SUMMARY(ELO I): During this ELO, we discussed emplacing markers, labeling them correctly, and identifying additional marker location.

J. ENABLING LEARNING OBJECTIVE

ACTION:	React to a Nuclear Attack
CONDITIONS:	In a training area where a simulated nuclear weapon has been deployed. You are given a protective mask, a brush or a broom, and shielding material.
STANDARDS:	React to a nuclear attack by performing the steps with 100% accuracy and in sequence.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO J - LSA 1. Learning Step / Activity ELO J - LSA 1. Drop down immediately (Generalize New Information).

Method of Instruction:	Discussion (Small or Large Group)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Donning protective mask first prevents Alpha particles from entering the nose, mouth, throat, and lungs.

a. If in Open Area, drop facedown immediately with feet facing the blast.

NOTE: This will lessen the possibility of heat/blast injuries to the head, face, and neck.

(1) If time, crawl to the closest available protection (i.e. A log, a large rock, or any depression in the earth's surface provides some protection).

(2) If time, don IPE (individual protective equipment) according to the unit SOP.

b. If in a Shelter, lay face down on the floor near a wall, if time, don IPE (individual protective equipment) according to the unit SOP.

c. If in a Foxhole, the best position is on the back with knees drawn up to the chest, hands holding back of knees, if time, don IPE (individual protective equipment) according to the unit SOP.

NOTE: This position may seem vulnerable, but the arms and legs are more radiation-resistant and will protect the head and trunk.

d. Close your eyes and open your mouth.

NOTE: This will equalize the blast pressure and help prevent organ damage.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed immediately dropping to the ground.

ELO J - LSA 2. Learning Step / Activity ELO J - LSA 2. Protect yourself from the blast (Generalize New Information).

Method of Instruction:	Discussion (Small or Large Group)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. If not in a foxhole position, protect exposed skin from heat by putting hands and arms under or near the body. In any position keep the helmet on.

b. If in Open Area, use any available material to provide overhead cover after the blast wave passes to avoid direct contact with radioactive fallout (raingear, poncho, tarps, or plastic).

c. Remain in position until the blast wave passes and debris stops falling.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed protecting yourself from the blast.

ELO J - LSA 3. Learning Step / Activity ELO J - LSA 3. Decontaminate Yourself (Generalize New Information).

Method of Instruction:	Discussion (Small or Large Group)
Mode of Delivery:	Resident Instruction

Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Don protective mask or dust mask, if not already on.

NOTE: This ensures that personnel protect themselves from ingesting or inhaling the radioactive particles.

b. Brush or shake debris off of clothing.

c. Lift off dry contamination with sticky tape if available.

d. Wash exposed skin with soap (detergent) and tepid water.

NOTE: This would be all skin that was exposed during the attack.

e. After decontaminating yourself check your surroundings for casualties.

f. Seek shelter if you are not already in one.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed decontamination methods.

CHECK ON LEARNING (ELO J): Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this ELO. Consider the below questions.

Question: What are some methods of decontaminating yourself after a nuclear attack?

Answer:

a. Brush or shake debris off of clothing.
b.Lift off dry contamination with sticky tape if available.
c.Wash exposed skin with soap (detergent) and tepid water.

REFERENCE: ECBC-SP-036.

Question: Why do you close your eyes and open your mouth during a

nuclear attack?

Answer: This will equalize the blast pressure and help prevent organ damage.

REFERENCE: ATP 3-11.32.

REVIEW SUMMARY(ELO J): During this ELO, we discussed all of the immediate actions upon a nuclear attack as well as decontamination actions.

K. ENABLING LEARNING OBJECTIVE

ACTION:	React To Chemical Or Biological (CB) Hazard.
CONDITIONS:	In an simulated environment where chemical or biological attack is occurring, you are given your Multipurpose Personal Hydration System (MPHS), assigned protective mask and complete set of MOPP Gear (JSLIST, Gloves, and Boots), individual equipment decontamination kit, and Reactive Skin Decontamination Lotion (RSDL). You are wearing eye protection, Army Combat Helmet (ACH), Improved Outer Tactical Vest (IOTV), and Deltoid Auxiliary Protectors (DAPs). You are currently in MOPP Level 0.
STANDARDS:	React to a CB hazard/attack by donning, clearing, and sealing your protective mask within 9 seconds, conducting skin decontamination within 2 minutes, assuming MOPP 4 (after decontamination) within 8 minutes, connecting your MPHS to your assigned protective mask, and decontaminating your individual equipment within 15 minutes using the decontaminating kit with 100% accuracy and without becoming a casualty.
LEARNING DOMAIN - LEVEL:	Cognitive - Applying
No JPME LEARNING AREAS SUPPORTED:	None

ELO K - LSA 1. Learning Step / Activity ELO K - LSA 1. Protect yourself from CB contamination by using your assigned protective mask, IAW common task 031-COM-1004, within 9 seconds (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Identify the CB hazard automatic-masking criteria.

(1) Don your protective mask automatically when any of the following situations occur:

(a) A chemical alarm sounds.

(b) A positive reading is obtained on detector paper.

(c) Individuals exhibit symptoms of CB agent poisoning, such as difficulty breathing, coughing, wheezing, vomiting, or eye irritation.

(d) You observe a spill or cloud of unknown material(s).

(e) You react to an IED explosion where you suspect the release of a CB agent.

(f) You observe a contamination marker.

(g) Your supervisor orders you to mask.

(h) You observe personnel wearing protective masks.

(i) You observe other signs of a possible CB agent hazard/attack.

(2) Respond to the commander's policy of automatic masking.

NOTE: Commanders at all levels may establish a modified policy by designating additional criteria for automatic masking.

b. Protect yourself from CB contamination by using your assigned protective mask within 9 seconds.

NOTE: The mask provides protection against conventional warfare agents. The mask provides little if any protection from toxic industrial materials (TIMs), but it provides the best available protection to enable you to evacuate the hazard
area. If possible, evacuate to a minimum safe distance of at least 300 meters upwind from the contamination.

(1) Stop breathing and close your eyes.

(2) Don the protective mask.

(3) Clear the mask.

(4) Check the mask.

(5) Go immediatley to the next step.

c. Give the alarm.

(1) Shout, "Gas, Gas, Gas."

(2) Give the appropriate hand-and-arm signal.

(3) Hit two metal objects together.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: In this LSA, we discussed masking procedures.

ELO K - LSA 2. Learning Step / Activity ELO K - LSA 2. Take cover (if possible) and conduct immediate skin decontamination, IAW common task 031-COM-1006, within 2 minute (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Take cover and/or assemble as directed, moving upwind from the contamination area to reduce exposure.

b. Decontaminate exposed skin within 1 minute of becoming contaminated using the individual decontaminating kit as necessary.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed seeking cover and immediate decontamination.

ELO K - LSA 3. Learning Step / Activity ELO K - LSA 3. Assume MOPP Level 4, IAW common task 031-COM-1005, within 8 minutes. Follow the step below when wearing ACH, IOTV, or DAPs (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	5 mins
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Remove the ACH and protective eye wear.

b. Loosen the DAPs.

NOTE: WHEN DOFFING THE IOTV FROM THE SHOULDER. TAKE CARE NOT TO SNAG THE FILTER CANISTER AND BREAK THE SEAL OF YOUR PROTECTIVE MASK.

c. Doff the IOTV by lifting the front flap and detach side plate carriers by separating hook and loop fastener tape. Lift front carrier and detach internal elastic bands at hook and loop interface. Open the medical access hook and pile closure, loosen the left shoulder adjustment strap and slide vest off the right shoulder.

d. Assume MOPP Level 4.

e. Don the IOTV over the right shoulder by tightening the left shoulder adjustment strap and fastening the medical access hook and pile closure. Attach internal elastic bands at hook and loop interface and close the front carrier. Attach side plate carriers and close the front flap.

f. Secure the DAP.

g. Don the ACH.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary: During this LSA, we discussed assuming MOPP level 4.

ELO K - LSA 4. Learning Step / Activity ELO K - LSA 4. Conduct personal hydration while wearing your assigned protective mask IAW common task 031-COM-1012 (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

NOTE: Multipurpose Personal Hydration System (MPHS) is used whenever Soldiers wear their mask which does not have to include any other IPE. So if Soldiers are in a Mask Only posture, they would connect their MPHS after conducting immediate skin decontamination.

Check on Learning: Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during

this LSA.

Review Summary:

During this LSA, we discussed conducting personal hydration.

ELO K - LSA 5. Learning Step / Activity ELO K - LSA 5. Decontaminate your individual equipment using your individual equipment decontamination kit, IAW common task 031-COM-1011 (Generalize New Information).

Method of Instruction:	Demonstration
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:25)*
Time of Instruction:	
Media Type:	Conference/Demonstration
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.
Note: Marked as (*) is	derived from the parent learning object

a. Decontaminate your individual equipment using your individual equipment decontamination kit, as necessary.

b. Notify your supervisor of any suspected CB hazard/attack.

c. Continue the mission and perform any additional requirements as outlined in your unit's standing operating procedure (SOP).

(1) Use all means of CB detection to check your surrounding area for the presence of contamination.

(2) Contact your higher headquarters if you find contamination or if you determine that the attack was non-CB related.

(3) Await further guidance. The higher headquarters contacts all adjacent/attached units to check the status of CB contamination in their areas. All units will report the absence or presence of contamination to the chain of command.

(4) Annotate the above actions on your duty log Department of the Army (DA) Form 1594, Daily Staff Journal or Duty Officer's Log, and as a siginificant activity (SIGAct) on units Combat Management System (CMS).

Check on Learning:

NOTE: In this check on learning the student will use the Develop phase as defined by the Experiential Learning Model (ELM). The students are challenged to go from abstract theory to application of the theory. This step is characterized by a simple
question to the student of how they will use the new information from the GNI step.
a. Determine if the students have learned the material presented by soliciting general

questions, getting answers from the students, and correcting any misunderstandings.
b. Ask questions similar to the following:
Question 1:
What does this mean to me?
Question 2:
How will you use the knowledge gained from this lesson in future assignments.
Question 3:
What has surprised you about the content?
Question 4:
What do you anticipate to be the most difficult aspect of what you learned today?
Question 5:
What do you think is the most important part?
Answer: There are no right answers as such for these questions.

Review Summary:

During this LSA, we discussed conducting decontamination of your individual equipment.

ELO K - LSA 6. Learning Step / Activity ELO K - LSA 6. Conduct Mask Confidence Training (Apply).

Method of Instruction:	Practical Exercise (Hands-On/Written)
Mode of Delivery:	Resident Instruction
Instr Type (I:S Ratio):	Military - ICH (1:10)
Time of Instruction:	2 hrs 15 mins
Media Type:	Practical Exercise
Other Media:	Unassigned
Security Classification:	This course/lesson will present information that has a Security Classification of: U - Unclassified.

a. Personnel Requirements.

(1) Range Officer in Charge (OIC). One CBRN Officer (AOC 74A) in the rank of 2nd Lieutenant (2LT) or above, or a CBRN NCO (MOS 74D) in the rank of Sergeant (SGT) or above.

NOTE: A non-74A CBRN Officer (2LT or above), or a non-74D (SGT or above) may be used in lieu of the 74A/74D as long as the instructor is a graduate of the two-week CBRN Defense Course (DA PAM 385-63).

(a) The OIC assigns and trains all range personnel on their duties.

(b) In order to monitor and supervise all facets of the MCT, the OIC floats between the MCT's Pre- Chamber, In-Chamber, and Post-Chamber operations.

(2) Range Safety Officer (RSO). One SGT or above, or one 2LT or above.

NOTE: A separate RSO is needed only if required by the Local Range SOP. The Local Range SOP could allow the OIC to perform RSO duties, or not require an RSO at all. Defer to the local Range SOP for RSO requirements.

(3) Medic. Combat Medic (MOS 68W) or Combat Lifesaver in lieu of Combat Medic if authorized by the Local Range SOP.NOTE: The manning of the below positions (Group Leaders, Pre/In/Post Chamber Managers) can be reduced or increased as needed by the Range OIC based on the MCT site variables (i.e. CS Chamber size/configuration, topography, number of Soldiers processing through the site, and the number and size ofgroups, etc).

(4) Group Leader(s) [GL(s)]. GL(s) lead 10 to 15 Soldiers at a time through the MCT operation (Pre- Chamber, In-Chamber, and Post-Chamber). GL(s) are responsible for conducting the mask seal checks, performance of the In-Chamber MCT exercises, and conduct of the group's AAR. (NOTE: The AAR can be done in one big group after all small groups have completed MCT, or given to each small group as they complete the MCT).

(5) Pre-Chamber Site Manager. The manager will monitor and organize personnel arriving at the range into groups. The manager or range OIC will conduct an initial briefing covering safety, admin, and range orientation.

(6) In-Chamber Site Manager. The manager is stationed inside the chamber, and has the primary duty of monitoring and operating the CS Generator. The manager's secondary duty is to assist GLs as each group enters the chamber (i.e. leading personnel to exit when their mask seal fails etc.). The manager will maintain the CS charge in the chamber at the approved levels. The manager will open and pour CS capsule contents onto the metal pan/plate as required, and save used CS capsule shells and wrapping for turn-in to the Ammunition Supply Point (ASP). The manager will also ensure that the electric stove's temperature does not exceed 200 Degrees Celsius (392 Degrees Fahrenheit) and the stove temperature is set as low as possible to achieve vaporization of the CS powder.

(7) Post-Chamber Site Manager. The manager will take control of personnel that exit the chamber early due to mask sealing issues, and guide personnel to the medic's location if they need medical attention. The manager will also provide direction/guidance to each group's Soldiers as they exit the chamber.

b. Facility Requirements. The MCT is conducted in a permanent facility with recommended dimensions of 24' width x 24' length x 8' height. The dimensions equate to: 576 Square Feet, or 4608 Cubic Feet, or 130.5 Cubic Meters. The facility will have:

(1) The capability to maintain a fairly uniform concentration of airborne CS.

(2) Adequate lighting.

(3) Separate entry and exits (Preferred requirement, but optional).

(4) An electrical outlet (Preferred requirement, but optional).

(5) An adequate space to support a group of 10 to 15 Soldiers performing MCT Exercises.

(6) Fireproof CS Generator Stove Platform (i.e. table with a metal sheet on it that the stove is placed on.

(7) Two Class A/B/C fire extinguishers.

c. Material Requirements.

(1) Infrared Thermometer. Used for monitoring the stove's surface temperature to ensure that it does not exceed 200 Degrees Celsius (392 Degrees Fahrenheit).

(2) CS capsules (DODIC 765). Obtained through the supply channels as a Class V (Ammunition).

(3) Qualified Combat Medic (MOS 68W) with ambulance, his/her protective mask, resuscitation equipment, and litter.

NOTE: A Combat Lifesaver can be used in lieu of a 68W Combat Medic if authorized by the Local Range SOP.

(4) Ambulance. NOTE: If authorized by the local range SOP, the ambulance can be a vehicle that is identified with red crosses and equipped with a radio system capable of communicating with the local Range Control.

(5) Litter.

(6) Portable Emergency Eyewash Station that meets Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.151 (c), and American National Standards Institute (ANSI)/ International Safety Equipment Association (ISEA) standard Z358.1-2009.

(7) Resuscitator.

(8) CS Generator station, consisting of the following items.

(a) Metal pot or pan to place on stove and put CS powder in.

(b) Metal sheet pan used as fireproof surface to place stove on (See metal pan under bricks in Figure 1 as an example).

(c) Single burner electric stove (a.k.a. hot plate); Stove must not exceed 200 Degrees Celsius (392 Degrees Fahrenheit). If no electric power is available to operate a single burner electric stove, then create an improvised stove consisting of a candle placed under an upside down tin can (i.e. a large can obtained from a Dining Facility [DFAC] referred to as a #10 Can) placed on a couple of bricks to raise it off the ground several inches. Puncture can with a sharp object to make several ventilation holes in the bottom of the can around the outer perimeter, and in the side of the can (See Figure 1 for an example). To ensure the stove remains hot enough to vaporize the CS powder placed on it, make sure the candle flame remains 1/2 to 1 inch from the bottom of the stove. Periodically adjust the distance of the candle flame to the bottom of the can, as the distance will increase as the candle melts.

(d) CS capsules (DODIC 765).

(e) Fire Proof CS Generator Platform. (i.e. table with a metal sheet on it that the stove is placed on) This platform is used to place electric or improvised stove on. Positioned two feet away from flammable material.

(f) Two Class A/B/C fire extinguishers; One placed inside the CS chamber and one placed just outside the entry door.

d. Safety.

(1) CS Chamber Inspection.

(a) Make sure a fire extinguisher is located just outside the entry door, and another one is located inside the CS Chamber.

(b) Make sure Fireproof CS Generator Platform is two feet away from flammable material (i.e. wooden walls).

(c) Identify any physical hazards, and eliminate or mitigate them.

(d) Ensure lighting is adequate.

(2) CS Exposure Concentrations. The organization responsible for the chamber must contact the local/installation Safety and Industrial Hygiene (IH) Office to have a Industrial Hygienist monitor and conduct hazard assessments of CS exposure concentrations on a annual basis. Semiannually the IH Office will have a Industrial

Hygienist conduct a visual assessment to insure that units/training cadre are following the posted procedures for CS concentration level establishment and sustainment. The IH exposure assessment will be used to validate the CS capsule dosage in paragraphs 8.a.(3) and 8.b. or adjust as necessary to maintain the appropriate training concentration level. Request guidance from the local Military Treatment Facility's IH Office on appropriate personal protective equipment (PPE) (such as masks) for cleaning mask confidence training facilities. Implement periodic cleaning of the gas chamber to reduce residual CS build-up using wet methods while wearing PPE. Request guidance from the local/installation Environmental Office to avoid possible soil contamination during chamber cleaning. (ALARACT 051/2013).

(3) CS Capsules. Ensure that only CS in capsule form (Department of Defense identification code [DODIC] K765) is used in the CS chamber (DA Pam 385-63 and FM 3-11.11, Chapter 6).

(4) Material Safety Data Sheet (MSDS). Follow the CS's MSDS in regard to first aid. Ensure a copy of the MSDS is on site.

NOTE: Ensure medic gets a copy of the MSDS and reads it.

(5) Personnel Readiness Evaluation. Prior to MCT ensure all scheduled Soldiers have had a readiness evaluation.

CAUTION: Reference DA PAM 385-63, Paragraph 13-2.a(4). Prior to scheduled MCT training, supervisors must conduct a readiness evaluation of all personnel before they are exposed to RCAs (i.e. CS). Any personnel with respiratory ailments, recent eye surgery, or eye infections, open wounds, severe facial acne, or any active dermatitis, and pregnant personnel must be referred to a medical officer for evaluation. The medical officer will evaluate the health records of these individuals and, when necessary, examine the personnel to determine their readiness to undergo training without undue medical risk. The examination results (stating can/cannot participate in training with RCAs ONLY) will be documented in the personnel medical records.

(6) Contact Lenses. They will not be worn while wearing the protective mask. Individuals who normally wear contact lenses will remove them and use optical inserts. Unnecessary eye irritation will occur if CS particles are trapped under contact lenses. The lenses can be lost due to excessive tearing. All Soldiers requiring corrective lenses will have masks with optical inserts installed before participating in MCT.

(7) Water Supply. Ensure that an adequate water supply is available during the MCT. Soldiers should be encouraged to hydrate based on the additional heat stress placed on them.

(8) Laundry. Launder CS-contaminated clothing normally.

(9) CS Contact. Do not allow the powder form of CS to contact the skin or eyes.

(10) Portable Eye Wash Station. Ensure that an eye wash station is readily available, that has the ability to flush CS contaminated eyes with a 1 percent solution of sodium bicarbonate (baking soda). The Portable Emergency Eyewash Station must meet Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.151 (c), and American National Standards Institute (ANSI)/ International Safety Equipment Association (ISEA) standard Z358.1-2009.

NOTE: When eyes are contaminated with a CS agent, treat them with a 1 percent solution of sodium bicarbonate (baking soda). If not available, hold the eyes open with fingers, flush with water for not fewer than 15 minutes, and then seek medical attention (DA PAM 385-63).

NOTE: Soldiers will not be ordered or required to enter a charged CS Chamber without donning a properly fitting protective mask. Solders with a defective mask or an improper sealing mask will be immediately removed from the chamber and will correct deficiencies prior to reentry. (ALARACT 051/2013).

(11) Unprotected Personnel. Do not allow unprotected personnel to remain in the area during training. If they are MCT participants, then keep them upwind of the CS Chamber. If they are not MCT participants, remove them from the range.

(12) Local Range Standard Operation Procedures (SOP). Follow all Local Range SOPs.

(13) Medic Support. Ensure a qualified medic with ambulance, his/her protective mask, resuscitation equipment, and litter is on site.

NOTE: If authorized by the Local Range SOP, a qualified Combat Life Saver can be used in lieu of an actual Combat Medic, and a vehicle not specifically manufactured as an ambulance can be used as the ambulance, as long as it is marked as such in accordance with local Range SOP requirements.

(14) Adverse Reactions to CS Exposure. Direct anyone suffering adverse reactions, other than temporary coughing or minor burning or tearing of the eyes, to the installation medical treatment facility for evaluation and treatment.

(15) Fire Extinguishers. Ensure everyone knows the locations of fire extinguishers.

(16) Mask Fit Tests. The unit's CBRN Noncommissioned Officer (NCO) will fit and test protective masks according to appropriate mask technical manuals prior to Soldiers participating in MCT. This means at the unit prior to arrival at the MCT (i.e.

during unit in-processing).

(17) CS Chamber Location. Ensure that the facility or chamber is located at least 100 meters from any other activity and 500 meters from uncontrolled civilian access roads and cantonment areas (DA Pam 385-63).

(18) MCT Cadre Identification. Ensure that instructors are clearly identifiable to the MCT participants.

(19) Chamber Exits. Identify exit routes and keep exit doors of the chamber clear at all times.

e. Chamber Preparation.

(1) Initial CS Concentration Establishment. Establish the initial CS concentration in the CS Chamber by using the items listed.

NOTE: The only authorized stoves allowed for CS generation are the electric stove, and the improvised stove fueled by a candle. No other fuel sources are authorized for the improvised stove (i.e. propane, gasoline, sterno ™, canned heat ™.

DANGER: High temperature dispersion (greater than 700 Degrees Celsius) of CS may release hydrogen cyanide and hydrogen chloride.

(a) Place electric stove (Reference Table 1) or improvised stove on the Fireproof CS Generator Platform. Set the metal pan (Reference Table 1) on the stove, and when ready for use, set the temperature control on the electric stove to a setting that is no higher than 200 Degrees Celsius (392 Degrees Fahrenheit) but high enough to cause CS powder placed in the metal pan to vaporize. Periodically check the metal pan's surface temperature using the infrared thermometer designed for checking hot surfaces from a distance, to ensure that the pan does not exceed 200 Degrees Celsius (392 Degrees Fahrenheit). If the 200 Degrees Celsius is exceeded, then adjust the electric stove temperature setting down, or if the improvised stove is used, increase the distance of the candle from the bottom of the improvised stove until the temperature is below 200 Degrees Celsius.

NOTE: If using an electric stove, then use only a 110-120 volt single burner electric stove that has a Nationally Recognized Testing Laboratory (NRTL) marking/label on it to indicate that it is approved for use by the NRTL. Any electric appliance, extension cord, electrical receptacle, Ground Fault Circuit Interrupt (GFCI) used must meet the safety requirements contained in DA PAM 385-26 The Army Electrical Safety Program. All burners have different temperature setting markings, for this reason, the installation's Industrial Hygiene Office will use an Infra-red (IR) Thermometer to test and verify the maximum burner temperature point on the stove based on the NIOSH

guides indicated melting point (MLT) of 95 to 96 Degrees Celsius (203 - 205 Degrees Fahrenheit). This point will be clearly marked on the stove temperature dial using a permanent type marking. The following label will be typed up by the supporting Industrial Hygienist and placed on the stove where it is easily seen: "WARNING! When using this stove to vaporize CS power (DODIC K765), set the temperature dial at the mark placed on the stove by an Industrial Hygienist, which indicates the maximum allowable temperature setting of 95 - 96 Degrees Celsius (203 - 205 Degrees Fahrenheit)".

(b) Compute initial CS concentration level capsule requirements (ALARACT 051/2013). To determine the number of capsules needed to establish the initial CS concentration level in the CS Chamber, the installation Safety Office's Industrial Hygienist will use the following formula:

1 Number of capsules = Room volume in cubic meters (m3) X 0.0107.To determine the Room volume in cubic meters (m3), convert room volume measured in cubic feet to cubic meters using the formula: Height (feet) X Width (feet) X Length (feet) X 0.02832 (m3/ft3) = Volume (m3).

2 Example using the Recommended CS Chamber Dimensions.

3 Volume (m3) computation: 8 ft x 24 ft x 24 ft x 0.02832 m3/ft3 = 130.5 m3

4 Number of capsules computation: 130.5 x 0.0107 = 1.4 (Using normal rounding rules round the number down if .4 or less, and round up if .5 or more. If rounding down gives less than one capsule, then use one capsule. In this example you would round down from 1.4 to 1.0. So you would need one capsule.

NOTE: Once the Industrial Hygienist has determined the number of capsules required to establish the initial CS concentration level for a particular facility, he/she will post a sign on the entry door or next to it that states the facilities room volume in cubic meters (m3), and how many CS Capsules are required to establish the initial CS concentration level, and the number of capsules required to sustain the concentration level (1 capsule for every 50 Soldiers that exit the chamber). This CS Chamber's room volume in cubic meters (m3) is ____. Use _____ CS Capsule(s) to establish theinitial CS concentration level.

(2) Use one CS Capsule or every 50 Soldiers that exit the chamber to sustain the CS concentration level.

(3) CS Concentration Level Sustainment. To sustain the desired concentration level, the In-chamber Site Manager will add one CS capsule for every 50 Soldiers that exit the chamber.

(4) Open CS capsule(s) by pulling the two ends apart and dumping the raw powder onto the center of the metal pan (ALARACT 051/2013).

(5) Retain the CS capsules encapsulating shells and turn them into the Ammunition Supply Point (ASP) as residue if required by your local ASP, or dispose of them as environmental waste.

f. Training Procedures.

(1) Ensure that a chart of the CS chamber and procedures are displayed outside the chamber.

(2) The unit's CBRN Noncommissioned Officer (NCO) will fit and test protective masks according to appropriate mask technical manuals prior to Soldiers participating in MCT. This means at the unit prior to arrival at the MCT (i.e. during unit in-processing).

(3) Brief Soldier's on the purpose of the training, the type of agent used, and the MCT process.

(4) Pre-position Soldiers who are waiting to enter the facility upwind to avoid potential exposure to the agent before masking.

(5) Give a Safety Briefing covering as a minimum:

(a) Medic's location.

(b) Eye wash station location.

(c) Locations of Fire extinguishers.

(d) Identify personnel who cannot go into the chamber for medical reasons such as respiratory ailments, recent eye surgery, or eye infections, open wounds, severe facial acne, or any active dermatitis, and pregnant personnel (DA PAM 385-63).

NOTE: Have personnel with problems report to an instructor and the on-site medic for further evaluation.

(e) No running on the range or in the chamber.

(f) Prior to entering the chamber, ensure that your mask fits and is working correctly.

(g) Instruct all personnel wearing contact lenses to remove them

(6) Break Soldiers down into groups appropriate for the size of the CS chamber facility. The group that is next in line to process through the CS Chamber is called the On-deck Group.

(7) Give the On-deck Group the "GAS, GAS, GAS" vocal alarm.

(8) Check the On-deck Group's masks to ensure each Soldier's mask functions normally and seals properly. Replace any mask that does not seal due to improper size with one that fits. If a Soldier can't get a good mask seal then the Soldier will not be made to go into the CS Chamber.

(9) Have the On-deck Group enter the chamber when instructed to do so.

(10) MCT Exercises. While inside the CS Chamber the Soldiers will be directed to perform the following exercises:

NOTE: No other physical movement or scenario based training exercises are authorized inside the CS Chamber during MCT.

WARNING: Soldiers will not be exposed to CS more than 15 seconds without protection (i.e. when breaking the seal of the mask and resealing it or when breaking the seal before exiting the chamber) (ALARACT 051/2013).

NOTE: If during the MCT exercises, any Soldier experiences symptoms of CS exposure such as coughing, excessive tearing of eyes, or heavy mucus flow from the nose, have the In-Chamber Site Manager immediately lead the Soldier out of the facility. The GL will identify and correct the problem and coordinate with the Pre-Chamber Site Manager to have the Soldier assigned to another group so the Soldier can enter the chamber with the group.

(a) MCT Exercise #1 Breathing Normally - In a normal standing position, without talking, have the Soldiers breathe normally.

(b) MCT Exercise #2 Breathing Deeply - In a normal standing position, have the Soldiers breathe slowly and deeply, taking precautions not to hyperventilate.

(c) MCT Exercise #3 Turning Head Side to Side - Instruct the Soldiers to stand in place and slowly turn their heads from side to side to a full range of motion on each side. The Soldiers hold their heads at each extreme momentarily and inhale at each side.

(d) MCT Exercise #4 Moving Head Up and Down - Instruct the Soldiers to stand in place and slowly move their heads up and down. The Soldiers will inhale in the up

and down positions.

(e) MCT Exercise #5 Rotating Chin - Instruct the Soldiers to stand in place and move their jaws in a circular pattern, holding their mouths slightly open to simulate speaking.

(f) MCT Exercise #6 Running In Place - Instruct the Soldiers to run in place for 60 seconds.

(g) MCT Exercise #7 Clearing and Sealing Mask in a Contaminated Environment - Tell the Soldiers that the reason they are doing this exercise is that they may have to reseal their mask in a contaminated environment because the seal was accidentally broken, or because they have to decontaminate their face and the inside of their mask. Then have them close their eyes, take a deep breath, hold their breath, and break the seal of their protective mask by grasping the mask with both hands and pulling the bottom of the mask away from their face approximately 4 to 6 inches. Have them hold that position for 5 to 10 seconds, and then clear and seal their mask as described in Common Task # 031-COM-1035.

NOTE: After sealing the mask, if any Soldier experiences symptoms of CS exposure such as coughing, excessive tearing of eyes, or heavy mucus flow from the nose, have the Soldier exit the facility immediately.

(11) Mask Removal. After the MCT Exercises are complete, the GL will line the group up in front of the chamber's exit door so that each Soldier is facing the back of the Soldier in front of them. The GL will then make the following statement to the Soldiers: "When I say DOFF, keep your eyes open, breath normally, and remove your mask and hold it with your left hand. Then, in a single file and while maintaining your right hand on the shoulder of the Soldier in front of you, exit the chamber."

NOTE: The purpose of having the Soldiers remove the mask is to ensure that the Soldiers have no doubt that the mask worked as designed, and that the Soldiers are convinced that the chamber contains CS gas. This action will also demonstrate the consequences of not properly maintaining and donning the mask to standard.

(12) When Soldiers exit the MCT, the Post-Chamber Site Manager will tell the Soldiers: "Keep your eyes open. Raise your arms out from your side. Don't touch your face or rub your eyes. Move into the wind to the Post-Chamber AAR Rally Point."

(13) Post-Chamber AAR. The group leaders will conduct an after-action review (AAR), focusing on the importance of a properly fitted mask. Make the following statement to the Soldiers: "The protective mask is a critical CBRN protection asset only if it fits properly. The protective benefit of the mask can be improved and maintained through proper maintenance, donning, adjustment, and wear of the

protective mask."

(14) Once the MCT is complete and before leaving the CS Chamber, ensure that the stove is turned off and unplugged from the electrical outlet (if the improvised stove is used, make sure the candle is extinguished).

Check on Learning:

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA.

Review Summary:

During this LSA, we performed Mask Confidence Training.

CHECK ON LEARNING (ELO K):

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this LSA. Consider the questions below.

Question: How quickly should you be able to assume MOPP level 4 once a CB attack occurrs?

Answer: Within 8 minutes.

REFERENCE: ATP 3-11.32.

REVIEW SUMMARY(ELO K):

During this ELO, we discussed the steps for reacting to a chemical or biological attack to include masking, seeking shelter, assuming MOPP 4, hydrating yourself, and decontaminating.

SECTION IV. SUMMARY

Method of Instruction:	Discussion (Small or Large Group)
Mode of Delivery:	Resident Instruction
Instr Type(I:S Ratio):	Military - ICH (1:25)
Time of Instruction:	5 mins

Check on Learning

Conduct a check on learning by developing questions that solicit student feedback on the major ideas covered during this lesson. Consider using the below questions.

Question: What are the conditions under which you don your protective mask automatically?

Answer:

(1) A chemical alarm sounds.

(2) A positive reading is obtained on detector paper.

(3) Individuals exhibit symptoms of CB agent poisoning, such as difficulty breathing, coughing, wheezing, vomiting, or eye irritation.

(4) You observe a spill or cloud of unknown material(s).

(5) You react to an IED explosion where you suspect the release of a CB agent.

(6) You observe a contamination marker.

(7) Your supervisor orders you to mask.

(8) You observe personnel wearing protective masks.

(9) You observe other signs of a possible CB agent hazard/attack.

REFERENCE: ATP 3-11.32 MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR PASSIVE DEFENSE.

Question: How do you give the alarm for a Chemical or Biological attack?

Answer:

(1) Shout, "Gas, Gas, Gas."

(2) Give the appropriate hand-and-arm signal.

(3) Hit two metal objects together.

REFERENCE: ATP 3-11.32 MULTI-SERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR CHEMICAL, BIOLOGICAL, RADIOLOGICAL, AND NUCLEAR PASSIVE DEFENSE.

Review/ Summary

During this block of instruction, we have learned:

-Maintenance on your assigned protective mask.

-Protecting in a contaminated area with your protective mask.

-Conducting personal hydration in a contaminated area.

-Decontatminating yourself.

-Decontaminating your equipment.

-Using M8 and M9 paper for identifying liquid chemical agents.

-Marking a contaminated area.

-Reacting to a nuclear attack.

-Reacting to a chemical or biological attack or hazard.

SECTION V. STUDENT EVALUATION

Testing Requirements	Material covered in this lesson will be evaluated through practical exercises.
Feedback Requirements	Schedule and provide feedback on the evaluation and any information to help answer student's questions about their performance. Provide remedial training as needed.

Appendix A - Viewgraph Masters

React to Chemical, Biological, Radiological, and Nuclear (CBRN) Hazard
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Sequence	Media Name	Media Type
None		

Appendix B - Assessment Statement and Assessment Plan

Assessment Statement: None.

Assessment Plan: None.

PRACTICAL EXERCISE(S)/SOLUTION(S) FOR LESSON 031-C1019 Version 20.0 ©

Appendix D - Student Handouts

React to Chemical, Biological, Radiological, and Nuclear (CBRN) Hazard
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Sequence	Media Name	Media Type
None		