

APPENDIX A

GUIDELINES FOR HEALTH SERVICE SUPPORT IN A NUCLEAR, BIOLOGICAL, AND CHEMICAL ENVIRONMENT

A-1. General

As the HSS unit prepares for its support role, NBC considerations must be included. This appendix provides guidelines for HSS planning and operations in an NBC environment.

A-2. Predeployment

When preparing the unit's mobilization plan and TSOP include the supplies and equipment that will be required for the unit to operate in an NBC environment. DO NOT wait until ordered to mobilize to begin preparation for the mission. A well prepared and trained unit stands a much better chance of surviving and accomplishing their assigned mission. At a minimum include the following:

- Nerve agent pretreatment and antidotes (see FM 8-285).
- Blister agent antidote/treatment (see FM 8-285).
- Incapacitating agent treatment (see FM 8-285).
- Lung-damaging agents (choking agents) treatment (see FM 8-285).
- Blood agents (Cyanogens) treatment (see FM 8-285).
- Prophylaxis for suspect biological agents (based on threat in AO).
- Biological agent treatment (based on suspect threat agent in AO).
- Protective mask with hood.
- Replacement filters for protective mask.
- Two sets of MOPP per individual assigned to unit.
- All TOE radiation detection equipment.
- All TOE chemical agent detection equipment.
- All TOE NBC alarm systems.
- Biological agent detection equipment, if available.
- Decontamination equipment and supplies (DS2, STB, pails, sponges, mops, decontaminant application apparatus, individual skin decontamination kits).
- Material for covering supplies and equipment (such as plastic sheeting, tape, tarpaulins).
- Material for preparing improvised protection in shelters (such as plastic sheeting, tarpaulins, tape, sandbags).

- Collective Protection Shelter systems with repair parts (MTFs).
- Chemical warfare agent patient decontamination medical equipment set (MES). The MES can also be used to decontaminate nuclear and biological patients.
- Chemical warfare agent patient treatment MES. Components may also be used to treat nuclear and biological patients.
- Water supply for patient decontamination.
- Shovels.
- Sanators.
- Identification of patient decontamination team members from supported units.
- Applicable references (ARs, FMs, TMs, and SOPs).

A-3. Mobilization

During mobilization the unit must ensure that all supplies and equipment are on hand and are serviceable. Commanders and leaders of MTFs must also ensure that—

- Movement plans are prepared.
- Transportation support requirements are identified and requested.
- Load plans include NBC supplies and equipment.
- Mission-oriented protective posture level has been established for the movement, when applicable.

A-4. Establishing a Medical Treatment Facility

When establishing an MTF, some types of CPS must be set up as the conventional shelters are being set up. Once the conventional shelter has been set up and is operational, CPS cannot be established without first taking down the existing shelter. Follow the technical manual provided with the CPS system issued to your unit. Things to do in preparation for operating in the NBC environment include, but are not limited to—

- Clear the AO. Survey the area to ensure contamination is not present before establishing the MTF.
- Establish detection stations on the units perimeter.
- Determine direction of prevailing wind. All contaminated patients, ambulances, and helicopters must arrive on the downwind side of the MTF; this must be done with or without CPS.

- Set up of the triage, patient decontamination, and contaminated treatment area (including overhead cover).
- Establish the contaminated ambulance point.
- Establish the contaminated helicopter landing area.
- Prepare the contaminated waste dump.
- Establish the clean ambulance point.
- Establish the clean helicopter landing area.
- Mark the hot line and prepare the shuffle pit.
- Employ CPS system (close shelter, CB filters, close air locks, maintain overpressure), if available.
- Establish the clean treatment area 30 to 50 yards (meters) upwind of hot line, when CPS is not available.
- Ensure provisions for overhead cover at the patient decontamination area.
- Request patient decontamination personnel from supported units (BAS and DCS), or units located within the geographic area (hospitals).
- Request issue of chemical patient treatment and decontamination MES, if not on-hand.
- Establish contamination monitoring procedures in CPS.
- Establish control procedures for personnel crossing the hot line (through the shuffle pit).
- Establish CPS entry and exit control procedures (see Appendix D).
- If CPS is not available at hospitals, improvisations must be made (Appendix B).

A-5. Operate a Medical Treatment Facility Receiving Contaminated Patients

An MTF must be prepared to receive contaminated patients. All actions listed in paragraph A-4 above must be taken. During operations actions that must be taken are—

- Establish MOPP level commensurate with operation.
- Require all ambulances and helicopters with contaminated (or suspected) patients to stay downwind of the MTF.
- Conduct initial triage, decontamination, and contaminated treatment downwind of the clean treatment area.
- Ensure all personnel crossing the hot line are decontaminated,

- Monitor personnel entering clean area.
- Monitor for contamination in the clean treatment area (with or without CPS).
- Monitor CPS for entry of contamination.
- Provide protection for patients if contamination enters MTF.
- Ensure personnel drink sufficient quantities of water to prevent heat injury.
- Provide protection for personnel and patient in cold environment. Use sheltered/heated area for patient decontamination.
- Provide protection of personnel and patient in hot environment.
- Control contaminated waste.
- Isolate biological agent patients, if necessary to control spread of agent/disease.
- Protect supplies and equipment from contamination.
- Provide medical resupply to clean areas.
- Provide food to personnel and patients in CPS.
- Provide latrine facilities in CPS.
- Provide drinking water in CPS.

A-6. Preventive Medicine Services

Preventive medicine personnel must monitor water supplies for contamination. To perform this mission, equipment and supplies must be available and operational. Essential equipment and supplies include—

- Radiation detection (AN/PDR27, AN/VDR2).
- Preventive Medicine Water Quality Control Set.
- M272 Chemical Agent Detection Set.
- Biological sample collection kit/supplies.

A-7. Veterinary Services

Veterinary personnel must provide treatment to government-owned animals and quality control of food supplies. To perform their mission, essential supplies and equipment include—

- Antidotes/treatment for chemical agent poisoning.
- Radiation detection equipment.

- M272 Chemical Agent Detection Set.
- Biological sample collection kit/supplies.

A-8. Dental Services

Most dental services will have to be suspended in NBC contaminated areas. Emergency services will have to be provided in a clean area or in an MTF with CPS. Essential supplies and equipment include—

- Dental treatment set for maxillofacial injuries.
- Material for covering and protecting supplies and equipment.

A-9. Combat Stress Control

Although specific supplies and equipment are not required for CSC, personnel must be prepared to provide their services under NBC conditions.

A-10. Medical Laboratory Services

Designated supporting laboratories must be prepared to collect specimens of suspect biological agents from humans, water sources, and food supplies. They must also be prepared to perform initial identification of biological agents in specimens collected from humans. They must also be prepared to process samples collected by preventive medicine and veterinary personnel. To perform this mission, supplies and equipment should include—

- General supplies and equipment.
 - Biological specimen collection kits and supplies.
 - Biological test kits or apparatus.
- Microbiology services.
 - Immunology/Serology MES.
 - Microbiology MES.
 - Laboratory, General MES.
- Veterinary services.
 - Laboratory, veterinary MES.
 - Veterinary post-mortem field MES.

- Preventive medicine services.
 - Water, biological sampling supplies and equipment.
 - Radiation protection MES.
 - Entomology MES.
 - Alpha/beta detector.
 - Microscope phase.
 - Ambient air analyzer.
 - Epidemiology MES.

A-11. Health Service Logistics

Health service logistics must continue their support role. To continue this role all supplies must be protected from contamination. Material required includes—

- Detection equipment.
- Plastic sheeting.
- Tape.
- Tarpaulin.

NOTE

These guidelines contain items that are required specifically for HSS operations in an NBC environment. They are in addition to supplies and equipment required for conventional (non-NBC) operations.