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VETERINARY SERVICE

TACTICS, TECHNIQUES, AND PROCEDURES

HEADQUARTERS, DEPARTMENT OF THE ARMY

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VETERINARY SERVICE TACTICS, TECHNIQUES, AND PROCEDURES

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PREFACE

This publication outlines the functions and operations of each veterinarian element within an area of operations (AO). It provides tactics, techniques, and procedures for veterinary support. The information provided in this publication will assist veterinary commanders and their staffs to operate efficiently in the corps and echelons above corps (EAC) arenas. It may be used by medical planners to supplement Field Manual (FM) 8-10 and FM 8-55.

The staffing and organizational structures presented in this publication reflect those established in the living table(s) of organization and equipment (LTOE) in effect as of this publication date. However, such staffing is subject to change to comply with the manpower requirements criteria outlined in Army Regulation (AR) 570-2 and can be subsequently modified by the modification table(s) of organization and equipment (MTOE).

The proponent of this publication is the United States (US) Army Medical Department Center and School (AMEDDC&S). Send comments and recommendations on Department of the Army (DA) Form 2028 directly to **Commander, AMEDDC&S, ATTN: MCCS-FCD-L, 1400 E. Grayson Street, Fort Sam Houston, Texas 78234-6175.**

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

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CHAPTER 1

VETERINARY SUPPORT IN MILITARY OPERATIONS

Section I. MISSION

1-1. Veterinary Mission

a. The veterinary service missions are—

- To conserve the fighting strength.
- To protect the health and welfare of the military community.
- To protect the financial interest of the government.

b. This is accomplished by the following functions:

(1) *Food hygiene and quality assurance*.

- Ensuring food wholesomeness, safety, hygiene, and related quality assurance standards.
- Performing food procurement examination missions in support of Class A Rations such as dairy products, red meats, poultry, bakery items, fresh fruits and vegetables, bottled water, and ice.
- Conducting basic food microbiological laboratory procedures to ensure adherence to food safety standards and to identify potential foodborne pathogens.
- Advising theater logistics units on storing subsistence to minimize threat of nuclear, biological, and chemical (NBC) contamination.
- Inspecting, monitoring, and submitting laboratory samples of subsistence and food-producing animals that are contaminated or suspected of being contaminated by NBC agents.
- Providing food decontamination guidance and instructions to units on decontaminating rations.

(2) *Veterinary medical care*.

- Maintaining the health of all government-owned animals in the AO.
- Providing complete veterinary care for all military working dogs (MWDs).
- Providing veterinary care to indigenous animals as directed.

(3) *Veterinary preventive medicine (PVNTMED)*.

- Establishing prevention and control programs to protect soldiers from diseases transmitted from animals and food.

- Monitoring zoonotic and foreign animal disease in the AO and advising PVNTMED elements on potential hazard to humans.

1-2. Veterinary Support

a. The US Army Veterinary Service is the DOD Executive Agent for veterinary support to the US Army, US Navy (USN), US Marine Corps (USMC), and US Air Force (USAF). Veterinary support is also provided upon request and subject to availability of resources for government-owned animals of other federal agencies. In some instances, it is also provided to allies/coalition partners and/or host-nation (HN) agencies. The US agencies provided this support include—

- Department of Agriculture.
- Department of Commerce.
- Drug Enforcement Agency.
- Secret Service.
- Department of State.
- Border Patrol.
- Customs.

b. The medical detachments, veterinary service, provide veterinary support in an AO. These detachments are assigned to a medical brigade, or a medical detachment, veterinary service headquarters.

c. As the mission requires, veterinary personnel may be attached to military command and control (C2) units or civilian management elements to provide veterinary support in stability and support operations (SASO).

Section II. OPERATIONS CONCEPT

1-3. Veterinary Concept of Operations

Veterinary services function in two broad categories. These categories include—

- Quality assurance/safety of food.

- Animal medicine.

a. Food Safety and Quality Assurance Services. Medical detachments, veterinary service, provide food safety/quality assurance services. This support is a primary means for preventing disease and nonbattle injury (DNBI) to US forces. Medical detachments, veterinary service, provide food safety/quality assurance services as a primary means for preventing foodborne illnesses in US forces in an AO. Services include sanitary inspection and approval of food sources in support of Class A Rations and surveillance inspections of food storage facilities. Procurement and surveillance inspections of all subsistence for wholesomeness and quality is an ongoing mission. Surveillance inspections of any subsistence items suspected of NBC contamination is performed upon request. Finally, the responsible detachment prepares, publishes, and distributes the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement in the AO.

b. Animal Medicine Services. Levels I and II veterinary medical care for animals is provided by medical detachments, veterinary service (large), and medical detachments, veterinary service (small). Levels I and II veterinary care for animals includes emergency treatment, stabilization, and evacuation. Level III veterinary medical care is provided by medical detachments, veterinary medicine. Level III veterinary medical care is definitive and comprehensive (complete care). Level III veterinary medical care is provided to units with MWDs and other government-owned and indigenous animals. The levels of veterinary medical care and the types of veterinary detachments deployed to an AO are mission, enemy, terrain, troops and time available (METT-T) driven. At all levels of veterinary medical care, surveillance, prevention, and control programs for diseases common to both animal and man are implemented. The veterinary staff officer provides advice and guidance to the medical commander of these threats.

c. Employment and Deployment. Veterinary units are designed with the flexibility and mobility to deploy numerous teams or individuals to accomplish diverse and decentralized food inspection support operations, or to consolidate to meet requirements of a larger support operation. The size of the supporting veterinary unit is dependent upon the total number of DOD military personnel being supported (see Appendix A, Format for the Veterinary Estimate). The squads organic to the medical detachment, veterinary service, are 100 percent mobile. They serve in general support to Theater Army Area Command (TAACOM) and corps level (corps support groups [CSGs] rear and forward) Class I logistics units.

(1) Normally, a medical detachment, veterinary service (small), or a veterinary squad from the medical detachment, veterinary service, is the first veterinary asset deployed into an AO, arriving with the initial task force. This unit ensures food wholesomeness, safety, hygiene standards of all operational rations, NBC subsistence surveillance, and public health standards of any local food and commercially bottled water procurement according to the combat health support (CHS) plan (Appendix B).

(2) As the AO matures, additional veterinary squads and the headquarters element from the medical detachment, veterinary service, arrive to support the increased food inspection requirements for all military services.

(3) Veterinary squads are located initially at the developing ports and supply depots such as the general support units (GSUs) located along main supply routes (MSRs). This placement allows the medical detachment, veterinary service (small), to push forward to support corps assets in the division rear area. For example, the medical detachment, veterinary service (small), supports the CSG (forward) as it is supplying Class I to the division.

(4) All veterinary squads are capable of providing Level I health care on an area basis. These squads may attach their enlisted animal health care specialists directly to a deployed USAF unit to provide on-site health care to MWDs in the AO. At EAC/division, Level III animal health care is provided by a medical detachment, veterinary medicine. This unit is usually located near a major USAF base to facilitate the receipt, treatment, or evacuation of injured MWDs in the AO and has the capability for deploying a team into high animal casualty areas for short periods.

(5) In the corps AO, C2 of all veterinary assets is provided by the senior veterinary commander. Technical guidance and AO policy is developed and dictated by the medical brigade veterinarian.

1-4. Veterinary Personnel and the Geneva Conventions

Two categories of personnel are protected by the Geneva Conventions. One is "medical personnel" who are engaged exclusively in the search for or the collection, transportation, or treatment of the sick and wounded. The other category is the "staff" who are engaged exclusively in the administration of medical units and establishment. Medical and veterinary personnel are separate and exclusive groupings in the Geneva Conventions. The presence of veterinary personnel in a medical unit is not enough to entitle them to special protection and privileges under the Geneva Conventions. Nor does their presence alter the special protection afforded other members of the medical unit. Veterinary personnel will be treated as combatants if captured or interned. An exception is made when veterinary personnel are assigned to a medical unit and exclusively perform the full-time duty of transporting the sick and wounded, administering the medical care of patients, and saving human lives, or performing full-time staff duties concerning these tasks. In these special cases, they may wear the brassard, carry a Geneva Conventions Identity Card (Department of Defense [DD] Form 1934), and be entitled to protection under the Geneva Conventions.

CHAPTER 2

ORGANIZATION OF VETERINARY SUPPORT

Section I. VETERINARY STAFF OFFICERS

2-1. Veterinary Staff Officer Assignments

a. Veterinary Corps staff officers are assigned to—

- Major Army commands (MACOMs).
- Medical commands (MEDCOMs).
- Medical brigades (combat zone [CZ] and EAC).
- Area medical laboratories (AMLs).
- Special Forces groups (airborne).
- Civil affairs commands, brigades, teams, and detachments in the public health, governmental, civic action, and civil assistance areas with direct support and general support missions.

b. Veterinary Corps staff officers may also be assigned to joint task forces, United Nation's peacekeeping operations, emergency management agencies for SASO, or other C2 organizations. When it is determined that a veterinary staff officer is necessary, this officer should be assigned to the task force medical group and be included in the initial planning and deployment.

2-2. Duties of the Veterinary Staff Officer

The veterinary staff officer—

- Coordinates veterinary activities with the command surgeon.
- Exercises staff supervision over the veterinary support provided the command or task force.
- Determines requirements for and recommends employment of veterinary units and personnel. The requirements are METT-T driven.
- Establishes policies and procedures for—
  - Ensuring food safety and quality assurance.
  - Preventing and controlling animal diseases of military significance.
  - Establishing approved food sources in the operations area.

- Ensuring that the levels of care and treatment of military animals meet professional standards.

- Establishing procedures for veterinary care and treatment for other than government-owned animals.

- Ensuring compliance with US export/import laws and the laws and regulations of HNs or other foreign countries.

- Ensuring that training priorities for veterinary personnel are accomplished.

- Formulating and establishing food recall procedures for all hazardous subsistence items according to AR 40-660 and Defense Logistics Agency (DLA) Regulation 4155.41.

- Establishing coordination and reporting procedures for food safety issues.

- Establishing priorities for the inspection of subsistence during redeployment operations and for the treatment and care of government-owned animals.

- Establishes and maintains liaison with veterinarians of higher and subordinate headquarters and those of US, allies, coalition partners, and HN veterinary services.

- Prepares or consolidates, evaluates, and forwards statistical and historical data and other required command veterinary reports (see Appendix C).

- Advises the commander on the prevention and control of existing or anticipated foreign animal diseases.

- Provides guidance (advice) on special decontaminating procedures to prevent transmission of animal diseases for equipment being retrograded to the continental United States (CONUS).

- Advises the command and staff on all veterinary matters.

- Conducts staff visits and inspections of veterinary facilities, activities, and units.

- Investigates claims concerning injury or death of indigenous animals resulting from military operations.

2-3. Theater Army Veterinarian

a. In a multicorps operation, the theater Army (TA) veterinarian is the senior veterinary staff officer in the theater of operations (TO). This officer provides technical guidance for the establishment of veterinary policies in the TO.

b. The TA veterinarian—

- Plans and advises the commander concerning policy for DOD veterinary activities throughout the TO.

- Establishes policy and provides technical guidance to all veterinary activities assigned or attached to the TA.

- Recommends policy concerning veterinary operations in a multicorps operation to the TA surgeon.

- Coordinates veterinary medical and surgical support, as directed.

- Approves, disapproves, and maintains records pertaining to the sanitary status of establishments that have requested to be or are listed as sources of local food procurement.

- Establishes policies/procedures for emergency medical evacuation (ground/air) of MWDs.

- Coordinates with theater procurement agencies concerning the notification, status, and possible alternate sources of supply of civilian food establishments.

- Publishes the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement.

- Reports to the TA surgeon and TA commander for all of the above listed activities.

- Establishes liaison with theater contracting personnel, theater Materiel Management Center (MMC) commander, theater chemical officer, and theater food service officer.

2-4. Medical Brigade Veterinarian

a. The medical brigade veterinarian may serve as the corps veterinarian. He normally provides veterinary technical guidance to all veterinary units in the medical brigade AO. *This position should be staffed for early deployment into the AO for veterinary asset coordination and allocation.*

b. The medical brigade veterinarian is the senior veterinary adviser to the medical brigade commander.

c. The medical brigade veterinarian keeps the medical brigade and, as necessary, the corps support command (COSCOM) commander informed of all veterinary activities. He assumes all the responsibilities of the TA veterinarian and the MEDCOM veterinarian if those positions are not staffed. Other responsibilities of the medical brigade veterinarian include conducting inspections and receiving reports that keep him informed on—

- The status of food safety and quality assurance.
- Zoonotic diseases transmitted from animals to humans.
- Status of veterinary care of government-owned animals within the AO.
- Veterinary units providing CHS.

d. The medical brigade veterinarian provides staff estimates pertaining to the deployment and employment of veterinary detachments assigned to the brigade. These detachments provide veterinary support to all DOD elements operating in the corps.

e. The medical brigade veterinarian recommends policy for all veterinary operations within the guidelines of its higher headquarters.

Section II. VETERINARY SERVICE SUPPORT SYSTEM

2-5. Veterinary Support

Veterinary support is a CHS function which is required for support of war and SASO. Veterinary units in an AO provide veterinary services on an area support basis.

a. *Unit Veterinary Support*.

(1) *Military working dog units*. Department of Defense units may have veterinary service personnel attached to provide care for the unit's MWDs. These soldiers are responsible for providing emergency veterinary care and preventive veterinary measures to their assigned MWDs. They also assist in the evacuation of MWD casualties to the nearest veterinary service unit. Veterinary service personnel may be deployed with organic USAF MWD units into an operations area.

(2) *Area medical laboratory*. Veterinary service personnel may be assigned individually or as a complete laboratory section to an AML. These soldiers are the only veterinary laboratory assets in an AO. They provide definitive analysis of food and animal specimens submitted by field veterinary units organic to the AO. They—

- Analyze food samples for safety and quality assurance.
- Detect and diagnose diseases transmissible from animals to humans.
- Provide definitive chemical, histopathological, and microbiological analyses for operational rations and food procurement operations.

- Provide a laboratory diagnostic support facility for MWDs.

- Detect NBC and/or directed-energy exposure in animals.

(3) *Special Operations Forces groups (Airborne)*. Veterinary service personnel are assigned and/or attached to Special Operations Forces. These forces work with indigenous military assets and allied or foreign governmental agencies. They assist in planning and executing population and resource control, civic action, and other security, development, and stability programs. During military and paramilitary operations, Special Operations Forces assist in planning and executing civic action, humanitarian assistance, and other programs designed to expand the governments legitimacy within contested areas. They also provide estimates and data on the resources essential to build an effective infrastructure for civil health and agricultural administration and operations.

(4) *Civil affairs units*. Veterinary personnel are assigned or attached at various command levels in civil affairs units. They—

- Assess available infrastructure to support combat forces.

- Support and coordinate humanitarian and disaster relief in coordination with other DOD elements, other US Government agencies, foreign and HN authorities, and international relief organizations.

- Assist in the planning and coordination of noncombatant evacuation operations (NEO) in the areas of food supply and privately owned animal (pet) evacuation or disposition.

- Assist in coordinating the use of local HN resources such as maintenance of medical facilities, to include animal facilities. They provide and conduct public health, PVNTMED, and civil defense operations in conjunction with the local agencies.

b. Area Veterinary Support. Area veterinary support is the primary method of providing veterinary service in the AO. The extent of support is contingent upon resources, time, and the types and numbers of units to be supported. Additionally, veterinary personnel can be placed in direct support of approved establishments designated for local procurement. Area veterinary support units also conduct vigorous preventive veterinary programs to identify and control those diseases that can be transmitted from animals to humans. Area veterinary medical support to government-owned and indigenous animals can vary from expedient, limited animal medical services and treatment to full medical and surgical care and hospitalization.

2-6. Command and Control

a. Command and control of veterinary units is normally provided by the senior Army Medical Department (AMEDD) commander in the corps AO. The senior veterinary unit commander in EAC provides C2 for veterinary units assigned to EAC.

b. The senior veterinary commander in the corps will exercise C2 over EAC veterinary units in the absence of a veterinary service headquarters. The medical brigade staff veterinarian provides technical guidance through policy statements and mission priorities. The senior theater staff veterinarian in a multicorps operation can be dual-hatted as the MEDCOM veterinarian.

c. The corps senior veterinary service detachment commander provides C2 for all veterinary assets in the corps.

Section III. VETERINARY SERVICE SUPPORT FOR SUBSISTENCE

2-7. Subsistence Support to the Theater of Operations

Veterinary support will also be required for those USAF, USMC, and USN general and direct support, supply, and service units. Veterinary support requirements are based on the mission and the size of the force supported. Medical detachment, veterinary service, and medical detachment, veterinary service (small), are found in support of those TAACOM GSUs that receive, store, and distribute subsistence. These rear GSUs normally provide support from fixed facilities located near ports of debarkation. Additional food safety and quality assurance support is provided to subsistence platoons, support companies, supply companies, and support battalions. The requisitioning and distribution of subsistence is explained in FM 10-23, *Basic Doctrine for Army Field Feeding and Class I Operations Management*. Figure 2-1 depicts the flow of Class I requisition and Figure 2-2 shows the flow of rations in the TO. Veterinary units are found in support of those corps and divisional combat service support (CSS) units that receive, store, and distribute subsistence that is in support of those COSCOM GSUs and division support command (DISCOM) direct support units (DSUs) within the AO.

2-8. Army Subsistence Requisition and Supply System in the Theater

Requisitions for all classes of supply, including Class I, are initiated in the battalion field trains. From that point, the requisitions are forwarded to the DSU, then through the Division Materiel Management Center (DMMC), Corps Materiel Management Center (CMMC), Theater Army Materiel Management Center (TAMMC), to the Defense Personnel Support Center (DPSC), Philadelphia, Pennsylvania. The TAACOM receives corps requirements and routes materiel to the TAACOM MMC. The subsistence is shipped by DPSC from depots or vendors for delivery to the TA GSU where it is distributed to the COSCOM subsistence supply point. Subsistence shipments may also be shipped directly from the CONUS to the COSCOM. Next, subsistence moves to the division main support battalion (MSB), which distributes subsistence to the supported units in the division support area (DSA). The MSB also distributes to the forward support battalion's (FSB's) forward ration breakdown point (FRBP) which distributes the subsistence to the field kitchens.

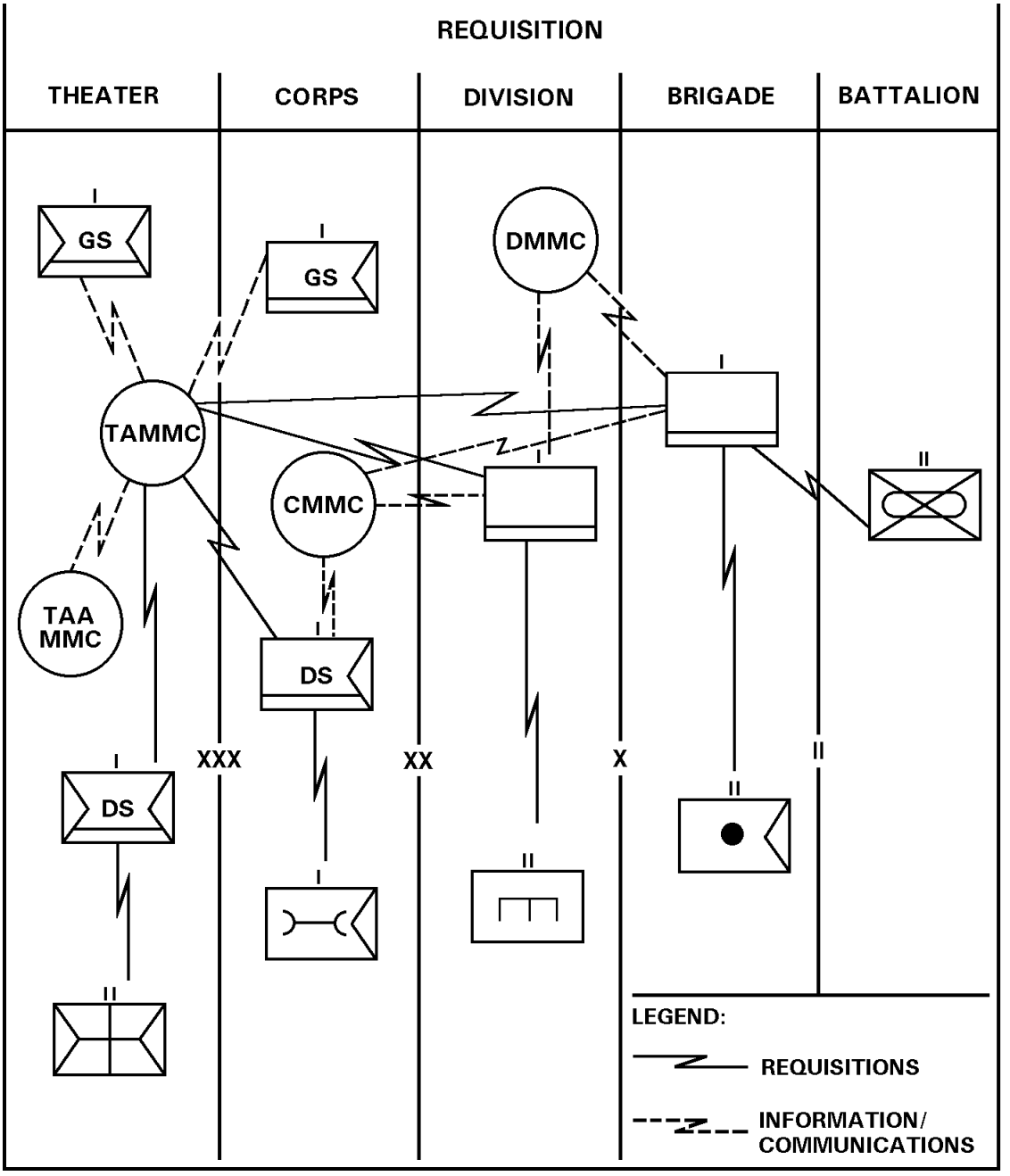

Figure 2-1. Flow of Class I requisition in a theater of operations.

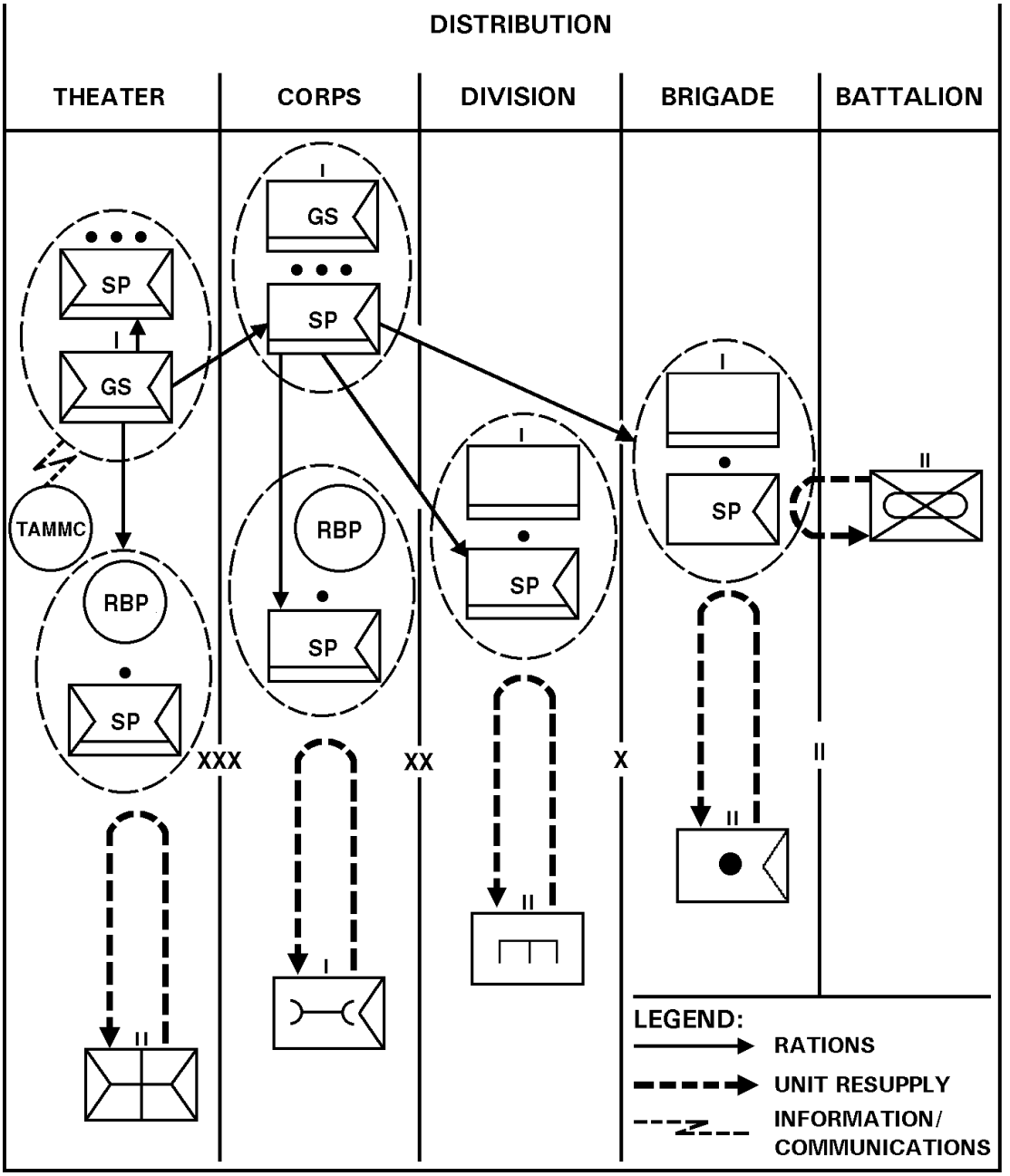

Figure 2-2. Flow of rations in the theater of operations.

Section IV. VETERINARY SERVICE SUPPORT FOR ANIMAL CARE

2-9. Animal Care Support to the Theater

The medical detachment, veterinary service, and the medical detachment, veterinary service (small), have a primary mission of food safety/quality assurance but also provide Levels I and II veterinary care. Due to the possible wide dispersion of MWDs within the corps, veterinary units found on MSRs allow for the ease of patient flow and evacuation of the MWDs. Medical detachments, veterinary service, units may be collocated with a medical task force to enhance animal care support through available radiographic and dental surgery support. These units also provide veterinary PVNTMED functions and support SASO. Units may also provide limited care for indigenous animals in the AO. Animal medicine and surgical support will be required for those US Army, USAF, USMC, and USN government-owned animals which will be supported on an area basis. The animal care specialist may be attached to bases with high concentration of MWDs to provide on-site veterinary health care support.

2-10. Animal Care Support to Echelons Above Corps

Medical detachments, veterinary medicine, provide Level III care. These detachments are normally found in support of large concentrations of MWDs along evacuation routes and near major USAF bases when established. Animal medicine and surgical support is required for those USAF bases with MWDs. Additional animal medicine support for USMC and USN government-owned animals will be based on population strengths. Due to the medical detachment's veterinary medicine capabilities, equipment, and transportation requirements, these detachments are found only in the EAC. Levels I and II equivalent care is provided by the medical detachment, veterinary service, and the medical detachment, veterinary service (small). Medical detachments, veterinary service, provide the emergency treatment and stabilization procedures, then prepare and coordinate evacuation of the MWDs to the medical detachment, veterinary medicine, or to CONUS-based facilities. Each of these units also provides veterinary PVNTMED functions and support SASO. They may also provide limited and emergency care for indigenous animals in the AO when tasked through command channels.

CHAPTER 3

FIELD VETERINARY UNIT OPERATIONS

Section I. VETERINARY FACILITIES

3-1. Employment

Veterinary units establish facilities at sites best suited to support their mission. Veterinary facilities are located in secure areas where logistical support is available. The sites selected are normally adjacent to or collocated with other units (either medical or logistical or both). These sites facilitate the inspection of subsistence which must be performed from the time the subsistence is procured or received until it is issued for consumption.

a. Site Selection. Site selection is an important factor impacting on the accomplishment of the veterinary detachment's missions. Improper site selection can result in inefficiency and possible danger to unit personnel and patients. For example, if the area selected does not have proper drainage, heavy rains may cause flooding in the unit and treatment areas. The facility established by the detachment should not be placed near hazardous materials (such as petroleum, oils, and lubricants [POL] and ammunition). The selected site must be cleared of mines, booby traps, and other hazards. The selected site should not be located near potential areas of filth such as a garbage dump, landfill, or other waste disposal site. The site must be at least 1 mile from breeding sites of flies and mosquitoes such as garbage dumps or stagnant water sources, when possible.

b. Additional Site Selection Factors. Additional factors to consider when selecting the site for establishing the veterinary facility include—

(1) *Commander's plan and mission*. The specifics of the operation plan (OPLAN), the manner in which it will be executed, and the unit's assigned mission can affect the selection of a specific site. The requirements for an area which is only to be used for a short period of time can differ significantly from an area which is expected to be used on an extended basis. For example, if the detachment's mission requires relocation several times a day, complete treatment areas will not be established; only essential services, shelters, and equipment will be used. On the other hand, if it is anticipated that the detachment will be located at one site for an extended period of time, buildings or preestablished shelters, if available, may be used.

(2) *Routes of evacuation and accessibility*. Ground vehicles are the principle means of evacuation for wounded/injured patients. The veterinary facility must be situated so that it is accessible from a number of different directions and/or areas. It should be situated near and be accessible to main road networks and air corridors, but not placed near lucrative targets of opportunity. The site should not be so secluded that incoming vehicles have difficulty locating the facility.

(3) *Hardstand, drainage, obstacles, and space*.

- The site should provide good drainage during inclement weather. Care must be taken to ensure that the site selected is not in or near a dry river or stream bed, has drainage that slopes away from the facility location and not through the operational area, and has no areas where water can pool.

- The ground, in the selected area, should be of a hard composition that is not likely to become marshy or excessively muddy during inclement weather or temperature changes. This is particularly true in extreme cold weather operations where the ground is frozen at night and begins to thaw and become marshy during daylight hours. Further, the areas must be able to withstand a heavy traffic flow of incoming and departing vehicles in various types of weather.

- The area selected should be free of major obstacles that will adversely impact on the detachment layout (such as disrupting the traffic pattern), cause difficulties in erecting shelters (overly rocky soil), or require extensive preparation of the area before the facility can be established.

- The space to establish the treatment and administrative areas of the detachment is dependent upon the mission and expected duration of the operation and whether NBC operations are anticipated. The site should provide adequate space for establishment of all unit elements including possible augmentation. It must be adequate in size to accommodate dispersion of unit assets according to the tactical standing operating procedure (TSOP). Space requirements are also based on the air threat. There should be at least 50 feet (15 meters) dispersion between vehicles and facilities to protect against loss from hostile ground action, indirect mortars, or artillery fire. This is when allied forces have air superiority. When allied forces do not have air superiority, dispersion between assets should be 150 feet (46 meters).

(4) *Communications*. While considering all factors of site selection, remember that terrain can impede the communications systems.

(5) *Likely enemy targets*. The site must not be too closely located to likely enemy targets; in some cases, such as MSRs, the facility should be located in the vicinity of the MSR for accessibility but not directly on it. Likely targets include—

- Ammunition storage facilities.
- Petroleum, oils, and lubricants points.
- Motor pools.
- Main supply routes.
- Bridges.
- River crossing points.
- Strategic towns and cities.
- Industrial complexes or factories.

(6) *Cover and concealment*. The area should provide maximum cover and concealment without hampering mission accomplishment or communications capability. Overhead cover is required to prevent detection and to prevent air and ground attacks. It also provides protection from biological and chemical contamination in the event of an attack.

(7) *Landing sites*. The site selected must have sufficient space available to serve as a landing site for incoming and outgoing helicopters. Sufficient space must be allocated for establishing a landing site for contaminated aircraft downwind of the unit and treatment areas. Additional site selection considerations for a landing site are contained in FM 8-10-6.

(8) *Equipment*. Certain pieces of equipment require strategic placement within the detachment area. In selecting the site, the placement of this type of equipment must be considered. For example, trailer-mounted, 10-kilowatt (kw) generators must be placed in such a manner as to enhance their safe operation and to reduce their heat signature and noise level, yet close enough to unit and treatment areas that the limited amount of cable can reach. It is preferable to maximize the use of natural terrain features within the site to provide a portion of this shielding rather than having to rely solely on the use of sandbags.

(9) *Decontamination area*. The site should be large enough to provide an area for decontamination of animals. The specific site selected to establish the decontamination station must be downwind of the unit and treatment areas. The decontamination station for animals is established using the same tactics, techniques and procedures used to establish a patient decontamination station (see FM 8-10-7).

3-2. Facilities Design

The commander of the veterinary unit is responsible for the internal layout of veterinary facilities. Veterinary equipment is laid out in a tent or in more permanently constructed facilities to provide the best possible operation. In the facility design, factors that should be considered are the MWD populations supported, unit administration, and personnel living requirements.

3-3. Logistical Support

Veterinary units require administrative and logistical support. Whenever practicable, support should be obtained from the medical brigade/group. When deployed from its higher headquarters, support arrangements should be specifically documented in attachment orders to address all support requirements. See Appendix D, Veterinary Supply and Maintenance Operations, for additional information.

Section II. VETERINARY SERVICE ACTIVITIES

3-4. Food Hygiene and Safety

The assurance of food safety is essential to the health of the command. The sanitary inspection of places of production, storage facilities, and conveyances is an integral part of assuring food wholesomeness, safety, hygiene, and quality. Evaluation and disposition of food supplies are provided by veterinary units to assure

only wholesome and safe food is consumed. Veterinary units are also responsible for determining the disposition of NBC-contaminated rations.

3-5. Animal Medicine

In an AO, animal medicine includes Levels I, II, and III veterinary care of military and other government-owned and indigenous animals. Class VIII resupply is provided by the supporting medical logistics (MEDLOG) battalion. Controlled drugs used in animal medicine must be stored, handled, and inventoried according to AR 40-2, using DA Form 3949/3949-1.

Section III. VETERINARY UNITS

3-6. Medical Detachment, Veterinary Service (Headquarters), Table of Organization and Equipment (TOE) 08409L000

a. Mission. The medical detachment, veterinary service (headquarters), provides C2, administrative assistance, and technical guidance to assigned and attached veterinary units in the TO.

b. Assignment and Basis of Allocation. The Medical Detachment, Veterinary Service (Headquarters), is assigned to a Medical Brigade (Corps), TOE 08422L010, or Medical Brigade (Communications Zone [COMMZ]), TOE 08422L200. This detachment is allocated on the basis of one per 4 to 11 veterinary service and veterinary medical detachments.

c. Capabilities. The medical detachment, veterinary service (headquarters), provides C2 for 4 to 11 separate veterinary service, veterinary medicine, or veterinary service (small), units in any combination for all functions within an AO. It also implements the veterinary policies established by the MEDCOM. It may be used to augment the MEDCOM or the medical brigade when veterinary staff services are required. The detachment commander may serve concurrently as the EAC, medical brigade, or MEDCOM staff veterinary officer. This unit establishes communications and—

- Directs coordination for the inspection of commercial food sources in support of DOD, federal, and, when authorized, allied procurement organizations.

- Provides publication and distribution of the Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement.

- Provides coordination with military units resourced with government-owned animals, HN and allied forces public health officials, and the State Department.

- Monitors and evaluates selected public health conditions, zoonotic disease surveillance, and food safety data, to include those food and food-producing animals exposed to NBC agents.

- Briefs the MEDCOM/brigade commander of those factors posing a potential threat to the overall CHS mission.

d. Concept of Operations. A medical detachment, veterinary service (headquarters), is required in a multicorps deployment or if 4 to 11 veterinary detachments are deployed in the EAC. The veterinary headquarters detachment may be assigned to the corps medical brigade or to EAC medical brigade. When the veterinary detachment is assigned to the EAC medical brigade, and a headquarters detachment is not assigned to the corps, C2 for veterinary detachments in the corps AO will be provided by the Senior Command medical detachment, veterinary service. An example of a medical detachment, veterinary service (headquarters) with attached medical detachments, veterinary service, veterinary service (small), and veterinary medicine is diagramed in Figure 3-1.

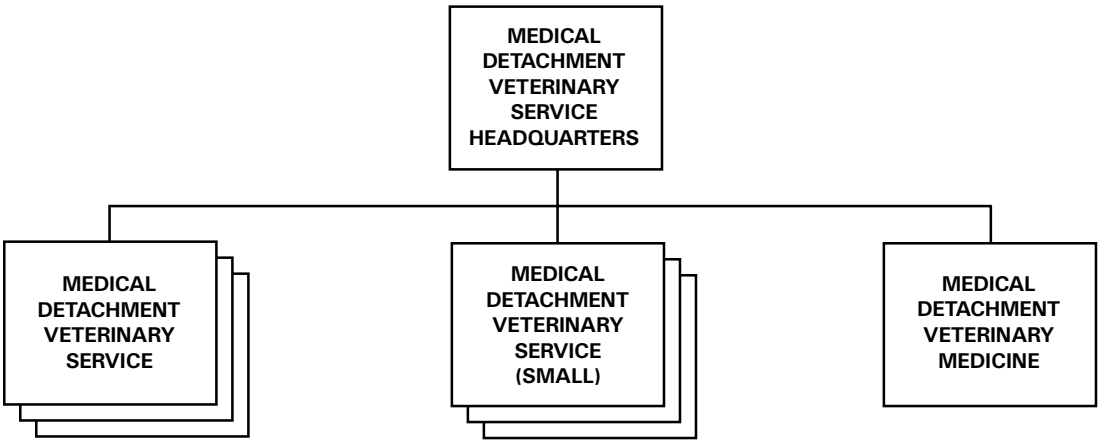

Figure 3-1. Veterinary headquarters and units.

3-7. Medical Detachment, Veterinary Service (Large), TOE 08417L000

a. Mission. The medical detachment, veterinary service provides veterinary services for all branches of the Services throughout the AO.

b. Assignment and Basis of Allocation. In the corps, the medical detachment, veterinary service, is assigned to the medical brigade. At EAC, this detachment may be assigned to a medical brigade or medical detachment, veterinary service (headquarters). The medical detachment, veterinary service, basis of allocation is one per every 70,000 troops supported in the CZ and one per every 140,000 supported in the COMMZ. Also one medical detachment, veterinary service, is allocated for every 140,000 USN, USMC, and USAF personnel supported.

c. Capabilities. The medical detachment, veterinary service, possesses the capabilities that allow the detachment to—

- Command and control up to three additional veterinary units in its assigned AO.
- Provide Levels I and II veterinary care for up to 50 MWDs.
- Coordinate evacuation of MWDs to a medical detachment, veterinary medicine for medical and surgical treatment, or to CONUS facilities.
- Provide procurement inspection of Class A Rations.
- Conduct commercial sanitary inspections, to include packaged ice, bottled water, and bakery, egg, poultry, red meat, and dairy plants.
- Provide NBC surveillance of contaminated subsistence and their subsequent disposition.
- Determine the disposition of NBC-contaminated subsistence.
- Investigate unexplained animal deaths.
- Provide surveillance inspection of commercial/catered rations.
- Conduct basic food microbiological surveillance of military food supply.
- Provide veterinary inspection of up to seven DSUs and/or GSUs.
- Publish and distribute a Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement. In the absence of a medical brigade or a veterinary service (headquarters), inspect all government food storage facilities within the corps AO.
- Provide inspection of all food at time of receipt.
- Provide surveillance inspection of all foods in storage and at time of issue/resale.
- Monitor and evaluate public health, diseases that are common to both animals and humans, and food safety data, to include those foods and food-producing animals exposed to NBC agents. Provide information to its higher headquarters on those factors posing a potentially adverse affect on the overall CHS mission.
- Provide veterinary support to humanitarian civic action programs.
- Initiate an animal disease prevention and control program.
- Provide Level I veterinary care for large animals.
- Provide Levels I and II veterinary care for approximately 25 MWDs per squad on an emergency and short-term basis.

- Establish communications and direct necessary coordination with supported logistical organizations of all Services and other federal agencies, military units resourced with government-owned animals, HN public health officials, allied nations with animals in the AO, and to the State Department.

d. Mobility. This veterinary detachment is organized into a headquarters and seven mobile veterinary squads. These squads have the capability to be task-organized across squad lines or subdivided to meet a variety of functional scenarios within the stated mission. Each squad has an animal care specialist assigned; each squad can be utilized to assist with procurement inspections. All squads maintain 100 percent mobility to ensure mission completion and to independently operate in two separate locations for short periods of time. The entire unit can operate in 6 to 12 locations within a 70-kilometer radius, depending on environmental and tactical travel restrictions.

e. Concept of Operations.

(1) In the corps, the medical detachment, veterinary service, is usually assigned to the medical brigade. This detachment may provide C2 and limited administrative and logistical support for subordinate veterinary assets in the corps AO. The veterinary squads may be forward deployed to support the GSUs or DSUs at Class I points. Other squads may be located in the corps rear area to support procurement inspections for Class A Rations. Some squads may be attached to USMC divisions or USN port activities to support food inspection operations. The animal care specialist will be located near the largest population of MWDs in the AO and may be located near a major air base to receive injured MWDs. Additionally, animal care specialists from the other squads may be attached to air bases to support MWDs' health requirements.

(2) In an EAC, the medical detachment, veterinary service is assigned to the medical brigade or to a medical detachment, veterinary service (headquarters). The emphasis of this unit's mission is food inspection which is conducted at theater GSUs located at ports or airheads. This unit will also perform commercial food production sanitary inspections. An example of the medical detachment, veterinary service with its assigned elements is provided in Figure 3-2.

3-8. Medical Detachment, Veterinary Medicine, TOE 08418L000

a. Mission. The mission of this unit is to—

- Provide Level III veterinary medical care to government-owned animals.
- Provide veterinary support for civic action programs.
- Conduct animal disease prevention and control programs.

b. Assignment and Basis of Allocation.

(1) The medical detachment, veterinary medicine may be assigned for C2 to—

- Medical brigade (COMMZ), TOE 08422L200.

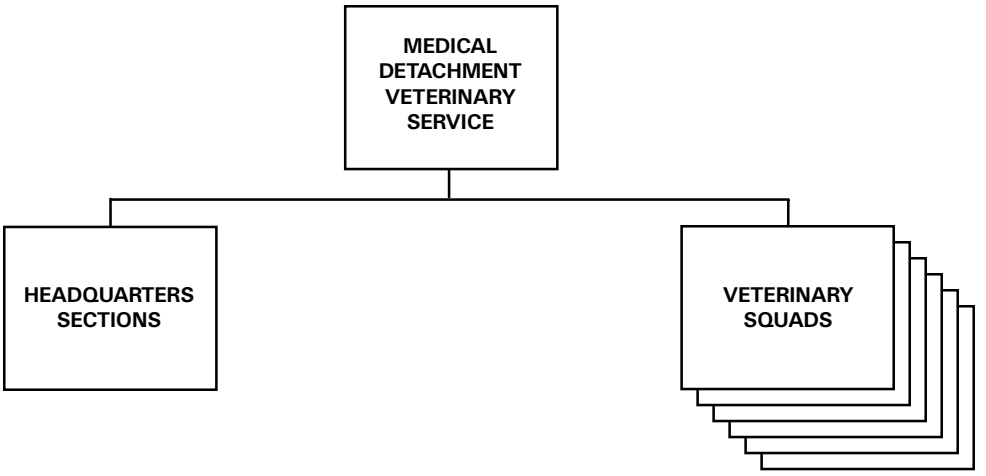

Figure 3-2. Medical detachment, veterinary service.

- Medical Detachment, Veterinary Service (Headquarters), TOE 08409L000.
- Medical Detachment, Veterinary Service, TOE 08417L000.

(2) One unit is allocated per 50 to 200 government-owned animals in support of all branches of the military services.

(3) One unit is allocated for every seven military police companies (heavy security) and military patrol dog section.

c. Capabilities. The medical detachment, veterinary medicine provides Level III veterinary medical and surgical care to government-owned animals, provides veterinary medical support for SASO, and conducts animal disease prevention and control programs. This unit—

- Provides animal care services for up to 200 government-owned animals.
- Provides consultation services for animal care specialists attached or organic to units having MWDs for animal health maintenance on an area basis.
- Receives injured/ill government-owned animals from other veterinary service units and provides treatment or further evacuation.
- Provides a medical element for immediate deployment to high or potentially high casualty areas for triage and emergency medical treatment (EMT) of government-owned animals.

- Provides veterinary support for SASO. Also, the unit provides veterinary care for large animals under certain conditions of government interest.

d. Mobility. The medical detachment, veterinary medicine, is authorized 15 personnel and maintains approximately 30 percent mobility with organic assets.

e. Concept of Operations.

(1) The medical detachment, veterinary medicine, normally establishes a centrally located veterinary hospital in proximity to the animal population supported along normal ground or air medical evacuation routes or MSRs. Since the veterinary medicine unit is the final echelon of veterinary treatment and hospitalization in the AO, it is normally employed at EAC. It maintains a holding facility for long-term treatment and is capable of providing hospitalization for 50 MWDs. Animals treated at this facility may be held for 15 days, returned to duty, or further evacuated.

(2) This unit has the capability to immediately deploy a module to high or potentially high casualty areas for triage and EMT. Required functions include the following:

- Perform basic cardiopulmonary resuscitation (to include establishing and maintaining an airway).
- Perform basic clinical laboratory procedures.
- Stabilize/temporarily stabilize fractures.
- Provide care for chest and abdominal wounds.
- Stabilize patients for evacuation.
- Provide veterinary care for large animals.

3-9. Medical Detachment, Veterinary Service (Small), TOE 08419L000

a. Mission. The mission of this unit is to provide veterinary services and medical support in the areas of approved food sources, facility sanitation, procurement and surveillance inspection of food, and environmental zoonotic disease hazards. It provides Levels I and II veterinary care for government-owned animals and civic actions programs. It also provides veterinary PVNTMED and public health functions for all branches of the armed services and federal agencies throughout the TO.

b. Assignment and Basic of Allocation. This detachment is assigned to a medical brigade, a medical detachment, veterinary service, or a medical detachment, veterinary service (headquarters), as the tactical situation dictates. This unit is allocated one per every 10,000 US or US-supported forces in the CZ, one per every 20,000 US Army personnel in the COMMZ, and one per every 20,000 USN, USMC,

and USAF personnel supported. The detachment could be deployed to an area with less than 10,000 troops, as mission dictates.

c. Capabilities. The medical detachment, veterinary service (small), possesses the capabilities that allow the detachment to—

- Provide inspection services for commercial food sources in support of procurement organizations.
- Publish and distribute a directory of approved establishments.
- Provide inspection of all government food storage facilities.
- Provide inspection of all food at time of receipt.
- Perform surveillance inspections of all foods in storage and at time of issue/resale.
- Monitor and evaluate environmental, zoonotic disease, and food safety data, to include those foods exposed to NBC agents.
- Brief the medical brigade commander on those factors posing a potential adverse affect to the overall CHS mission.
- Provide limited veterinary care to DOD military units with government-owned animals and veterinary support for civic action programs.
- Establish communications and direct necessary coordination with supported logistical organizations of all services and other federal agencies; military units resourced with government-owned animals; HN public health officials; and the State Department.

d. Mobility. The medical detachment, veterinary service (small), has 100 percent mobility to facilitate the travel requirements dictated by the assigned mission.

e. Concept of Operations.

(1) Medical detachments, veterinary service (small), are attached to medical units for C2. They are operational control (OPCON) or assigned inspection responsibilities at ports or other elements dependent upon local food supplies in countries where approved inspection services are not available. This unit may also be assigned inspection responsibilities of Class I points at corps and theater level supply points. The tactical situation will dictate the specific location of such elements in the theater. This veterinary unit can normally inspect rations on a daily basis at many locations depending on the environmental and tactical travel restrictions. Transportation to perform food inspection at a number of locations is essential. Daily activities involve several stops at a variety of dispersed locations.

(2) This unit will provide Levels I and II veterinary care for up to 25 MWDs on an emergency and short-term basis.

(3) Command and control for the medical detachment, veterinary service (small), is provided by the medical brigade, medical detachment, veterinary service (headquarters), medical detachment, veterinary service, or another medical control element, depending on its location.

f. Theater Veterinary Services. See Figure 3-3 for laydown of veterinary service units/elements supporting a TO.

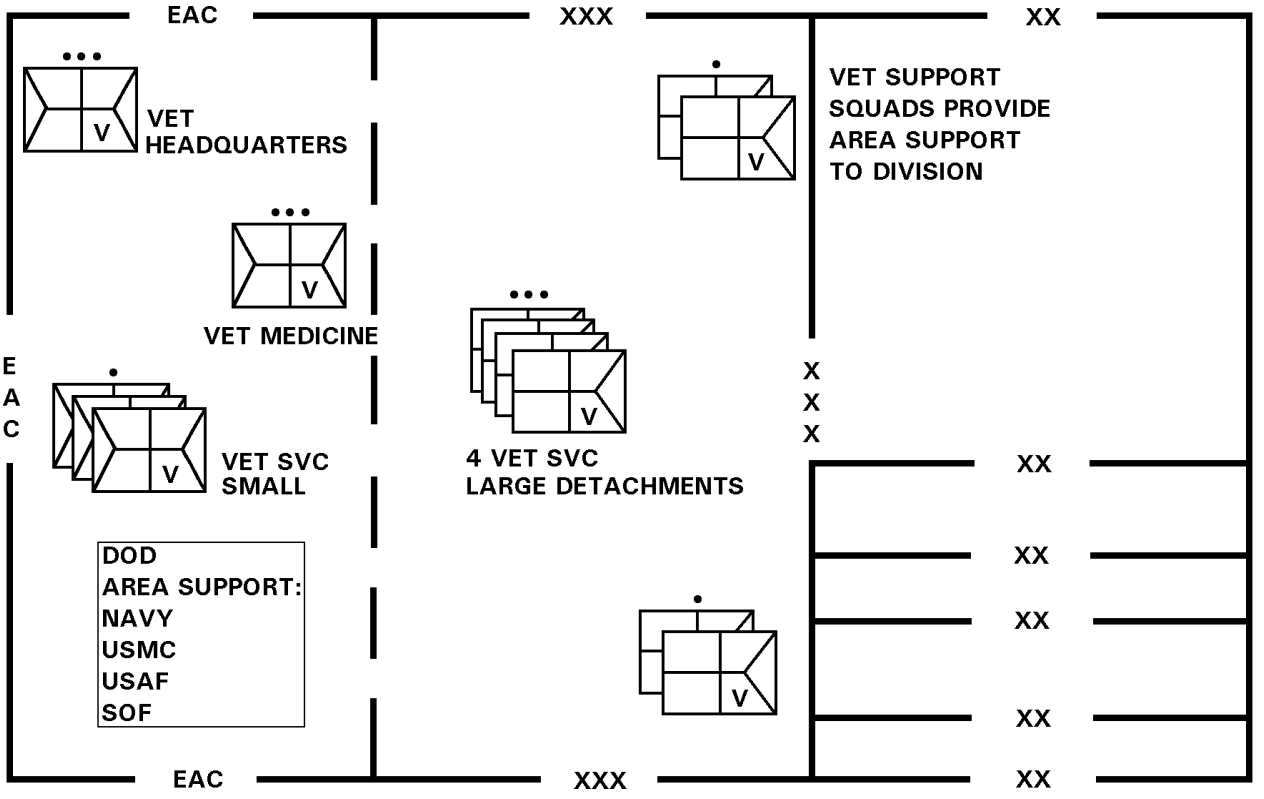

Figure 3-3. Theater veterinary services for a notional five-division corps.

CHAPTER 4

UNIT MOVEMENT OPERATIONS

4-1. Unit Readiness

The veterinary unit commander is responsible for the readiness of his unit to conduct unit movement. The attainment and maintenance of required readiness conditions for unit movement are a mission-essential requirement for all veterinary units. Veterinary units must maintain a readiness posture that will allow immediate assembly and unit movement under emergency conditions within a specified time frame, on orders from higher headquarters. Units are routinely alerted through command channels using established readiness condition stages of alert and recall procedures. The unit commander must be prepared to deploy the unit or redeploy from the operations site. This chapter contains guidance for the preparation and execution of the unit movement plan. In preparing a detailed movement plan, the commander should consult AR 220-10, FM 100-5, and all pertinent local directives. (AR 55-113 governs the movement of units within CONUS.)

4-2. Planning

Planning the movement of a veterinary unit is continuous. It begins long before the actual move, continues during preparation for the move, and goes on until the move is completed. The veterinary unit commander should review existing movement plans, standing operating procedures (SOPs), and loading plans for completeness and correctness. The unit must be fully aware of all marshaling, staging, and holding areas. If the unit is newly activated or has no plans, the commander should prepare movement plans, including SOPs and loading plans. Specific actions are detailed in Appendix E, Unit Commander's Checklist for Planning Unit Movement.

4-3. Warning Order

The first indication that a unit will move may be the receipt of a warning order establishing the personnel shipment ready date (PSRD). Receipt of this order prompts several actions. The unit begins preliminary preparation for the move. The major Army commander gaining the unit furnishes preparation for oversea movement (POM) information to the appropriate losing major Army commander. The losing commander distributes required planning and equipment information to the appropriate units. Preparation for oversea movement information normally includes the unit's overseas Army post office designation and a listing of authorized items that need not be shipped with the unit. It also normally includes additional items that the overseas commander desires to have shipped with the unit, such as medical equipment sets (MESs) (veterinary large animal, field), authorized stockage lists, and expendable supply requirements. Additional actions to be taken by a unit commander on receipt of a warning order are shown in Appendix E.

4-4. Movement Directive and Movement Order

The movement directive is the authority for the movement of the unit and is the basis for all actions by all agencies concerned with the move. It is usually issued 90 days before the deploying unit's PSRD. Based on

this directive, the installation or activity issues a movement order for the deploying unit. This order implements the movement directive and provides additional instructions needed to prepare the unit for movement. In an emergency deployment (ED) or emergency deployment readiness exercise (EDRE), the movement directive and movement order may be received at the same time as the warning order, or shortly after the warning order. Any modification of equipment authorized by the MTOE should be included in the movement order along with a listing of equipment to be issued at the port of embarkation or in country, if applicable. Actions required on receipt of the movement order are outlined in Appendix E.

4-5. Unit Movement Plans

Unit movement plans contain up-to-date logistical data summarizing transportation requirements, priorities, and limiting factors connected with the unit's movement by highway, water, rail, or air. Contents of a movement plan may vary with the unit's contingency status, guidance from higher headquarters, and the effort the unit commander puts into preparing the plan. As a minimum, the unit movement plan should contain the following elements:

a. Detailed listing of personal baggage, organizational equipment (such as veterinary food inspection kits), expendable supplies (such as paper clips and penicillin), and nonexpendable supplies (such as air conditioners and gas anesthesia machines).

b. Organization for movement, including the procedures for movement of the staff, advance parties, and rear detachments.

c. Weapons accountability and security.

d. Responsibility and accountability of personnel.

e. Procedures to be followed at home station, en route, and at destination.

f. Unit loading plans (see paragraph 4-7).

4-6. Standing Operating Procedures for Unit Move

Many details relating to a unit move should be included in one or more unit SOPs. These SOPs include such things as duties of advance or rear detachments, convoy security (for motor move), and deployment procedures at destination. Although minor changes in an SOP may be required, basic procedures should vary little from move to move. Preparation of an SOP covering the details of unit movements relieves the commander of the necessity to repeatedly plan and issue directives for the conduct of operations that follow established patterns.

4-7. Unit Loading Plans

Unit loading plans include all the individually prepared documents that, when compiled, present in detail all instructions for the arrangement of personnel and the loading of equipment into unit vehicles. To ensure effective and expeditious movement of unit personnel and equipment, loading plans should be kept current. Loading plans should be based on authorized veterinary personnel and equipment. Loading plans should be prepared and maintained in each unit in anticipation of movement under contingency planning by various transportation modes.

a. Unit Loading Inventory and Checklist. This is prepared for each category of unit equipment such as vehicles, weapons, and veterinary MESs. It is a numerical list of all containers (express containers and boxes) and vehicles to be shipped. In addition, all hazardous/controlled/sensitive items in the loading plan that could require special handling or restrictions for rail/air/vessel transport must be identified.

b. Unit Vehicle Loading Plan. This plan is used when the unit moves to a terminal for overseas movement using its organic vehicles. The plan identifies the personnel and equipment transported in each vehicle. The plan also includes convoy procedures and lists the common table(s) of allowances (CTA) equipment transported on each vehicle. The CTA equipment should be limited to that which is needed for mission completion.

c. Unit Train Loading Plan. This plan is used when the unit moves by rail. It shows the proposed distribution of personnel and equipment based on the railcars tentatively available for unit loading. It requires adjustment when an actual move is made and specific railcars are assigned. For detailed information, see FM 55-20, Technical Manual (TM) 55-2200-001-12, and TM 55-603.

d. Unit Air Loading Plan. This plan is used when the unit moves by air. The specific type of aircraft must be known before this plan can be prepared. It covers the type of cargo to be loaded in each aircraft, loading start time, estimated time to load, special equipment requirements, and other data pertaining to the specific aircraft. For detailed information, see FM 55-9, FM 55-12, and TM 38-250.

e. Unit Estimate of Aircraft Required. This is used to determine the number and type of aircraft required to airlift a unit's personnel and equipment.

f. Unit Vessel Loading Plan. This plan is used by units assigned to a mission that requires a lift by an Army TOE transportation boat unit. The assigned transportation boat unit must be contacted for specific requirements.

CHAPTER 5

VETERINARY SUPPORT IN STABILITY AND SUPPORT OPERATIONS

5-1. Stability and Support Operations

a. Today, the US Army is often required, in its role as a strategic force, to protect and further the interest of the US at home and abroad in a variety of ways other than war. Stability and support operations may precede and/or follow war, or occur simultaneously with war in the same theater. Stability and support operations may be conducted during peacetime; they may also involve conflict. These operations may be conducted in conjunction with wartime operations to complement the achievement of strategic objectives. They may support a combatant commander's forward-presence operations or a US ambassador's country plan. Stability and support operations may occur in the US. They are designed to promote regional stability, maintain or achieve democratic end states, retain US influence and access abroad, provide humane assistance to distressed areas, protect US interests, and assist US civil authorities. The national command authorities may commit US Army units to operations pertaining to—

- Nation assistance.
- Security assistance.
- Humanitarian assistance and disaster relief.
- Support to counterdrug operations.
- Peace enforcement operations.
- Peacekeeping operations.
- Arms control.
- Combating terrorism.
- Show of force.
- Attacks and raids.
- Noncombatant evacuation operations.
- Support for insurgencies and counterinsurgencies.
- Domestic support operations.

b. In support of the operations identified above, the provisions of CHS and health education play a more direct role in countering both the medical and general threat. Combat health support for SASO can be defined as those actions taken (encompassing all military health-related activities) or programs established

to further US national goals, objectives, and missions. In SASO, the interrelationship of human and animal health, disease transmission, and economics is often complex. It can affect the overall health of a country. Livestock (horses, cattle, goats, and hogs) affect both the economy and public health. The care and immunization of these important resources merit attention in the planning and resourcing of nation assistance, support to counterinsurgency operations, and humanitarian assistance and disaster relief operations. Consumable veterinary drugs and supplies necessary for care of livestock are not normally available through military supply channels. These supplies must be resourced and procured early in the mission planning and development phases of the operation.

c. Veterinary service can contribute to the success of CHS in SASO. This is accomplished by—

- Ensuring that foodstuffs and food sources are inspected for wholesomeness, quality, and sanitation.
- Providing care for government-owned animals (MWDs and pack animals).
- Helping to improve the public health of the population with such programs as—
  - Vaccinations for zoonotic diseases.
  - Public health and sanitation training.
  - Training in food hygiene, safety, and inspection techniques.
  - Animal husbandry programs when specifically authorized.

5-2. Noncombatant Evacuation Operations

a. Noncombatant evacuation operations are conducted to relocate civilian noncombatants and nonessential military personnel from locations in a foreign (host) nation during times of endangerment to a designated safe haven. These operations are normally conducted to evacuate US citizens whose lives are in danger from a hostile environment or natural disaster. They may also include the evacuation of US military personnel and dependents, selected citizens of the HN, and third country nationals. These operations are of short duration and consist of rapidly inserting a force, occupying an objective, and making a planned withdrawal. The amount of force used is normally limited to that required for self-defense and the defense of the operation. The level of hostilities encountered varies with each specific mission. The key factor in planning for this type of operation is the correct appraisal of the politico-military environment.

b. Veterinary support for NEO depends upon the planned length of the operation and whether privately owned pets will be abandoned, euthanized, or retrograded.

(1) If privately owned pets are retrograded, veterinary support is required to ensure that exotic foreign animal diseases are not transferred to the US. If the pets are to be euthanized, veterinary support is required to ensure that the process is conducted in a safe and humane manner.

(2) If the NEO takes several days to complete, the prevention of foodborne and waterborne diseases is important. In these operations, local food supplies are normally used to feed the evacuees while they are in the assembly area. As a result of the factors leading up to the necessity to conduct NEO, the food supplies are often severely deteriorated. This subsistence requires careful inspection by highly trained and experienced personnel to ensure food wholesomeness, hygiene, and safety.

5-3. Domestic Support Operations

a. When the appropriate governmental authority requests the military services through command channels to provide veterinary support in domestic emergencies within CONUS, US Army veterinary units/ personnel will resource the requirement.

b. Veterinary support may be required in disaster assistance operations to ensure the quality and wholesomeness of food supply. Additional support which may be required includes the care and treatment of privately owned pets and wild animals which are injured and sick as a result of the disaster or which are separated from their owners. Ensuring that animals in the disaster area have been vaccinated against rabies and other diseases transmissible to humans will help lower the incidence of disease.

5-4. Humanitarian and Disaster Relief Operations

a. Humanitarian and disaster relief operations provide emergency assistance to victims of natural and man-made disasters abroad. These operations are responses to requests for immediate help and rehabilitation from foreign governments or international agencies.

b. Veterinary support for humanitarian and disaster relief operations may be required. For example, food supplies used in humanitarian and disaster relief operations are normally quickly procured, often without proper specifications. These supplies usually approximate native diets. Veterinary personnel ensure that only safe and wholesome food supplies are used. In the aftermath of a disaster, such as a hurricane, there will be many animals (privately owned pets, livestock, and wild animals) wandering through disaster sites. Some of these animals will be injured. Veterinary personnel are required to effectively deal with this problem for the safety of disaster victims, rescue workers, and the animals. Further, veterinary personnel can assist in the control of the spread of zoonotic disease. (See paragraph 5-3 and Appendix F for additional information on veterinary support for disaster relief.) (Also, see Appendix G, Veterinary Role in Civil-Military Operations, for additional information.)

5-5. Security Assistance

a. Security assistance consists of the group of programs authorized by the Foreign Assistance Act of 1961 (amended), the Arms Export Act of 1976 (amended), and other related statutes. Through security assistance programs, the US provides defense materiel, military training, and defense-related service by grant, loan, credit, or cash sales to further its national policies and objectives.

b. Veterinary support may be required when friendly or allied nations face an imminent threat and require logistical support.

(1) If logistical support includes transporting subsistence, there will be an increased demand to inspect the cargos for wholesomeness. The conditions imposed by short-notice deployments may stress food due to the lack of refrigeration or other factors, thereby requiring additional inspections.

(2) The assistance provided may include MWDs or government-owned pack animals. These animals will require veterinary support to sustain them and ensure they remain disease free.

5-6. Support to Counterdrug Operations

a. Military efforts principally support law enforcement agencies, the counterdrug effort of other US agencies, the states, and cooperating foreign governments to interdict the flow of illegal drugs at the source, in transit, and during distribution.

b. Veterinary support to counterdrug operations may include—

- Caring for government-owned animals used in these operations.
- Assisting the HN in developing alternate forms of agriculture/livestock production to produce revenue. This assists in decreasing their dependency on drug crops.

5-7. Combating Terrorism

a. Combating terrorism has two major components—antiterrorism and counterterrorism. During peacetime, the US Army combats terrorism primarily through antiterrorism, which is the passive defensive measures taken to minimize vulnerability to terrorism. Antiterrorism is a form of force protection and, thus the responsibility of US Army commanders at all levels. Antiterrorism complements counterterrorism, which is the full range of offensive measures taken to prevent, deter, and respond to terrorism. Counterterrorism occurs in conflict and war; antiterrorism occurs across the range of military operations.

b. It is important that veterinary personnel be involved in the planning to counter the terrorist threat. The veterinary service may play a key role in antiterrorism. The terrorist threat may include the employment of NBC weapons/agents. Veterinary personnel must be alert to the potential use of these NBC weapons/agents and report any suspected use to appropriate authorities. Personnel, animals, and food supplies and sources (such as crops) are highly susceptible to biological agents. Veterinary personnel must be prepared to inspect potentially contaminated foodstuffs and care for affected animals.

5-8. Peace Operations

a. Peace operations encompass a wide range of activities which establish or sustain peaceful conditions or foster the conditions essential to establishing peace. Peace operations include essentially

diplomatic activities under the titles of peacemaking, peace building, peacekeeping, peace enforcement, and preventive deployment. Other activities which support peace operations may include humanitarian and nation assistance. The involvement of US forces is limited in peacekeeping and peace building operations because these activities occur mainly in the political arena. Veterinary support is required in most peace operations. For information pertaining to overall CHS for peace operations, see FM 8-42.

b. Due to the nature of these operations, field expedient food procurement systems may be established. If this occurs, ensuring that the food, bottled water, and packaged ice procured is safe for consumption is an important mission for veterinary personnel.

c. In peace operations, MWDs may be required to perform many tasks (such as guarding areas and conducting bomb searches). Veterinary support is required to sustain the use of these and other government-owned animals.

5-9. Support for Insurgencies and Counterinsurgencies

a. The areas of support for insurgency and counterinsurgency provide the greatest challenges and are the most complex programs in SASO.

(1) *Insurgency*. Insurgency is an organized, armed, implemented political struggle whose goal may be the seizure of power through revolutionary takeover and replacement of the existing government. In some cases, however, insurgency undertakes to break away from government control and establish an autonomous state within traditional ethnic or religious territorial bounds. It may even be conducted to extract limited political concessions that are unattainable through less violent means.

(2) *Counterinsurgency*. The Internal Defense and Development (IDAD) strategy is the full range of measures taken by a nation to promote its growth and protect itself from subversion, lawlessness, and insurgency. It focuses on building viable institutions (political, economic, military, and social) that respond to the need of the society. Developmental programs, carefully planned, implemented, and publicized, can serve the interests of population groups and deny exploitable health issues to the insurgents.

b. Veterinary support for insurgency operations may include providing training to indigenous guerrilla forces in establishing a food procurement system, inspecting food, caring for MWDs and pack animals, and caring for and managing livestock. Special Operations Forces personnel are initial participants in unconventional warfare (UW) and their training and veterinary skills are used to a limited extent in these situations.

c. The use of veterinary resources and expertise in counterinsurgency includes support to US troops, assistance to HN military forces, and/or support for nation assistance operations.

(1) The support of US troops is largely characterized by traditional services rendered by the veterinary services such as—

- Treating government-owned animals.

- Ensuring the wholesomeness and safety of the US military food supplies.
- Ensuring the local procurement process for food items has adequate food hygiene, safety, and quality assurance.

(2) As US military CHS involvement increases, the veterinary service can assist in the assessment of the HN's veterinary program.

NOTE

Special Operations Forces personnel are early participants in counter-insurgency operations and their medical assets (the special forces medic and attached veterinary personnel) are trained in the basics of animal husbandry and food inspection. Coupled with their civil affairs techniques, language skills, and knowledge of the culture, they can interface with the HN's residents and can be effectively used to enhance the HN's economic stability. They can provide guidance, training and support for HN's military animal care program.

Once established, the veterinary service can assist in establishing a food procurement system or in enhancing an already existing system.

(3) The US Veterinary Service's most challenging and nontraditional roles include enhancing the stability of the HN government and assisting in establishing programs that benefit the HN's populace. Veterinary service participation in humanitarian activities must be thoroughly coordinated through the country team. Coordination with such agencies as the Department of State, US Agency for International Development (USAID), and HN counterpart agencies may be required.

NOTE

The US Army veterinarian is not a member of the country team. Face-to-face coordination with relevant members of other US governmental and HN agencies, however, is indispensable if veterinary programs are to be successful.

(*a*) The USAID is responsible for helping HNs improve their health care system (including veterinary care). The US Department of Agriculture is often involved with developing these programs. Both agencies are frequently not on-site for executing programs, but rather contract with outside agencies for the actual implementation.

(*b*) The US military often has veterinary resources and a logistical support system already in-country to execute and effectively promote such programs. The military veterinarian (after

thorough research, coordination, and assessment of his capabilities and resources) can develop course(s) of action (COA) to support the overall veterinary effort.

(4) Well-developed veterinary programs have the ability to impact across a wide range of interests (such as public health, medical, nutritional, and economic areas). These programs must complement the social, religious, and political factors present in the HN. Proposed veterinary programs require analysis and evaluation prior to their implementation. These programs should address the specific problem areas that tend to foster the insurgency in a given region. For example, if the principal issue underlying the insurgency is a religious one, the application of a successful program to eradicate brucellosis in goats will have little impact on the HN's ability to survive the insurgency. On the other hand, if the central dilemma is an expanding population without economic growth, the insurgent may base his strategy on the HN's inability to provide for the basic needs such as food, fuel, clothes, and housing. In this situation, the use of a program to control hog cholera on small farms would increase pork production. The control of this disease would have a result in increased food production, increased income for the farmer, and perhaps of most importance, the ability to change the diet from one based on grain to one which includes meat. This gives the population the perception that their status in life is improving. Changes such as these directly attack the insurgent's principal issue, defuse the insurgent's psychological operations, and at the same time bolster the credibility and popular support of the HN government.

NOTE

Veterinarians must ensure the programs developed are in consonance with local customs, values, and religious ideologies. For example, it would do no good to increase hog production in a Muslim or Jewish country, beef production in a Hindu country, or any of the above if the people are vegetarians.

(5) In developing, coordinating, and establishing US military veterinary support to the Foreign Internal Defense (FID) effort, several factors must be considered.

(*a*) The primary issue is to determine the specific veterinary support required. If the mission is a combination of activities, then priorities must be established. Once the mission is established, the level of veterinary resources and assets available is determined. The planning considerations include, but are not limited to—

- State of development of the HN's veterinary infrastructure.
- Accessibility and affordability of the HN's veterinary services.
- Human and animal disease prevalence data.
- Status of agricultural production system.

- Determination of the local names for common diseases.
- Climatic factors.
- Agriculture economics (market system, cooperative, banking).
- Infrastructure (roads, rivers, electric power).
- Availability of animal foodstuffs.
- Types and amounts of immunizations for chemoprophylaxis for livestock.

(*b*) The programs which are developed should focus on long-term projects. The *quick fix* should also be avoided in this arena. However, there are a number of programs which can be developed and would require only short-term US military involvement. These include, but are not limited to—

- Vaccination programs in which a single-dose application provides lasting immunity.
- Village-level external parasite control facilities (dipping vat construction project).
- Vampire bat control program.
- Water well and windmill construction in selected areas to improve animal grazing capabilities.
- Local control of toxic plants on grazing lands.

(*c*) Long-term programs to improve animal health and increase production based on solid economics and the phaseout of US assistance are optimal solutions for changing some of the environmental conditions that insurgents focus on. Such programs must be developed after extensive evaluation by regional experts. Programs requiring active participation by local financial institutions tend to be extremely successful. They provide incentive, produce tangible rewards, and succeed. An example would be a requirement by local banks for livestock production loans to have the producer feed mineralized salt and vaccinate the cattle against hoof and mouth disease in order to secure the loan.

(6) Innovation and creativity are the hallmark of a successful nation assistance program. Veterinary service capabilities include—

- Assisting in veterinary laboratory development.
- Assisting in vaccine production development.
- Training HN or indigenous personnel.

- Assisting in the development of a drug and vaccine distribution system.
- Assisting in the development of disease control and eradication strategies.
- Improving food plant sanitation.
- Conducting epidemiological surveys.
- Assisting in animal disease and parasite control.
- Developing a food inspection system.
- Developing education and exchange programs.
- Serving as advisors for veterinary activities.

CHAPTER 6

VETERINARY SUPPORT IN A NUCLEAR, BIOLOGICAL, AND CHEMICAL ENVIRONMENT

Section I. SUBSISTENCE

6-1. Subsistence Stocks

a. At the beginning of a conflict in an established AO, military personnel are fed from subsistence stocks on hand. These stocks may consist of—

- Operational rations (A Rations, B Rations, and Medical B Rations).
- Other subsistence on hand from sources such as the commissary or the Army and Air Force Exchange Service.

b. Operational rations (A Rations, B Rations, and Medical B Rations) are located within units as part of their prescribed unit loads or within the established supply system, either in transit or in storage. The majority of the subsistence items in the supply system are located at direct support (DS) or general support (GS) Class I supply points.

c. When a new AO is being established, units bring their subsistence into the new theater as part of the prescribed unit load. These subsistence items consist primarily of operational rations. Initially, these rations will be consumed in the theater, especially during the early stages of the conflict. It is expected, however, that A Rations and B Rations will be introduced when the AO can support the additional logistical requirements. Medical B Rations are required when hospitals are established and receiving patients.

6-2. Concept of Operations

The availability of contamination-free subsistence items in an AO depends upon the amount of planning taken for the protection of subsistence prior to the initiation of NBC warfare.

a. The procedures to protect subsistence items from an NBC threat must become a part of OPLANs and TSOPs maintained by all units. Each unit incorporates procedures into its readiness plan for the protective storage of subsistence items. Procedures for monitoring the results of decontamination of subsistence items are incorporated into the unit SOPs.

b. Prior to and after initiation of NBC warfare, command and technical (medical) channels of communication are used to disseminate information pertaining to the use of NBC-contaminated/exposed subsistence. Veterinary personnel provide information and guidance to unit commanders regarding the storage, protection, decontamination, and use of NBC-contaminated subsistence.

6-3. Veterinary Support

Veterinary personnel support commanders in developing readiness plans and SOPs for the protection, decontamination, and use of subsistence items in the NBC environment. This assistance is either in the form of direct or indirect veterinary support.

a. Direct veterinary support is provided to commanders by assignment of veterinary teams/ personnel at GS and DS Class I activities. This support is in the form of technical advice to aid the commander in formulating plans and procedures pertaining to the storage, decontamination, and use of subsistence which may become exposed to an NBC agent. See Appendix I for information on future veterinary support and new veterinary units developed as a result of the Medical Reengineering Initiative (MRI).

b. Indirect veterinary support is provided to unit commanders by disseminating (through command/technical channels) information and guidance pertaining to NBC contamination of subsistence.

c. Veterinary personnel inspect at unit level on an area support basis, as required.

6-4. Veterinary Plans and Procedures

a. *Procedures*. The commander of veterinary units/teams develops readiness plans and SOPs required of the veterinary unit in an NBC environment (see Appendix B for a sample of a format for the veterinary support portion of the CHS plan). Plans and SOPs include procedures for—

- Protecting veterinary personnel in the NBC environment.
- Training veterinary personnel to function in the NBC environment (see Appendix H for information on training).
- Monitoring the protection of subsistence in the NBC environment.
- Maintaining assigned NBC equipment.
- Inspecting subsistence in the NBC environment.
- Monitoring the decontamination of NBC-contaminated subsistence.
- Treating MWDs and other government-owned animals that become NBC casualties.
- Reporting intelligence data through command channels.
- Ensuring the security of veterinary equipment, supplies, and personnel.
- Using veterinary personnel to support assigned NBC mission.

b. Mission-Oriented Protective Posture (MOPP). Upon receipt of an NBC warning, veterinary leaders place readiness plans into operation and direct veterinary personnel to assume the appropriate MOPP level. After assumption of the directed MOPP level, veterinary personnel, within limits dictated by the tactical situation, ensure that actions are taken to protect subsistence items.

c. Corrective Action. If subsistence items have not been protected in accordance with protection plans and procedures, or if the plans/procedures need modification, a recommendation for corrective action is initiated by veterinary personnel.

6-5. Actions During the Attack

During an NBC attack, veterinary personnel remain in MOPP 4. Individual decontamination and first aid procedures are performed, as required. Veterinary personnel also perform unit NBC-monitoring tasks and report NBC information, as required.

6-6. Actions After the Attack

a. Decontamination. After an NBC attack, the primary concern is decontamination and treatment of casualties. Veterinary personnel will initiate organic personnel and equipment decontamination procedures.

b. Evacuation. Once an area is contaminated by an NBC agent, personnel may be evacuated from the area. If the area is evacuated, personnel and equipment should be decontaminated in accordance with prescribed guidance and assistance of supported unit or organic NBC decontamination teams. Responsible leaders ensure that the contaminated area is marked with NBC warning signs. The primary function of the veterinary unit while it is in the contaminated area is concentrated on protection and decontamination of organic personnel and equipment. When possible, the mission and duties of the contaminated unit/personnel may be transferred to other operational veterinary units/personnel by the commander.

c. Testing. Following an NBC attack, all subsistence within the boundaries of a contaminated area is considered contaminated and managed accordingly until testing determines which foods are safe for consumption. As a method of control, subsistence items located in contaminated storage facilities/areas are restricted from issue or use until necessary NBC testing can be completed. Access to subsistence storage facilities/areas will be restricted by the level of contamination.

d. Team Effort. In most instances, decontamination of subsistence does not begin until the surrounding area and storage facility are decontaminated. Technical guidance on food decontamination is provided to decontamination teams by veterinary personnel.

6-7. Decontamination Responsibilities

The question of whether subsistence should be decontaminated is decided by command authority. Technical advice is provided by veterinary personnel to assist in making this decision. The commander determines

how subsistence is provided to affected units and what actions, if any, are taken to decontaminate supplies. The commander and his staff coordinate priorities for large scale decontamination operations. In determining whether subsistence is to be decontaminated, the commander relies upon information and guidance provided by the veterinary personnel. Factors considered in determining the feasibility of subsistence decontamination include—

- Urgency of need.
- Priorities for other decontamination efforts.
- The tactical situation.
- Availability of other subsistence supplies for affected troops.

6-8. Subsistence Decontamination

There are three levels of decontamination for subsistence—individual, unit, and support. The level is dictated by who has control or responsibility for the item.

a. Individual Decontamination. The individual soldier performs this level of decontamination. Individual decontamination of subsistence is performed by each soldier on those subsistence items in his possession at the time of the attack. This is performed in conjunction with individual/equipment decontamination procedures as soon as possible after an NBC attack. Individual decontamination of subsistence is limited to operational rations that are in the original containers and still intact. The decision to decontaminate subsistence, however, rests with the individual's commander and not with the individual, except when the soldier is separated from his unit. The decontamination procedures are conducted as outlined in the unit SOP or as modified by the unit commander. At the individual level, the decontamination procedures are employed to the extent that the NBC hazard to the subsistence is reduced, thus allowing for continuation of the mission.

b. Unit Decontamination. Unit personnel under the supervision of NBC-trained personnel organic to the unit perform this level of decontamination. Decontamination procedures for subsistence items stocked by the unit are performed as soon as possible after an NBC attack and in conjunction with area decontamination procedures. Decontamination is attempted only on subsistence items that are in original, intact containers. Decontamination procedures are conducted by unit personnel in accordance with SOPs and supervised by unit NBC-trained personnel. Special decontamination requirements and/or advisability of decontamination efforts are relayed to unit commanders through command or medical channels, as required. The decontamination procedures employed are aimed at reducing or eliminating the NBC hazard presented by the subsistence.

c. Support Decontamination. Specially trained and specially equipped decontamination units/ teams accomplish this level of decontamination. The decision to decontaminate subsistence items at this level rests with the commander responsible for supplies. Support decontamination of subsistence is accomplished at major subsistence storage facilities/areas, such as the GS Class I activities in the theater.

At the support level, veterinary personnel advise on technical matters pertaining to the decontamination operations involving subsistence items. Veterinary personnel also monitor the decontamination results and recovery operations. They make recommendations if procedures need modification or correction and ensure that decontaminated subsistence is wholesome and suitable for issue. The support decontamination procedures must reduce the NBC hazard presented by subsistence to as low a level as possible.

6-9. Evaluation of Nuclear, Biological, and Chemical Hazards

a. Introduction. Commanders depend upon technical advice, professional guidance, and assessment of the situation provided by the veterinary personnel to determine the feasibility and advisability of conducting decontamination operations for subsistence.

b. Veterinary Assessment. The veterinary assessment of the situation is formulated using information and data from survey reports supplied by veterinary personnel conducting inspections of subsistence in contaminated areas. These veterinary survey reports are then consolidated with data received from other sources, such as NBC-monitoring teams, supporting laboratory, supply and PVNTMED units, and combat, technical, and medical intelligence. Veterinary personnel analyze the collected data to assess the status of the subsistence with emphasis on the following:

(1) Would consumption of the subsistence present an NBC hazard to personnel? The degree of risk is linked directly to the type of agent/contaminant and the level of residual contamination in the subsistence (see FM 8-10-7).

(2) The veterinary assessment requires that the NBC agent(s) be identified. The dissemination method of the agent also should be determined regarding the form of dispersion (liquid, solid, gas, aerosol, or fallout). The collected data should indicate degree of penetration of packaging and packing material by the contaminant.

(3) An analysis of the data obtained from veterinary surveys and information obtained from other sources aid in determining the most effective decontamination method. The practicality of a decontamination method is determined by many factors which must be considered in the analysis. Some of these factors are—

- The requirements for and the availability of personnel, equipment, and supplies needed for the decontamination operation. The proposed decontamination method selected should reduce the NBC hazard of subsistence sufficiently to permit human consumption.

- The method must not create additional hazards to the subsistence item or create additional risks for decontamination personnel.

- The method should be timely in regard to amount of subsistence that can be decontaminated.

- The method should provide a wholesome product suitable for its intended use.

(4) Once subsistence is decontaminated, the items may require special storage or handling procedures to protect them from deterioration or future exposure to NBC agents. An additional inspection must be conducted after decontamination to ensure subsistence decontamination was successful and that items are safe for consumption. Recoupment of the decontaminated items into clean packaging materials may be required for protection against future exposure to NBC agents. Some subsistence items may require upgraded protective storage in an enclosed facility with controlled temperature and/or relative humidity instead of storage in an open area protected by barrier covers. The decontamination process may materially reduce the storage life of the subsistence, thus requiring accelerated movement through the supply system. A determination is made as to type of precautionary markings required on subsistence containers. These precautionary markings aid personnel involved in the storage, issue, receipt, and preparation of the subsistence.

6-10. Veterinary Survey of Storage Facilities and Subsistence

a. Introduction. Surveys of NBC-contaminated subsistence and storage facilities/areas are conducted by veterinary personnel to obtain data for the veterinary assessment of the situation. The designated MOPP level must be adhered to while conducting the surveys. Veterinary personnel use available NBC-detection equipment for the survey. The survey is conducted, if possible, in conjunction with NBC detection or survey teams.

b. Survey of Storage Facility.

(1) A preliminary inspection is made to determine the effectiveness of the storage facility and other protective measures in preventing entrance of an NBC agent into the facility. An inspection of the structural integrity of the facility is made, checking for such damage as broken windows or holes in structure. The intactness of the facility is noted by the inspector. Other subsistence items will be closely monitored and tested, as needed. Chemical detection tapes are examined for indication of activation by chemical agents. The area surrounding the facility is examined for the presence of animals, rodents, birds, and insects acting unusual or whose death is unusual or unexplained.

(2) A survey of the storage facility is conducted using NBC alarms/detectors/monitors to determine the presence of an NBC agent. Detector paper, tape, and other detection equipment are used by the inspector to determine if an NBC agent or residue remains in the facility.

(3) Specimens are collected for submission to the supporting laboratory. Recorded symptoms of contaminated soldiers or animals, gross pathology, NBC equipment readings, and other observations are reported. This information, when combined with histopathology and other medical laboratory tests, aids in identifying the nature, level, and type of NBC agent.

c. Survey of Subsistence Items.

(1) A survey of subsistence items must be conducted to determine the presence of an NBC agent on or in the item and the extent of damage caused by the contamination. Veterinary personnel select for testing those subsistence items most likely to have been contaminated. These items will be located near entrances, ventilation inlets, and aisles.

(2) Packaging materials are tested for presence of NBC agents. The presence of unusual liquids or stains is noted. The degree of biological contamination, however, can only be determined by laboratory analysis. Results of the survey of packaging and packing materials are recorded. If an NBC agent is present, then this information is included in the survey.

d. Veterinary Nuclear, Biological, and Chemical Survey Findings. At the completion of the initial survey of the storage facility and subsistence, the findings are provided by veterinary personnel to the veterinary leaders. These findings will be as definitive and timely as possible. These survey findings must address the following points:

- Survey method and inspection procedures used to obtain data, to include type of detection equipment used. Data obtained from support units, such as medical laboratory/NBC units, should be included, noting the source of the data.

- Estimate of the quantity of food contaminated or suspected of being contaminated by the NBC agent. The quantity of contaminated subsistence is reported by the amounts in each of the following categories:

    - Operational rations.
    - B Ration components.
    - Semiperishable ration components.
    - Perishable items.
    - Medical B Rations.

- Recommendation as to advisability and feasibility of conducting a decontamination operation. The recommendation should include an estimate of the amount (percent) of contaminated subsistence that can be recovered if decontamination is accomplished.

e. Decontamination of Subsistence. Once it has been determined that subsistence is contaminated, commanders will decide if the subsistence will be decontaminated. Information provided by the survey aids the commander in reaching this decision. The responsible veterinary personnel provide technical information regarding the subsistence item/product packaging and packing characteristics, as required. See FMs 8-10-7 and 8-505 for additional information on the decontamination of subsistence items.

f. Disposition of Subsistence. The responsible veterinary officer has final approval for determining whether decontaminated subsistence is wholesome and is fit for human consumption. Subsistence supplies meeting wholesome standards should be identified and returned to a protective posture. Subsistence supplies not meeting the standards set for human consumption will be disposed of as directed by the senior veterinary authority.

Section II. TREATMENT OF MILITARY WORKING DOG CHEMICAL AGENT CASUALTIES

6-11. Chemical Agent Protection

The information in FM 8-285 on human casualties of chemical agents generally applies to all animals. Chemical protective doctrine for animals is not currently available, nor are animal protective masks any longer available through military supply channels. For these reasons, any degree of protection of the MWD in a chemical environment will, at best, be extremely difficult. The information given herein applies particularly to the MWD, although these principles can be applied to other animals.

6-12. Nerve Agents

a. Absorption. Nerve agents dispersed as a vapor, aerosol, or spray can be absorbed by the dog through the respiratory tract and the eyes. However, these agents have a limited absorption through the dog's skin because of the combination of the hair covering and the lack of sweat glands. The pads of the dog's paws will absorb nerve agents. In field concentrations, nerve agent vapors are absorbed extremely rapidly through the respiratory tract. (Liquid nerve agents are absorbed readily through the eyes, mucous membranes of the mouth and the nose, and gastrointestinal tract. The dog's respiratory tract, eyes, and paws are especially vulnerable to absorption of liquid agents.)

NOTE

The effectiveness of the Nerve Agent Pyridostigmine Pretreatment (NAPP) Tablet Set in dogs is not well documented. The use of NAPP in the MWD is a command decision. If NAPP is used, the MWDs should be identified as under the influence of the pyridostigmine prior to entering a potentially contaminated environment. A recommended NAPP regimen is ˝ tablet every 8 hours. All precautions regarding NAPP utilization as delineated in FM 8-285 should be followed in MWDs.

b. Protection. Protection for the dog's paws should be considered. There are indications that Mylar (polyethylene terephthalate) specimen bags may provide protection to the paws if the dog must cross through a contaminated area.

c. Effects on Food and Water. Liquid nerve agents or vapors of nerve agents can poison food and water. Animals should not be permitted to drink from water holes or trenches in contaminated areas, nor to drink surface water which has run off from contaminated areas. Water suspected of being contaminated should be tested by PVNTMED personnel and only that which is found to be safe should be

approved for consumption. Contaminated food or food that is suspected of being contaminated should NOT be fed to animals unless approved by veterinary personnel. Food and water packaged in sealed, airtight cans, bottles, or other impermeable containers can be decontaminated in accordance with provision of Appendix F, FM 8-10-7.

6-13. Signs of Nerve Agent Intoxication in Animals

a. All nerve agents generally produce similar effects, although the onset and severity of signs may vary depending upon the route and degree of exposure.

b. Exposure to nerve agent vapors produces local ocular and respiratory effects before other effects. These signs usually appear within 5 minutes after exposure. The initial ocular effect is pupillary constriction. Respiratory exposure is manifested by a rapid, panting respiration and an increase in upper respiratory secretions resulting in watery nasal discharge. Increased upper respiratory secretions, with bronchoconstriction which may occur shortly afterward, will cause coughing, rattling sounds in the throat, wheezing, and respiratory distress. More severe exposures may cause eye pain and visual impairment.

c. Systemic absorption of enough nerve agent through the respiratory tract or gastrointestinal system will increase the severity of local effects and also will cause generalized systemic effects. Respiratory distress becomes marked due to profuse bronchial secretions, bronchoconstriction, and airway obstruction. The distressed animal will gasp and the mucous membranes of the mouth will become blue (cyanotic) as a result of decreased oxygenation. Other effects which may occur are slowing heart rate, profuse salivation and frothing, loss of fecal and urinary control, and increased peristalsis and abdominal pain. Muscular effects occur with other systemic effects and the animal will exhibit muscular weakness, twitching muscles, and trembling. As weakness and paralysis of respiratory muscles progress, breathing becomes increasingly labored, shallow, rapid, and finally intermittent, with the animal quickly becoming oxygen-deficient. In severe exposures, the onset and progression of signs are very rapid. The animal may tremble violently, become uncoordinated, collapse, and go into generalized convulsive seizures. Loss of consciousness may ensue with a total loss of reflexes. Convulsions may become intermittent, with the animal showing a rapid panting respiration between convulsive episodes. Marked generalized convulsions are usually followed by complete flaccid paralysis, central respiratory and circulatory depression, asphyxiation, and death.

d. The symptoms of cutaneous exposure to liquid nerve agents are similar to respiratory exposure to nerve agent vapors. A difference is that the initial signs take longer to develop and the transition from mild to severe symptoms may be slower. With fatal cases, the survival period may be hours, whereas in the inhalation poisoning most deaths occurred in a few minutes. Cutaneous exposure causes local twitching at site of contamination, increased gastrointestinal activity, salivation, miosis, generalized tremors, prostration, and convulsions. Dyspnea is not a pronounced symptom of early cutaneous poisoning, which differs from the inhalation route. Hypopnea occurs during the prolonged convulsive phase. A lethal factor in cutaneous poisoning is the rapid and very considerable rise in body temperature to heatstroke levels caused by the prolonged convulsions.

6-14. Nerve Agent Decontamination Procedures

Following contamination of the hair coat, skin, or eyes, the animal should be decontaminated as quickly as possible to prevent or reduce any further absorption of the agent.

CAUTION

All persons who handle animals contaminated with nerve agents must be in MOPP 4.

a. Hair and Skin.

(1) Since the hair coat delays penetration of liquid agents to the skin and cutaneous absorption requires several minutes, effective decontamination of the hair and skin may be carried out before any significant absorption has occurred. Decontamination is not a substitute for treatment. When the animal shows signs of exposure to a nerve agent, specific therapy should be initiated.

(2) The entire animal (except eyes) may be decontaminated by using the M291 Skin Decontaminating Kit or scrubbing the hair coat and the skin with a 5 percent solution of sodium carbonate (50 grams [g]/liter). It is important for the decontaminating solution to penetrate the hair coat and to reach the skin. Then the hair coat and the skin should be rinsed with warm water, scrubbed with warm soapy water, and rinsed again. While this is being done, the decontaminating solution must be kept out of the animal's eyes. A generous amount of nonmedicated ointment (such as petroleum jelly) should be applied over the eyes before using the decontaminating solution near the eyes.

(3) Small, localized areas of liquid contamination on the animal's hair, skin, collar, or leash may be removed by washing with a 5 percent sodium carbonate solution.

CAUTION

Do not use sodium carbonate for a VX (nerve agent). It cannot detoxify VX and creates extremely toxic by-products (see Table F-2, FM 3-5).

b. Eyes. Any amount of liquid nerve agent getting into the eyes of an animal requires prompt action to prevent conjunctival absorption, which can occur very rapidly. The eyes can be decontaminated by irrigation with copious amounts of water until all agents have been removed. Avoid using any components from the M291 Skin Decontaminating Kit in the eyes.

NOTE

The M291 Skin Decontaminating Kit is replacing the M258A1 Skin Decontamination Kit. The dog handler carries an additional M291 Skin Decontaminating Kit for his dog.

6-15. Treatment of Animal Casualties of Nerve Agents

a. Emergency Therapy Procedures.

(1) Initial first aid includes administering one Nerve Agent Antidote Kit, MARK I (carried by the dog handler), into the back of the thigh of the dog. In the severely poisoned dog (paragraph 6-13*c*), administer three sets of the MARK I in rapid succession with one injection of the convulsant antidote for nerve agent (CANA).

NOTE

The dosage for atropine in nerve agent poisoning in the dog is 0.2 to 0.4 milligram (mg)/kilogram (kg). For an average-size MWD (40 kg), 8—16 mg (4—8 MARK I atropine injectors) may be required for initial control of clinical signs. The CANA is an autoinjector containing 10 mg of diazepam. It is used to prevent and control convulsions.

Single atropine injections of 2 mg are continued every 10 to 20 minutes until the nerve agent effects have subsided or signs of atropinization appear—see paragraph (6) below.

NOTE

It should be noted that not all clinical signs of nerve agent intoxication can be alleviated with atropine. Care should be taken to ensure that atropine intoxication is not induced.

It should be noted that the above treatment is the same as that administered to the soldier. The MWD must be monitored for heat stress. The atropine dries the mucous membranes, thus preventing the MWD from expelling body heat.

(2) The initial dosage of 2 PAM Cl (pralidoxime chloride) in the dog is 20 mg/kg. Two 2 PAM Cl injectors should be sufficient. Additional 2 PAM Cl may need to be administered, but not at the same rate as atropine. If after 1 to 2 hours no significant improvement has been noted, an additional injector of 2 PAM Cl should be given.

NOTE

The initial dosage of 2 PAM Cl in the dog is 20 mg/kg. Two 2 PAM Cl injectors should be sufficient.

However, it is not likely that more than two 2 PAM Cl injectors will be needed.

(3) Maintain a clear airway. Remove respiratory secretions and saliva obstructing the airway.

(4) In severe nerve agent exposure, the animal's respiration is markedly depressed and extreme muscular weakness or paralysis is present. In such cases, assisted ventilation is required to effectively resuscitate the animal.

(5) Adequate atropine and 2 PAM Cl should bring about an improvement or restoration of spontaneous respiration and also improve blood circulation. However, the effectiveness of 2 PAM Cl after a short period of time is lost. The 2 PAM Cl varies in its effectiveness against nerve agents. It is least effective against Soman (GD).

(6) Signs of effective atropinization include dry mouth and mucous membranes, increased heart rate, and increased body temperature. Atropine administered systemically may not overcome local ocular effects so that the absence of pupillary dilatation does not necessarily indicate the need for further atropine administration. Canine nerve agent casualties can tolerate much greater doses of atropine than would a normal dog that has not been exposed to a nerve agent. However, repeated doses of atropine will markedly increase its effects, especially in animals that have received only a minimal exposure.

b. Supportive Therapy Procedures.

(1) Maintain a clear, unobstructed airway. Assisted ventilation may be required.

(2) Complete decontamination, if not already performed.

(3) Provide supportive treatment, as indicated.

(4) As previously stated, atropine is usually sufficient to control central nervous system (CNS) signs, but if convulsions persist or occur intermittently and further interfere with respiration, they may be controlled by the administration of CANA intramuscularly.

6-16. Incapacitating Agents (BZ Type)

a. Absorption and Protection. Significant absorption of BZ is most likely to occur through the animal's respiratory tract, but effective percutaneous and gastrointestinal absorption can occur. The protective measures for nerve agent poisoning can be applied to incapacitating agents.

b. Signs of Intoxication.

(1) BZ is an anticholinergic agent with pharmacological effects similar to those of atropine, although it has a greater effect on the CNS than atropine. The onset of signs following a moderate respiratory exposure can be expected to occur within 10 to 20 minutes. In general, the greater the dose, the shorter the time for the onset of symptoms.

(2) In the MWD, early effects of moderate exposures to BZ include increased heart rate, pupillary dilation, impaired vision, dry mouth, and a decrease in physical endurance while working. Marked rises in body temperature do not usually occur. The agent's predominant effects are on the CNS, resulting in incoordination, behavioral changes, confusion, and a lack of normal responses to commands. These exposures can be expected to incapacitate animals and make them unfit for service.

(3) There is a large margin of safety between incapacitating and lethal exposures to BZ. Overwhelming exposures, however, can result in prostration and convulsions, with death occurring rapidly.

c. Treatment.

(1) After an animal has had a moderate exposure to BZ, effects may persist 24 hours or more. Although the animal's life is not immediately threatened, therapy can be administered to hasten recovery and return the animal to duty as quickly as possible. However, the animal should be examined and its disposition determined before it is returned to duty.

(2) General therapy for BZ exposure should include decontaminating the hair and the skin with warm soapy water, restricting activity, and keeping drinking water available.

(3) Physostigmine salicylate (0.1 to 0.6 mg/kg) is given by slow intravenous (IV) or intramuscular (IM) injections. Repeated doses of physostigmine can be given at intervals of 1 to 2 hours if signs of BZ exposure persist or recur. Continuous therapy may not be necessary since the effects of the exposure gradually disappear. If continuous administration is required, it should be carried out at reduced dosage levels to avoid an overdose of physostigmine. The signs of physostigmine overdose include pupillary constriction, muscle weakness, twitching, vomiting, diarrhea, respiratory distress, slowed heart rate, and convulsions. If toxicity is noted, further administration of physostigmine should be discontinued and one atropine injector should be given intramuscularly to control severe effects of overdose.

(4) Anesthetics, tranquilizers, and sedatives tend to potentiate the effects of incapacitating agents and are contraindicated in the treatment of animals exposed to BZ.

6-17. Blister Agents

The terms blister agent or vesicant are misnomers when applied to animals since vesiculation occurs in only a few species, although these agents do injure any part of the body they contact. The preventive measures used for nerve agents can also be used for blister agents. If a dog must walk through a contaminated area, its paws should be protected to prevent the blister agent from reaching the skin (paragraph 6-12*b*).

The effects of specific blister agents and their treatment and decontamination procedures are described in paragraphs 6-18 through 6-20 below.

6-18. Mustard

a. Effects.

(1) Liquid mustard or mustard vapors produce delayed effects on the skin and eyes following exposure. The long hair of dogs does not prevent injury to the skin, but it does impede the penetration of liquids and vapors to the skin.

(2) Contamination of the skin is followed by a latent period, which varies in length with the degree of exposure. Within 1 hour after exposure, piloerection (erection of the hair) occurs at the site of exposure and may last for an hour or more. Two to three hours after that, redness and edema of the skin develop, increasing in intensity for 24 hours and then subsiding. In mild exposures, edema is followed by exfoliation of the epidermis of the skin. Severe exposures form ulcerated lesions. The lesions heal satisfactorily unless they become secondarily infected.

(3) The eye is most sensitive to mustard's corrosive effects. Liquid mustard or heavy vapor exposures can be extremely damaging to the entire eye. Mild ocular exposures are followed by conjunctivitis and conjunctival edema (usually appearing within 1 or 2 hours), edema of the eyelids, corneal opacity and inflammation of the cornea; corneal roughening, and pain. More severe exposures can produce more serious lesions, resulting in necrotic conjunctivitis, corneal erosions or deep ulcerations, deep ophthalmic inflammation, and permanent corneal opacification due to scarring. These lesions predispose the eye to secondary bacterial infections.

(4) Mild to severe exposures to mustard vapor damage the respiratory tract. Inhalation of blister agent vapors will first produce sloughing and ulceration of the tracheobronchial mucosa. Profuse inflammatory exudation and edema may cause respiratory distress. More severe exposures produce involvement of the lung tissue, pulmonary edema, and acute pulmonary alveolar emphysema, and may become complicated by secondary purulent bronchopneumonia. The effects of respiratory exposures tend to develop over several days. The signs of respiratory involvement include cough, nasal discharge, respiratory difficulty, fever, and tracheal and pulmonary rales.

(5) Ingestion of contaminated food and water or the licking of contaminated parts may produce ulceration of the alimentary mucous membranes, resulting in oral ulceration, abdominal pain, vomiting, bloody diarrhea, and prostration.

(6) Systemic absorption of mustard can result from extremely high skin or respiratory exposures, or from absorption of the agent from the intestines. It may produce systemic effects involving the CNS, cardiovascular system, and hematopoietic system. The possibility of severe leukopenia and susceptibility to infection also exists. These effects are manifested by excitation, salivation, slowed heart rate, decreased count of white blood cells and platelets, bloody diarrhea, and shock.

b. Decontamination.

(1) All persons who receive and handle contaminated animals must be in MOPP 4.

(2) Because of the insidious action of mustard vesicants (where effects are not immediately apparent) or the rapid action of arsenical vesicants, decontamination will not be entirely effective. Yet, it is essential to decontaminate animals promptly after exposure to prevent more serious injuries and to mitigate the effects of exposure where possible. Decontamination should be carried out within the first minute or two after contamination with vesicants to prevent injury and BEFORE treatment is begun. Decontamination should be accomplished as soon as possible to prevent contamination of handlers and treatment area.

(3) Before redness and edema appear, localized areas of the skin can be decontaminated by using the M291 Skin Decontaminating Kit as described in FM 8-285. Where mustard vesicants were used, decontamination of a large portion of an animal's body can be done by applying dressings soaked with a 0.5 percent chlorine solution (calcium or sodium hypochlorite solution). Collars, muzzles, and leashes are also decontaminated by using the M295 Decontamination Packet, Individual Equipment, or an M291 kit.

c. Treatment. The treatment for either local or systemic effects of mustard blister agents is primarily symptomatic and similar to the treatment described in FM 8-285 for human casualties. Specific systemic and/or topical antibiotic therapy should be administered when indicated. Supportive therapy may be required to maintain the animal's nutritive and fluid status. With eye injuries, the degree of corneal damage should be determined with fluorescein stain and treated accordingly. Also, the possibility of leukopenia, lung damage, sepsis, or other injuries may exist.

6-19. Arsenical Blister Agents

a. Effects. Arsenical blister agents are more damaging as liquids than as vapors. Exposure to liquid arsenical blister agents is immediately painful, and the exposed animal becomes very restless. Lesions produced by these agents are more severe and develop faster than those produced by mustard. Liquid arsenicals on the skin and their inhaled vapors are readily absorbed into the systemic circulation, producing signs of arsenic poisoning manifested by restlessness, vomiting, bloody diarrhea, shock, weakness, anemia, and pulmonary edema.

b. Decontamination. Procedures for decontamination are the same as those applied for mustard (paragraph 6-18*b*).

c. Treatment.

(1) The treatment of lesions induced by arsenical blister agents is similar to that for other blister agents. To treat localized skin exposures, British anti-lewisite (BAL) ointment can be rubbed into the contaminated areas, allowed to remain 5 minutes, and then washed off. Any other protective ointment on the skin must be removed before application of BAL ointment. When BAL ointment is applied, it will penetrate and neutralize arsenical blister agents.

(2) Systemic treatment for arsenical blister agents is indicated when there is extensive skin exposure which has not been decontaminated within 15 minutes, when a very rapid onset of effects follows exposure, or when systemic signs of arsenic poisoning appear. Systemic therapy consists of the administration of BAL at 2.5 to 5.0 mg per kg by IM injection. Dosage can be repeated every 4 hours for 2 days and then two times per day for the next 10 days or until recovery is apparent. Supportive therapy also should be administered as indicated.

6-20. Nitrogen Mustards

Liquid and vapor exposures to nitrogen mustards are less damaging to the skin of animals than are equal concentrations of mustard or arsenical blister agents. Exposures of the eye to nitrogen mustard, however, produce more serious lesions than mustard exposures. The respiratory, gastrointestinal, and systemic effects of nitrogen mustard are similar to those caused by mustard. Decontamination and therapy for nitrogen mustard are similar to those for mustard.

6-21. Phosgene

The effects of phosgene (CG) in animals are similar to its effects in humans. One difference is that cyanosis (which is so prominent in human casualties of CG) is masked in animals. For exposed animals, extreme exertion is dangerous, especially when pulmonary edema develops. Animals in shock should be kept comfortably warm and given oxygen, if available. If pneumonia develops, treatment with antibiotics is indicated.

6-22. Irritant Agents

Under field conditions, the irritant agents bromobenzylcyanide (CA), chloroacetophenone (CN), and O-chlorobenzylidene malononitrile (CS) have little effect on animals. The CS agent may cause increased respiration and hyperactivity. Liquid or solid agents in direct contact with the eyes will cause severe irritation; the eyes should, therefore, be flushed with saline or water. For skin decontamination, a 0.25 percent solution of sodium sulfite is more effective than saline or water in dissolving and neutralizing the irritant agent and should be used if it is available.

6-23. Smokes

a. White Phosphorus (WP). Burning particles of WP cause deep burns on contact with the skin. The smoke is generally not toxic. Since WP burns spontaneously when exposed to air, oxygen must be excluded to stop the burning. This may be done by submerging the burn or wound in water or by covering it with a water-soaked dressing. At the earliest opportunity, all WP should be removed from the skin as follows: Bathe the affected part in a bicarbonate solution to neutralize phosphoric acid, which then allows removal of visible WP. Remaining fragments will be observed in dark surroundings as luminescent spots. If the animal's condition will permit, the burn should be debrided promptly to remove bits of phosphorus

which might be absorbed later and possibly produce systemic poisoning. An ointment with an oily base should not be applied until it is certain that all phosphorus has been removed. Further treatment should be carried out as for thermal burns. Treatment with ultraviolet light is both palliative and therapeutic. If the eyes are affected, treatment should initially be commenced by irrigation, using water or saline. The lids must be separated and a local anesthetic instilled to aid in the removal of all imbedded particles. In eyes with severe ulceration, atropine sulfate ophthalmic ointment should be instilled once all particles have been removed.

b. Sulfur-Trioxide Chlorosulfonic Acid Solution (FS), Titanium Tetrachloride (FM), and a Chemical Mixture (HC). Field concentrations of these agents usually are not harmful to animals, but the liquid may cause burns on the skin and in the eyes. After the eyes are irrigated, they are treated the same as for thermal burns.

6-24. Blood Agents (Systemic Poisons)

a. General. These agents produce toxic effects after absorption. Inhalation is the usual route of entry. Hydrogen cyanide (AC) and cyanogen chloride (CK) are the important blood agents.

b. Effects and Treatment.

(1) Hydrogen cyanide causes asphyxiation of the tissues, especially the respiratory center of the CNS. In addition to cyanide effects, CK causes marked local irritant effects on the respiratory system which lead to pulmonary edema.

(2) Treatment is difficult under field conditions. It should consist of oxygen therapy under positive pressure ventilation and one 10-milliliter (ml) (3 percent) ampule containing 300 mg of sodium nitrite followed by one 50-ml (25 percent) ampule containing 12.5 g of sodium thiosulfate intravenously. The IV administration of one ampule of sodium nitrite followed by the IV administration of one ampule of sodium thiosulfate immediately after exposure to cyanide should be lifesaving in the dog.

NOTE

The dosage of sodium nitrite is 16 mg/kg or 640 mg, intravenously, for a 40 kg dog, followed immediately by sodium thiosulfate at a dose rate of 30 mg/kg. If additional treatment is required, use only sodium thiosulfate since there should be sufficient methemoglobin present from the original dose of sodium nitrite.

6-25. Biological Agents

a. Disease produced by the offensive use of biological agents against US forces could be lethal and/or disabling. These biological agents could also infect the animal population within the contaminated area.

b. The veterinary medical response to the threat or use of biological weapons may be different depending on whether veterinary medical measures are employed prior to exposure, or whether exposure has already occurred and/or symptoms are present. If provided before exposure, active immunization or prophylaxis with antibiotics may prevent illness in those government-owned animals which are exposed. Active immunization may be effective against several potential biological warfare agents, the best modality for future protection against a wide variety of biological threats. After exposure, active or passive immunization, as well as pretreatment with therapeutic antibiotics or antiviral drugs, may ameliorate disease symptoms. After the onset of illness, only diagnosis of the causative agent and general or specific treatment are left to the veterinary care providers.

6-26. Nuclear Weapons

a. A proliferation of NBC capabilities beyond the lines of the major powers has increased the likelihood of NBC use in a conflict. The number of Third World countries seeking the technology for nuclear weapons and advanced surface-to-surface missiles has increased. Many Third World or developing nations have current or near-term access to the materiel needed to produce nuclear weapons. With current trends in nuclear proliferation, the nuclear threat now and in the future will be global. The proliferation of nuclear-capable nations in all contingency regions increases the likelihood of US forces being targets of nuclear attack.

b. If US forces are attacked with nuclear weapons, government-owned animals will present the same types of medical problems as seen with human patients. These medical problems will include blast, thermal, and radiation injuries and radiation sickness depending on the amount of radiation received. Veterinary care will be based upon the clinical condition of the animal and its prognosis for recovery. For definitive information on the medical effects of nuclear weapons, diagnosis, treatment, and prognosis, see FM 8-9.

CHAPTER 7

REAR AREA OPERATIONS AND AREA DAMAGE CONTROL

7-1. Commander's Responsibilities

The tactics and weaponry of modern warfare make rear areas susceptible to enemy action. Distance from the combat area does not assure safety from attack. The commander is always responsible for the security and defense of his unit. He should survey his operation and develop a plan to minimize the possibility and effect of an enemy attack. His plan should be based on the instructions received from higher headquarters and on the unit's mission, situation, and location. He must ensure that each individual is aware of his duties and specific responsibilities as outlined in the CHS plan and TSOP. The defense plan must include steps to be taken in the event of an NBC attack (see FMs 3-3, 3-4, 3-5, and 8-10-7 for additional information). Each individual must be thoroughly trained in NBC defensive measures. All defensive activities that can be made routine should become part of the TSOP. Some of the subject areas that should be addressed in the TSOP include—

- Warning system for attacks.
- Means of communicating with higher headquarters.
- Specific responsibilities of key personnel and identification of alternate personnel.
- Provisions for destruction of materiel and records.
- Active and passive individual and unit defensive measures.
- Ammunition and maintenance of weapons.
- Provisions for training and rehearsal.

Plans should be rehearsed frequently so that individuals become proficient in performing their assigned tasks.

7-2. Defensive Planning

a. Defensive planning is integrated into the planning for CHS operations and considers both tactical and technical mission requirements. Such plans are prepared and normally incorporated into the unit TSOP. The plan is rehearsed regularly to ensure that each individual knows his defensive duties and responsibilities. Active and passive defensive planning, to include cover, concealment, methods and channels of communications, and control, are stressed during training. Terrain features that would aid in the defense of the unit are used. Dispersion, consistent with C2, is practiced. Warning systems are established and obstacles constructed.

b. The defense plan of a unit will be published as part of the unit's SOP. The plan includes measures to carry out the unit's rear area security operations responsibility and to ensure an effective unit defense. Security should be a part of an integrated defense plan (base cluster commander's base defense plan). Within an AO, the base cluster and base commanders are appointed by the area commander. This is normally the senior commander (except medical) located within the base cluster. The base cluster commander has responsibility for security. The base cluster operations center (BCOC) briefs units on security requirements and oversees implementation of the base cluster defense plan. Veterinary units as an element of the base cluster are included in the base cluster defense plan. The BCOC inspects and approves the units' defense plans and integrates each base cluster unit into the overall base cluster defense plan. Adjacent units within the base cluster coordinate their activities to ensure all defensive responsibilities for their areas of the perimeters are covered.

7-3. Area Damage Control

a. Effective planning, setting of specific responsibilities, and use of all available assets to conduct area damage control (ADC) are necessary to restore operations and provide continuous support. The corps commander provides guidance to planners on requirements to support US Army operations, including ADC. Effective damage control is decentralized and executed at the lowest level. The base cluster commander reviews and identifies all assets available within the base. He also assesses the base's ability to conduct ADC operations. Assets include medical evacuation and treatment elements. Also included are equipment evacuation and repair, critical supplies, and explosive ordnance disposal assets. The base cluster commander and unit commanders identify critical support points. They include points that are the sole local sources of supplies. They examine innovative ideas and initiatives to minimize damage. They coordinate with HN assets, military police, and engineer units through the COSCOM when these support elements are not located in the base cluster.

b. In accordance with the ADC guidelines, the BCOC completes the following tasks before an incident occurs:

- Designates specific individuals and units to perform ADC operations.
- Attempts to disperse and harden units and facilities to minimize damage; when practical, uses existing structures.
- Establishes priorities within the AO. Identifies those critical facilities requiring protection and logically prioritizes the responsibilities based on the commander's directive. Reports those critical facilities that are not provided the necessary ADC support to the commander as soon as possible.
- Prepares, coordinates, and rehearses ADC plans and SOPs.
- Organizes, equips, and trains personnel and units for ADC operations.
- Designates alternate operational sites or alert areas. Reports facilities or supply points that are source facilities.

c. Units in the base cluster complete the following tasks during and after an incident:

- Conduct an immediate assessment of the damage and report to the BCOC. Simultaneously, initiate action to isolate the danger areas and to prevent extension or continuation of the damage. (Fighting fires, stopping gas leaks, and minimizing flooding are examples.)

- When feasible, prevent fires by bunkering and isolating flammables and explosives. Fight existing fires; store water or identify water sources. Extensive fire fighting is primarily a unit responsibility with support from engineer fire fighting teams where available. However, due to the extended distance involved and the current technology that produces widespread devastation, alternate means may have to be used. Local fire fighting capabilities, such as HN support or the acquisition of commercial materiel to support ad hoc fire fighting teams, may be necessary.

- Perform self-aid, buddy aid, and first aid procedures for casualties, and transport casualties. If possible, medical personnel provide medical treatment and evacuation of casualties. However, the timely evacuation of casualties is important. The situation may require the use of nonmedical vehicles for mass casualties. If possible, medical personnel accompany patients being transported in nonmedical vehicles to provide en route patient care.

- Coordinate with the military police to provide traffic control. This ensures fire fighting equipment gains access to the area and ambulances and evacuation vehicles clear the area. The military police notify the BCOC of blocked routes and divert traffic as necessary. They also provide refugee control, straggler control, and some local security when required.

- Coordinate with the engineers to support critical facilities. Engineers construct fortification and barriers and clear debris and rubble in support of the base ADC mission.

- Coordinate explosive ordnance disposal support to ADC operations, through the corps if necessary, with the explosive ordnance disposal control group.

- Coordinate for decontamination support. The contaminated units evacuate along specific routes (not the MSR) assigned by the corps movement control officer to the appointed decontamination sites. Military police provide circulation control.

APPENDIX A

FORMAT FOR THE VETERINARY ESTIMATE

(Classification)

VETERINARY ESTIMATE OF THE SITUATION

Headquarters
Place
Date, time, and zone

References: *Maps, overlays, charts, or other documents required to understand the plan. Reference to a map will include the map series number and country or geographic area, if required; sheet number and name, if required; edition; and scale.*

1. MISSION (Statement of the specific veterinary support mission.)

2. SITUATION AND CONSIDERATIONS

a. Enemy situation.

(1) Strength and disposition of animals.

(2) State of health of animals and threat concerning zoonotic diseases.

(3) Capabilities that affect the ability of the veterinary service to accomplish its mission.

b. Friendly situation.

(1) Size and posture of Class I supply system. *(Although other units of the command are responsible for processing food and water, appropriate veterinary service or PVNTMED detachments are responsible for food wholesomeness, hygiene, safety, and quality.)*

(2) Type of rations to be used.

(3) Status of Class I supplies.

(4) Strength and disposition of animals, if applicable.

(5) Status of veterinary supply.

(6) Military significant endemic diseases of animal and public health importance.

(7) Number and extent of civic action programs. *(The civil-military operations [CMO] staff can provide liaison with indigenous health professionals and organizations.)*

(Classification)

(Classification)

(8) Veterinary service personnel. *(Veterinary service personnel are responsible for advising all DOD theater logistics units on storing subsistence to prevent NBC contamination of rations and, when necessary, on decontaminating rations to ensure food safety.)*

c. Characteristics of the area of operations. *(Factors that affect the veterinary mission and veterinary support.)*

(1) Terrain.

(2) Weather and climate.

(3) Animal population (health, types, disposition [domestic and wildlife]). *(Veterinary units can evaluate the local crops and animals for availability and suitability as fresh food sources. As a TO expands and matures, more fresh food will be needed to support US forces.)*

(4) Civilian population.

(5) Flora.

(6) Zoonotic disease posing a serious threat to the health of the command, the local population, or the agricultural economy.

(7) Local food supply systems. (*Also included are requirements to inspect subsistence items intended for dislocated civilians and enemy prisoners of war to prevent foodborne diseases. This will limit the impact these populations have on AMEDD resources.)*

(8) Water. *(Sources of approved water supplies. If approved supplies are not available, request PVNTMED assistance.)*

(9) Location, quantity, and quality of indigenous veterinary services.

(10) Nuclear, biological, and chemical and directed-energy weapons.

(11) Animal diseases having a disruptive impact on the economy.

(12) Other.

d. Strengths to be supported. *(Normally a table depicting food inspection support and animal support.)*

(Classification)

(Classification)

(1) United States uniformed services.

(a) Army.

(b) Navy.

(c) Air Force.

(d) Marines.

(e) Coast Guard.

(2) Department of Defense civilians.

(3) Allied forces.

(4) Coalition forces.

(5) Enemy prisoners of war.

(6) United States national contract personnel.

(7) Dislocated civilians.

(8) Detainees and internees.

(9) Civilian internees.

(10) Others. *(If this is an NEO, consider the following: Has the Department of State authorized pets to accompany NEO evacuees? Are any animals prohibited from US entry by the Food and Drug Administration? What will be done with pets brought to evacuation control?)*

e. Health of animals in the command.

(1) Origin of animals.

(2) Presence of disease.

(3) Status of immunizations.

(Classification)

(Classification)

(4) Status of diagnostic tests.

(5) Status of nutrition.

(6) Care and management.

(7) Fatigue.

f. Assumptions.

g. Special factors.

h. Definitions.

3. ANALYSIS

a. Veterinary service personnel estimate.

(1) Distribution of Class I installations.

(2) Distribution of subsistence (perishable and nonperishable).

(3) Extent of local procurement.

(4) Extent of inspection work load of indigenous foods for indigenous personnel, if applicable.

(5) Estimate of animal casualties, if applicable.

(6) Evacuation of animal casualties, if applicable.

b. Veterinary support requirements.

(1) Food inspection.

(2) Veterinary PVNTMED and veterinary public health.

(3) Veterinary supply.

(4) Veterinary treatment.

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(5) Evacuation policy of MWDs.

(6) Other (humanitarian civic action programs).

c. Veterinary resources available.

(1) Organic veterinary personnel.

(2) Attached veterinary units.

(3) Supporting veterinary units.

(4) Veterinary personnel in civil affairs units and Special Forces groups. *(Host-nation and medical personnel and supplies reported by civil affairs as available from civil public health agencies must also be listed. Cultural differences can impact on veterinary support. Civil affairs personnel assist in planning for the maximum HN support. They also assist in carrying out HN agreements.)*

(5) Staff veterinarian in MEDCOM and medical brigades.

(6) Area medical laboratories.

(7) The veterinary troop ceiling.

(8) Status of veterinary supply.

d. Courses of action. *(As a result of the above considerations and analysis, determine and list all logical COA which will support the commander's OPLAN and accomplish the CHS mission. Consider all SOPs, policies, and procedures in effect. Courses of action are expressed in terms of who, what, when, where, how, and why.)*

4. EVALUATION AND COMPARISON OF COURSES OF ACTION

a. Determine the probable outcome of each COA listed in paragraph 3 when opposed by each significant difficulty identified. This may be done in two steps:

(1) Determine and state those anticipated difficulties or difficulty patterns that will have an equal effect on the COA listed.

(2) Evaluate each COA against each significant difficulty or difficulty pattern to determine strengths and weaknesses inherent in each COA.

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b. Compare all COA in terms of significant advantages and disadvantages, or in terms of the major considerations that emerged during the above evaluation. Decide which COA promises to be most successful in accomplishing the mission.

5. CONCLUSIONS

a. Indicate whether the mission set forth in paragraph 1 can (cannot) be supported.

b. Indicate which COA can best be supported from the veterinary standpoint.

c. Indicate disadvantages of nonselected COA.

d. List the deficiencies in the preferred COA that must be brought to the attention of the commander.

/s/ _____
Veterinarian

Annexes (as required)

DISTRIBUTION:

(Classification)

APPENDIX B

FORMAT FOR THE VETERINARY SERVICE PORTION OF THE COMBAT HEALTH SUPPORT PLAN

(Classification)

VETERINARY SERVICE

1. FOOD INSPECTION.

a. Procurement inspection policy.

b. Captured ration inspection policy.

c. Nuclear, biological, and chemical contaminated ration inspection policy.

d. Units. *(Under separate subparagraphs for each unit, give location, mission, and attachments, if indicated. Include specific location, type, and name of units requiring inspection services.)*

2. EVACUATION POLICY FOR MILITARY WORKING DOGS.

a. Evacuation requirements.

b. Units participating in evacuation. *(Under separate paragraph, include location, mission, and attachments of each subordinate evacuation unit.)*

c. Special requirements for animals subjected to NBC agents.

3. HOSPITALIZATION OF GOVERNMENT-OWNED ANIMALS. *(Under separate subparagraphs for each hospital, give location, mission, and attachments, if indicated.)*

4. VETERINARY OUTPATIENT SERVICE. *(Under separate subparagraphs for each facility, give location, mission, and attachments or animals supported.)*

5. VETERINARY SUPPORT FOR HUMANITARIAN CIVIC-ACTION PROGRAMS. *(When veterinary support of humanitarian civic-action programs has been authorized, separate subparagraphs identify—*

- *Each veterinary unit providing support.*
- *Each unit's area of responsibility.*

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- *The type and extent of veterinary support to be provided.*
- *The availability of veterinary biologicals, drugs, and supplies, if not normally maintained by the unit.*
- *Necessary coordination with civil affairs units, when required.)*

(Classification)

NOTE

See FM 8-55 for additional information on the Combat Health Support Plan.

APPENDIX C

ADMINISTRATIVE PUBLICATIONS AND REPORTS

C-1. General

Unit administration is the foundation of the US Army's systematic approach to accomplish its missions. It deals with the creation, maintenance, and disposition of basic records and reports required at company, battery, and detachment level.

C-2. References

Part of the comprehensive system of unit administration is the collection of references known as DA publications. They are divided into five basic groups.

a. Administrative publications pertain to the conduct of military affairs and the integral management of units. They are normally permanent in duration and directive and regulatory in nature. They outline the policies and responsibilities for the entire US Army.

b. Technical publications pertain to specific subjects in the arts, sciences, and trades. They are specialized, detailed, or professional guides for a particular subject. Technical publications are not directive.

c. Training and organizational publications contain information regarding doctrine, tactics, techniques, and procedures used in training units and individuals.

d. Supply publications contain instructions for the procurement, distribution, maintenance, and salvage of supplies.

e. Miscellaneous publications contain information not readily associated with one of the above categories.

C-3. Distribution and Resupply of Publications

Currently, initial distribution and resupply of publications are made by two methods—command and pinpoint distribution. See AR 25-30 for additional information.

a. *Command Distribution*. Command distribution is used for the initial distribution of publications. It is also used for the initial distribution and resupply of blank forms through installation publication stockrooms and overseas publication centers established and operated in the field. In CONUS, bulk quantities are furnished by US Army Publications Distribution Centers to installation publication stockrooms for initial distribution to activities and units.

b. *Pinpoint Distribution*. Pinpoint distribution is a method by which publications are forwarded directly from publication centers to the using unit. They bypass the installation publication stockrooms,

resulting in more rapid distribution. All elements of the US Army, down to and including detachment level, are authorized to establish a publications account with the US Army Publications Distribution Centers at Baltimore, MD, and/or St. Louis, MO. A DA Form 12-R (Request for Establishment of a Publications Account [LRA]) is used to obtain an account number from either center. It is also used to report the unit's requirements for pinpoint distribution. A DA Form 12-R must be submitted before, or with, the initial submission of a requirement pinpoint distribution form.

C-4. Veterinary Activity Report

This is a semiannual report prepared by all activities having veterinary service personnel permanently assigned and performing those duties prescribed in DA Pamphlet 40-17. The report covers the period 1 October through 31 March and 1 April through 30 September. The original copy of each activity's report, except major overseas commands, will be forwarded through command channels to Headquarters, Department of the Army (HQDA), DASG-VCP, Washington, DC 20310; major overseas commands will consolidate their reports and forward the consolidated report to HQDA.

C-5. Medical Statistical Report

The occurrence of certain diseases in animals must be reported to higher headquarters. Army Regulation 40-400 should be consulted to determine those diseases of interest and to determine reporting requirements.

C-6. Command Health Report

The Command Health Report is prepared by the surgeon of the command to which the veterinary unit is assigned or attached. Veterinary unit commanders submit reports, through command channels, to the local surgeon on a monthly basis or as directed by him. Included in the report is information concerning the control of animal diseases communicable to man such as the—

- Origin and progress of the disease.
- Scope and results of tests.
- Methods of treatment.
- Nature and efficiency of quarantine, if any.
- Number of cases and their disposition.

The report should also contain information concerning unusual conditions affecting food sources, storage and handling facilities, and food items that may endanger the health of the command. Refer to AR 40-5 for additional information.

C-7. Annual Historical Report

Annual reports of administrative, professional, and operational activities of the AMEDD are the basic files of the Historical Unit, US AMEDD. They are also used as reference and source material for historical programs, AMEDD missions, and teaching material. Particular attention should be given to personnel rosters, TOE, MTOE, and movement orders. All AMEDD veterinary units prepare the report in accordance with AR 40-226. The report will be submitted for each calendar year. Reports from small medical units, such as detachments and teams that have functionally integrated with larger medical units, may be included with the larger unit's report. The title page of the consolidated report must list each unit covered by the report, and the information reported from each small medical unit must be attached to an identifying tab or appendix of the basic report. Upon inactivation, agencies should prepare and forward reports covering the calendar year preceding inactivation.

APPENDIX D

VETERINARY SUPPLY AND MAINTENANCE OPERATIONS

Section I. SUPPLY

D-1. General

a. Overview of the Supply System. A military unit will function as an effective force only if its many elements operate smoothly and efficiently. To accomplish its mission, a military unit requires supplies. Thus, a most basic requirement of any military unit is a supply system that provides the necessary materiel at the proper time, at the proper place, and in the quantities required.

b. Management. To obtain and manage supplies and equipment, simply ordering is not sufficient. When received, supplies and equipment must be accounted for. Therefore, someone must be appointed to be responsible for and supervise their management until supplies and equipment are consumed or become unserviceable.

c. Publications. The publications referenced in this chapter are subject to frequent revisions. The information contained within should only be used as a reference point for continued accurate supply procedures. It is the unit commander's responsibility to keep informed of current supply procedures and command guidelines.

D-2. Property Accountability

Accountability is the obligation of a designated individual to keep an accurate record of unit property in accordance with specific regulations or the policies of higher authority. The person having this obligation may not necessarily have physical possession of the property or the records for the requisition, storage, or issue of supplies. The records maintained by accountable officers are subject to inspection and audit by official auditors and inspectors. At unit level, this individual is the appointed property book officer (PBO). It is the PBO's obligation to maintain records for certain types of property under the conditions specified in AR 710-2 and/or other DA instructions.

D-3. Property Responsibility

Property responsibility differs from accountability in that responsibility is the obligation of an individual to care for and safeguard the property in his possession or in the possession of his subordinates. This obligation applies whether that property is in use or in storage. Property responsibility is inherent and does not necessitate the signing of a formal document or receipt for the items. There are four types of responsibility: command, supervisory, direct, and personal.

a. Command Responsibility. This is the obligation of the commander to ensure that the property of his command is properly safeguarded, accounted for, and administered. This obligation applies regardless of whether the command is permanent or temporary. The commander cannot delegate this responsibility to another member of the unit.

b. Supervisory Responsibility. This responsibility is the obligation of a supervisor to ensure that all government property issued to or used by his subordinates is properly used and cared for, and that

proper custody and safekeeping are provided. It is inherent in all supervisory positions, it is not contingent upon signed receipts or responsibility statements and cannot be delegated.

c. Direct Responsibility. This is the obligation of a person to ensure that all government property for which he or she has receipted for, is properly used and cared for, and that proper custody and safekeeping are provided. This is an inherent responsibility resulting from assignment as accountable officer, receipt of formal written delegation, or acceptance of the property on hand receipt from an accountable officer (see AR 735-5).

d. Personal Responsibility. This is the obligation of an individual to look after and maintain the property issued to him or acquired for his *exclusive* use. The property may be issued with or without a receipt.

e. Physical Security. Guidance on physical security measures to safeguard such sensitive items as weapons, narcotics, alcohols, and inspection stamps is found in AR 40-61, AR 190-13, AR 190-51, AR 702-18, AR 710-2, FM 19-30, and Technical Bulletin, Medical (TB MED) 263.

D-4. Supply Personnel

The following personnel are directly concerned with supply in TOE veterinary units:

a. Commanding Officer. Although not directly in the chain of supply functions, the commander must ensure that his unit's property is properly safeguarded, accounted for, and administered. Also, the commander must ensure that requests with high priority designators are legitimate.

b. Property Book Officer. When he assumes command, the unit commander also assumes responsibility and accountability for the unit's property. If he wishes, he may appoint one of the unit's officers as the PBO. In the medical detachment, veterinary service, the PBO may be the Medical Service Corps officer. In other units, it will be a Veterinary Corps officer or warrant officer (food inspection technician). The commander may, if he wishes, perform the duties of PBO himself. If accountability is delegated, the PBO is appointed on unit orders in accordance with AR 735-5. In any case, the PBO is accountable for all unit nonexpendable property and the maintenance of property book records in accordance with AR 710-2 and AR 735-5.

c. Supply Sergeant/Specialist. Every veterinary TOE unit, except the veterinary headquarters detachment and medical detachment, veterinary service (small), is authorized a medical supply sergeant/specialist (military occupational specialty [MOS] 76J) or unit supply sergeant/specialist (MOS 92Y). These individuals assist the commander and the PBO in planning and coordinating supply activities in the unit and with other organizations. Also, they do the detailed work involved in daily supply operations.

D-5. Supply Directives and Publications

a. Technical Bulletins. Technical bulletins can be useful to supply personnel. Although most of the information in a TB is technical, some information relates to supply.

b. Supply Bulletins. Supply bulletins (SB) disseminate information and instructions on the more technical aspects of supply matters. Included are such things as the availability dates of newly standardized items, compilation of logistical data, purchase notice agreements, and lists of regulated items. They do not contain administrative supply instructions.

(1) Of particular interest to veterinary officers are SBs of the 8-75 Series. This series, entitled "Army Medical Department Supply Information," contains technical medical supply information disseminated by The Surgeon General. Contents of the bulletins include—

- Suspension of materiel suspected of being hazardous or unsuitable.
- Release of suspended materiel.
- Disposition instructions for materiel determined to be unsuitable.
- Extension of potency period expiration dates.
- Announcement of type classified items, stock availability, and other supply information.

(2) Supply Bulletin 700-20 provides a cross-reference of line item numbers with national stock numbers (NSNs). It is useful in locating catalog information on items listed in the TOE and in identifying reportable items.

D-6. Supply Authorization Media

a. Table(s) of Organization and Equipment. Table(s) of organization and equipment are published for every type of unit in the US Army that has a field mission. A TOE prescribes the normal mission, organizational structure, personnel, and equipment for a military unit on a worldwide basis. The "basic" TOE is the same for similar units. In other words, the TOE for all veterinary service detachments is the same.

b. Modification Table of Organization and Equipment. The MTOE prescribes in a single document the modifications to a basic TOE that are necessary to adapt it to the combat operational needs of a specific unit or units. This may include its capabilities, organization, personnel, and/or equipment. The MTOE may prescribe the equipment necessary for a veterinary unit to operate in Alaska as opposed to one operating in Southeast Asia. It may also authorize additional personnel and equipment for a unit responsible for providing care for numerous working dog units. The authorized level of the MTOE represents the allowances available to the command for requisition. The policies and procedures for establishing personnel and equipment authorizations and processing MTOEs are in AR 310-49.

c. Authorization Documents and Permanent Orders. An MTOE becomes an authorization document only when so directed by a permanent order.

d. Table of Distribution and Allowance. A table of distribution and allowances (TDA) prescribes the organizational structure, personnel, and equipment for a unit with a mission for which there is no appropriate TOE. A TDA is written for a specific unit with a specified mission. An example is the veterinary clinic on a CONUS installation. The TDA is written specifically for that clinic based on its mission and work load. Instructions for submitting a change to a TDA are found in AR 310-49.

e. Common Table of Allowances. A CTA lists items of equipment that are common to all types of units. Common table(s) of allowances are used with TOE and TDA to determine the unit's total allowances of equipment. An example is CTA 50-900, Clothing and Individual Equipment. Included here are special clothing items such as cold weather apparel. Most of the other CTAs prescribe allowances of installation property such as linens and dining facility equipment. Common Table of Allowance 8-100 is an AMEDD publication which lists certain types of medical expendable items.

f. Authority to Requisition Supplies. Basic loads and discretionary equipment are authorized by the MACOM commander (AR 710-2, paragraph 2-4). Discretionary allowances may be authorized by parent unit commanders to support wartime operations (AR 710-2, paragraph 2-46). Local purchase by a unit/activity purchasing agent appointed by the supporting contracting officer is authorized within the scope of authority granted by the contract office (AR 710-2, paragraph 2-31). Field manuals, supply catalogs, and General Services Administration catalogs are not an authority to requisition items of equipment. Certain TMs authorize the issue of repair parts.

D-7. Property Control Document

The following records and files are maintained at unit level to account for supply transactions.

a. Department of the Army Form 2064 (Document Register for Supply Actions). This register is used to record all supply transactions. This includes all requisitions for issue and turn in. Separate registers are kept for expendable/durable and nonexpendable transactions. Disposition of these files is in accordance with AR 25-400-2. Entries for expendable medical supplies are not made on the expendable document register of medical treatment facilities where medical stock record accounts are operated.

b. Organizational/Installation Property Book. Organizational/installation property books are the basic accounting documents at unit level. Property books consist of either DA Form 3328 (Property Record) or DA Form 3328-1 (Serial/Registration Number Record), or by listings prepared by automation (AR 710-2).

c. Department of the Army Form 1687 (Notice of Delegation of Authority—Receipt for Supplies). The unit supply officer may designate one or more persons as authorized representatives to receipt for supplies for which he assumes full responsibility. The form must be signed by the individuals authorized to receipt for property and by the unit supply officer. When receipting for supplies, the person authorized on DA Form 1687 must have positive identification, such as a DD Form 2(ACTIVE) (Armed Forces of the United States Geneva Convention Identification Card [Active] [EGA]) or a driver's license.

d. Document File. This file consists of documents that support entries to the property book. The file is established in organizational document number sequence beginning each calendar year.

e. Department of the Army Form 2062 (Hand Receipt/Annex Number). A DA Form 2062 is used to issue property book items to the various sections in the unit. The signing of the hand receipt signifies the individual's acceptance of direct property responsibility (custody, care, and safekeeping) for the items listed in it. Failure to exercise this level of property responsibility may result in the pecuniary liability charge for the loss, damage, or destruction of the property listed on the hand receipt. Use of a change document, DA Form 3161 (Request for Issue or Turn-In), is authorized to avoid frequent posting to the hand receipts and hand receipt annexes.

f. Suspense File. This file contains all incomplete supply transactions.

g. Department of the Army Form 3645 (Organizational Clothing and Individual Equipment Record). This is a consolidated record of property issued to an individual as authorized by an MTOE or a CTA.

h. Repair Parts.

(1) The prescribed load list (PLL) for TOE units shows the quantities of nonmedical repair parts and maintenance-related items required to be on hand or on order. Ordinarily, this is considered to be a 15-day supply. The list consists of repair parts and maintenance-related expendable supplies which have created demands to qualify for stockage. It also consists of items recognized as PLL requirements, but have no demand history. Stockage criteria is contained in AR 710-2. If the veterinary unit is too small to be authorized a PLL, it will be attached to a parent unit for PLL by formal written agreement.

(2) Prescribed load lists are prepared by making a separate list for each type of equipment using DA Form 2063-R (Prescribed Load List [LRA]) and the applicable organizational maintenance manual. When the individual lists are completed, they are consolidated into a single PLL. Copies of PLLs are submitted to the supporting supply activity within 3 days after approval by the unit commander. Prescribed load lists received by the supporting supply activity must be reviewed within 30 days of receipt. When feasible, the supporting supply activity may be directed to compute PLLs for supported units.

(3) A unit's repair parts records consist of DA Form 2063-R, DA Form 2064, and DA Form 3318 (Records of Demands—Title Insert). These records enable the unit to adjust authorized quantities based on actual demand experience.

(4) Prescribed load list procedures for medical equipment differ somewhat from those listed above. See AR 40-61 for specific guidance in PLL and repair parts procedures for medical equipment. See paragraph D-8 through D-13 for supply procedures.

D-8. Procurement of Supplies

a. Forms. Medical and nonmedical supplies are requested by preparation and submission of the proper form to the supporting supply activity. Army Regulation 710-2 governs the use and preparation of the following commonly used forms:

- Department of the Army Form 2765 (Request for Issue or Turn-In)—used to request or turn in expendable items and repair parts.

- Department of the Army Form 2765-1 (Request for Issue or Turn-In)—used to request or turn in nonexpendable items.

- Department of the Army Form 3161—used to request or turn in expendable medical supplies, housekeeping and office supplies, individual and organizational clothing, and petroleum products.

- Department of the Army Form 581 (Request for Issue and Turn-In of Ammunition)—only used to request or turn in ammunition.

b. Local Purchase.

(1) At times, there may be a demand for equipment or supplies which are not in the FSC system. Nonstandard items can be purchased from civilian sources under the provisions of AR 40-61, AR 710-2, and supplemental command directives.

(2) Standard items identified in the FSC system as Acquisition Advice Code L are procured as outlined in (1) above unless procurement capability does not exist at the installation.

(3) The supporting medical supply activity will determine whether supplies are to be requisitioned through the supply distribution system or purchased locally.

c. Special Materials.

(1) Professional books are obtained by referring to the Federal supply schedule (FSS), FSC Group 76, and SB 8-75 Series. In overseas commands, they may be purchased through the commercial subscription service; in CONUS, by submitting requisitions through command channels for procurement or, in some instances, by local purchase.

(2) Bulk amounts of narcotics, alcohols, and drugs are obtained from the supporting combat health logistics activity. Precautions will be taken to safeguard these items (AR 40-2). They must be stored under lock and key when they are not in use. The Controlled Substances Record, a loose-leaf notebook consisting of DA Form 3949-1 (Controlled Substances Inventory) and DA Form 3949 (Controlled Substances Record), is used to account for the receipt, issue, balance, and audit of these sensitive items while they are in custody of the veterinary service. These items must be inventoried monthly by a disinterested individual appointed on orders by the medical headquarters, either the medical brigade or medical group.

D-9. Turn-In of Supplies

Supplies may be turned in because they are excess or have been determined to be unserviceable by maintenance personnel. Items may become unserviceable through fair wear and tear, fault, or neglect. Items to be turned in for causes other than fair wear and tear or excess must be supported by a statement of charges, cash collection voucher, or a report of survey. Excess medical supplies are normally generated as

a result of inadequate supply control procedures. Periodic review of consumption rates to ensure that established levels are realistic will preclude accumulation of excess quantities. Requests should include only those quantities required for the issue period.

D-10. Lateral Transfer of Property

Property may be transferred from one unit to another by use of DA Form 3161 after approval has been granted by the appropriate authority.

D-11. Disposal of Materiel

Disposal of materiel for reasons other than its imminent capture by the enemy (see paragraph D-22) is accomplished in accordance with AR 710-2 or as directed by the supporting headquarters. Drugs, biologicals, and reagents determined to be unsafe or unsuitable for issue are referred to the health service materiel officer for disposition in accordance with AR 40-61 and SBs of the 8-75 Series.

D-12. Disposal of Supply Records

Supply records are disposed of in accordance with AR 25-400-2.

D-13. Reporting Unsatisfactory Items of Medical Materiel

To maintain the integrity of medical materiel available through the Federal Supply System, to promote economy, and to provide government-owned animals the best possible veterinary care, any standard item which does not meet the desired standards or requirements or is defective in any way should be reported. Army Regulation 40-61 prescribes the responsibilities and actions required in reporting and processing medical materiel complaints for medical equipment and medical supplies.

D-14. Inventory and Record Adjustments

Inventory of government property is a management tool and a safeguard against loss. All nonexpendable property should be inventoried periodically; it must be inventoried annually or upon change of the responsible individual. Since few supply accounting and storage functions can be operated continually at 100 percent accuracy and items become damaged, destroyed, or lost, DA has established several methods of relief from property accountability and responsibility. They are described in paragraphs D-15 through D-18.

D-15. Department of the Army Form 4949 (Administrative Adjustment Report)

The Administrative Adjustment Report is used at the property book level to correct minor administrative errors. This method is only authorized when there is no actual gain or loss of government property.

D-16. Department of Defense Form 362 (Statement of Charges for Government Property Lost, Damaged, or Destroyed)

Any government employee (officer, enlisted, or civilian) admitting pecuniary liability for government property which has been lost, damaged, or destroyed may sign a statement of charges if the amount of the loss does not exceed the monthly basic pay of the individual being charged. If the charges exceed the individual's monthly basic pay, a report of survey must be initiated. Payment is made through payroll deduction. If charges exceed two-thirds of the individual's monthly basic pay, the unit commander will attach a letter to the statement of charges requesting that the charges be prorated over a 2-month or longer period. This method of adjustment may not be used for loss or destruction of small arms ammunition or sensitive items. For small arms ammunition, see paragraph D-17; for other sensitive items, see paragraph D-18.

D-17. Department of Defense Form 1131 (Cash Collection Voucher)

Any government employee admitting pecuniary liability for the loss, damage, or destruction of government property in an amount not to exceed the individual's monthly basic pay or any contractor admitting pecuniary liability for any amount may voluntarily offer payment of the value of the property in cash. Sensitive items, such as weapons (excluding operational small arms ammunition that are lost or destroyed), will not be paid for under this procedure. In no case will this procedure be used to "purchase" items which are in contravention of standing US Army policy or legal requirements for the sale of property.

D-18. Department of the Army Form 4697 (Department of the Army Report of Survey)

This report is used by PBOs to document the clearing of their accounts by dropping property from records of accountability and responsibility (AR 735-5). It is not a device for punishment. It is used when no other method is appropriate for obtaining credit for lost, damaged, or destroyed property. This report is an important credit instrument in the US Army supply system. Accountability relief is obtained by explaining the circumstances surrounding the loss, damage, or destruction of the property to the satisfaction of the reviewing authority acting for the Secretary of the Army. The report ensures that a detailed investigation is made so that pecuniary responsibility can be determined and that each report is reviewed objectively at a suitable level of command. It may be initiated by anyone who has knowledge of the particular loss, damage, or destruction of government property. However, the person who has responsibility for the property also has the responsibility to initiate the report of survey; the commander is responsible for ensuring that it is initiated. A report of survey is the only instrument used to account for lost, damaged, or destroyed property under the following conditions:

- When a sensitive item is lost or destroyed. This requirement does not apply to operational small arms ammunition. Operational small arms ammunition lost or destroyed requires investigation, either by criminal investigators or in accordance with AR 15-6.
- When directed by higher authority.
- When property loss is discovered as a result of change of accountable officer's inventory.

- When damages or shortages in occupied government quarters amount to $200 or more in the aggregate per household.

- When an individual admits liability and the loss, damage, or destruction exceeds the individual's monthly basic pay.

- When an individual refuses a statement of charges/cash collection voucher.

- When bulk fuel loss exceeds $250 or the amount specified in appropriate directives.

D-19. Army Regulation 15-6, Investigation

In circumstances where the loss, damage, or destruction of government property is attributed to fraud, fire, theft, public disaster, or similar causes, losses will be investigated by a board of officers appointed in accordance with AR 15-6. In such cases, the report of investigation or board report and dollar amounts of damage or loss may be used in lieu of a report of survey.

D-20. Possible Sources of Trouble

In all adjustment methods, it is important to remember that adjustments may indicate a potential source of trouble which should be investigated before it becomes a real problem. Frequent or large government reports of lost or damaged property may indicate careless posting of records, careless observation of security procedures, need for improved property accountability awareness, or need for a better supply economy program. Adjustment records may indicate that commanders need to take steps to prevent misuse and improper handling of property by personnel. These steps include better indoctrination and use of command controls.

D-21. Class VIII Supplies in the Combat Zone

Class VIII supplies can be acquired by veterinary unit headquarters in the CZ through various methods depending upon the situation. Normally, medical supplies are acquired by submitting requisitions directly to the supporting medical battalion, logistics (forward). In some situations, particularly when a medical detachment, veterinary medicine, is present, veterinary medical supplies may be requisitioned from it by medical detachment, veterinary service (small), or medical detachment, veterinary service, within the AO. Distribution of supplies to nonmedical units having attached veterinary personnel is accomplished by requisitioning from the medical detachment, veterinary service, by the unit concerned.

D-22. Imminent Capture of Materiel by the Enemy

When capture of materiel by the enemy is imminent, every attempt should be made to evacuate all medical supplies according to priority. Medical units should have an SOP for such evacuation. Also, a method of

destruction of their nonmedical materiel and equipment should be established and used when dictated by the tactical command. The Geneva Conventions prohibit willful destruction of medical equipment and supplies. The decision to abandon medical equipment and supplies is a command decision. See FM 8-10.

D-23. Captured Materiel

Compliance with the command TSOP for captured materiel is vital. Medical supplies are to be collected, identified, and turned in to the supporting combat health logistics element/unit. Captured medical materiel is of particular value for use by prisoners of war in treating their sick and wounded, by medical intelligence personnel, and in fulfillment of CMO requirements (FM 8-10).

Section II. MAINTENANCE

D-24. Overview of Maintenance

Maintenance involves all actions taken to retain materiel in a serviceable condition. Maintenance is considered in nearly every phase of the life cycle of an item from initial research to disposal. Design changes are introduced for ease and lower cost of maintenance. Modifications are made to assure safety of personnel, to prevent serious damage to equipment, to increase significantly combat or operating effectiveness of equipment, and to improve or simplify maintenance. Maintenance includes inspection, testing, calibrating, servicing, and classifying as to serviceability, repair, rebuilding, and reclamation. The objective of maintenance management is to assure that materiel is maintained in a ready condition consistent with economy to fulfill its designed purpose.

D-25. Preventive Maintenance

Preventive maintenance (PM) is the care and servicing by personnel for the purpose of maintaining equipment and facilities in a satisfactory operating condition. This is accomplished by providing systematic inspection, detection, and correction of apparent failures before they occur or develop into major defects. Preventive maintenance is the responsibility of commanders at all echelons and is accomplished by user and maintenance personnel. Commanders are responsible also for ensuring that maintenance of equipment is performed using published maintenance doctrine at the lowest category consistent with the repair parts, tools, and skills within allocations (AR 750-1).

a. Operator Maintenance. This is maintenance performed by the equipment operator or crew before, during, and after use, and at other intervals prescribed by pertinent publications. The equipment is inspected and serviced by procedures outlined in applicable TMs, lubrication orders, or publications, such as the manufacturer's instructions. Deficiencies not corrected by the operator must be reported to the supervisor so that the medical equipment repairer can be notified.

b. Requirements. Requirements of an effective PM program include—

- Training and instructing maintenance personnel and operators in proper PM practices and operating procedures.

- Systematic and periodic inspection and servicing.

- Assigning specific maintenance responsibilities to operating personnel and to skilled maintenance personnel.

- Supervising the PM program by personnel responsible for maintenance or operation.

c. Preventive Maintenance Indicators. The physical inspection of equipment is not beyond the capability or proper activity of the commander. The most critical element of effective unit maintenance is the personal inspection by the commander himself. Even though he cannot examine all the details of the many points of inspection, he can get a good idea of the condition of his unit's equipment by checking a few points that represent the quality of maintenance that has been performed. These points, called "PM indicators," include performance, noise, lubrication, loose or missing parts, damage or abuse, adjustment, and cleanliness. See AR 40-61 for information on PM for medical equipment.

D-26. Categories of Nonmedical Maintenance

Four categories of maintenance have been defined to facilitate the assignment of missions and responsibilities for maintenance of general military equipment. The categories are—

- Organizational maintenance which is that category of maintenance authorized for and performed by an organization on equipment in its possession. It is usually limited to PM service and minor repairs. Adjustments or repairs which exceed the capability of the user should be referred to more qualified personnel. Specially trained personnel (medical equipment repairer) are assigned to the equipment maintenance section of certain hospitals and medical logistics units.

- Direct support maintenance which is normally authorized for and performed by designated TOE and TDA maintenance activities in DS of using organizations.

- General support maintenance which is characterized by its capability (through possession of requisite maintenance skills, tools, and supplies) to repair and overhaul unserviceable equipment for return to local area supply systems and to back up DS maintenance units as required through repair and return of equipment to the user.

- Depot maintenance which is characterized by the presence of fixed industrial-type facilities with a mission of repairing, overhauling, or rebuilding equipment to meet overall DA requirements for serviceable materiel assets.

D-27. Levels of Medical Equipment Maintenance

There are four levels of maintenance.

a. Unit Maintenance, Level 1. The intended purpose of unit maintenance (UM) is to sustain materiel readiness by performing scheduled services, minor repairs, and replacement of components. Unit maintenance is performed by equipment operators, users, assigned medical equipment repairer, and/or mobile support teams (MSTs).

(1) The responsibilities of the equipment operator/user include—

- Cleaning.
- Preventive maintenance checks and services (PMCS) in accordance with AR 40-61.
- Replacement of operator-level components and accessories.
- Prompt reporting of equipment malfunction to the medical equipment repairer.

(2) The responsibilities of the medical equipment repairer include—

- Scheduling, performing, and documenting UM.
- Electrical safety inspections and tests.
- Calibration, verification, and certification services.
- Performing unscheduled maintenance (remedial repair).
- Maintaining unit-level repair parts (PLL, maintenance parts lists, bench stock).
- Maintaining a file of operating and service literature for all assigned medical equipment.
- Performing pre-issue technical inspections on incoming medical equipment and condition coding of medical equipment to be turned in.
- Notifying support maintenance activities of requirements and/or evacuating unserviceable equipment as appropriate to support maintenance activity.

b. Direct Support Maintenance, Level 2. The purpose of DS maintenance is to—

- Provide all authorized maintenance functions that exceed the authority, capability, or capacity of UM.

- Provide UM to medical units within the CZ without an organic capability.
- Repair Level 2 components and/or modules.
- Provide on-site support to CZ medical units by means of MSTs.
- Provide technical assistance to supported units.
- Fabricate minor repair parts when required to meet operational readiness requirements.
- Notify the next higher maintenance support level of requirements and/or evacuate unserviceable equipment to a higher maintenance level.

c. General Support Maintenance, Level 3. The purpose of GS maintenance is to—

- Provide all authorized repair functions that exceed the authority, capability, or capacity of DS units.
- Provide UM to medical units within the COMMZ without an organic capability.
- Repair GS-level components and/or modules.
- Provide on-site support to COMMZ medical units by means of MSTs.
- Provide technical assistance to supported units.
- Fabricate repair parts, when required.
- Notify the next higher maintenance support level of requirements and/or evacuate unserviceable equipment to a higher maintenance level.

d. Depot Maintenance, Level 4. The purpose of depot maintenance is to—

- Provide overhauling and rebuilding of end items and components in support of the wholesale supply system as repair and return actions.
- Perform special inspections, tests, and modification program actions.
- Perform maintenance services and functions for the wholesale supply system.
- Manufacture items and parts, when required.
- Provide end items, components, and repair parts through established programs in support of both TOE and TDA medical units.

- Provide on-site MSTs on an "as required" basis.

D-28. Organization for Medical Maintenance

a. In the CZ, area medical equipment maintenance support for units without organic medical equipment repairer and DS maintenance, when required, is provided by the medical equipment maintenance section of the medical battalion, logistics (forward).

b. In the COMMZ, area medical equipment maintenance support for units in the COMMZ without organic medical equipment repairer and DS/GS maintenance is provided by the medical battalion, logistics (rear).

D-29. Maintenance Publications

Army regulations of the 750-Series prescribe the basic concepts, objectives, policies, and procedures for the maintenance of US Army materiel.

D-30. Command Inspections

The unit commander participates personally in a command inspection. He and his staff use tabulations of PM indicators, not as mechanical checklists, but as checklists of specific technical inspection points for the various items of equipment. Command inspections may be either formal or informal.

a. *Formal Command Inspection*. This type of inspection requires advance notice and set procedures. The thoroughness of the inspection requires considerable time in preparation. It is conducted by the commander, often assisted by an inspecting party of technical assistants and members of his staff. The inspection covers all equipment and personnel assigned to the unit and is conducted at intervals prescribed by the commander.

(1) One purpose of the command inspection is to make sure that equipment and supplies are being used correctly and economically. The inspection also covers the adequacy of supply of parts and equipment, the efficiency and completeness of PM, the prevention of equipment abuse, the adequacy of personnel training and discipline, and the compliance with prescribed maintenance procedures and regulations.

(2) Although detailed technical examinations of equipment are impractical in command inspections, the inspections should be thorough enough to reveal major faults and areas of neglect or carelessness.

b. *Informal Command Inspection*. Informal command inspections are usually given without prior notice and at any convenient time and place. The commander participates as in the formal inspection. The informal inspection involves no set procedures, but is usually conducted each day or week on different unit

equipment. The commander may be assisted by accompanying personnel. Checklists are usually employed. Informal inspections are designed to provide firsthand information on the day-to-day condition of equipment and the maintenance proficiency of personnel. Improper operating procedures and poorly functioning equipment can be quickly discovered and corrected.

D-31. Materiel Condition Status Report

This report (DA Form 2406 [Materiel Condition Status Report]) reflects the readiness status of items considered essential to combat operations. This report informs DA staff and commanders at all levels as to the readiness status of equipment in the hands of using organizations. The objectives of the Materiel Condition Status Report are to provide—

- Commanders at lower levels with equipment status information for planning day-to-day operations.

- Table of organization and equipment and TDA organization commanders with information as to maintenance work loads, density of equipment, and availability of equipment for operation.

- Major commanders and intermediate commanders the materiel readiness status of equipment in the hands of using activities.

- A work sheet for computing equipment status to organization commanders who report under the provisions of AR 220-1.

- The Department of the Army the materiel readiness status of designated items of equipment.

D-32. Unit Readiness

a. Readiness System. Army Regulation 220-1 establishes a system for reporting the status of unit readiness. This regulation applies to all MACOM, all TOE units of the Active Army (except those specifically exempted), National Guard, and Army Reserve. To ensure a uniform report, full MTOE is used as the basic standard of measurement for all TOE units other than excepted units. Full MTOE for a unit is the 100 percent requirement of personnel and equipment for sustained operations under its stated MTOE mission and, as such, would accompany the unit when deployed or committed.

b. Objectives. The objectives of the readiness system are to ensure that each unit has its authorized personnel with the required skills available for duty; its authorized equipment on hand and maintained in an operational condition; its needed supplies on hand; and that each unit maintains a state of training which will permit accomplishment of the mission reflected in the authorization document under which it is organized. To determine if the objectives are being accomplished, certain computations must be made. Figures from these computations are entered on the unit status report. The completed report will show the readiness of the unit. It is important that the unit status report reflects the true condition of the unit.

c. Status Report. Department of the Army Form 2715-R (Unit Status Report [LRA]) provides a means for the commander to measure and report the current readiness of his unit. It permits commanders to identify problem areas (personnel, training, or logistics) which warrant command emphasis or corrective action to improve the unit's condition. The unit's condition is the actual level of readiness at a particular time. Criteria for determining conditional status and instructions for preparing this report are contained in AR 220-1.

D-33. Maintenance Assistance and Instruction Team

The Maintenance Assistance and Instruction Team (MAIT) program provides assistance and instruction in critical and general maintenance management and operations areas to assist units in maintaining US Army materiel at a high state of readiness (AR 750-1). Maintenance Assistance and Instruction Team visits are announced and occur at least once annually. They emphasize identification of problems and provision of the "what to do" and "how to do" in areas where improvements are needed. No score or rating is involved with MAIT. Instead, upon completion of the visit, the unit will be advised on recommended actions to ensure improvement of the logistics readiness program. If the unit commander is doubtful about his unit's readiness posture, he can request assistance and instruction at any time.

APPENDIX E

UNIT COMMANDER'S CHECKLIST FOR PLANNING UNIT MOVEMENT

Section I. ACTIONS CONDUCTED ON A CONTINUING BASIS

Veterinary unit commanders may use this checklist to assist them with actions required for movement planning on receipt of either a warning order or a movement order in conjunction with a deployment, ED, or EDRE. The checklist should be adjusted to meet the instructions in specific movement orders and local directives and procedures.

E-1. Standing Operating Procedures, Checklists, and Plans

All units should prepare SOPs, checklists, and plans and keep them up to date. They should include, but not be limited to, the following:

- A pyramidal alert plan for personnel on leave, pass, and temporary and special duty.
- Classified document security SOP.
- Unit movement packing lists, medical request lists, PVNTMED lists, and loading plans for all modes.
- Vehicle preparation for movement TSOP.
- Convoy operations TSOP.
- Standing operating procedure for detached parties (advance parties and rear detachments).
- Standing operating procedure for disposition of nondeployment personal items.
- Unit personnel TSOP.
- Unit mail clerk TSOP.
- Unit movement officer TSOP.

E-2. Personnel and Administrative Actions

The following actions are required:

- Appoint a unit officer or noncommissioned officer to ensure that all personnel, medical, dental, and immunization records are current and complete.

- Ensure that unit personnel have personal identification tags.
- Ensure that unit personnel have personal use items, uniforms, and personal equipment ready for any ED condition and packed in a prescribed uniform manner.
- Be sure required eyeglasses, to include protective mask lens, are on hand.
- Issue "Code of Conduct" cards to each person.
- Prepare and maintain readiness folders on all personnel to include the following:
  - Emergency personnel data card.
  - Preparation for overseas movement (units) personnel checklist.
  - Authorizations to start, stop, or change allotments.
  - Equipment Operator's Qualification Record (Except Aircraft), DA Form 348.
  - Geneva Conventions Identification Card (if applicable).
  - Extra set of personal identification tags.
  - Checklist for preparation of replacements for overseas movement.
  - Change of address and directory record.
  - Other locally required documents.
- Maintain a 30-day supply of administrative and veterinary-specific blank forms and supplies.
- Appoint a unit safety officer.

E-3. Security Actions

The following actions are required:

- Appoint a unit security officer.
- Initiate requests to obtain personnel security clearances.
- Provide for disposition of nondeployment personal items per local SOP.

E-4. Operations and Training Actions

The following actions are required:

- Maintain a pyramidal alert recall plan.
- Determine requirements necessary from other units or installations to support movement and loading plans such as labor, materiel, messing, and vehicles.
- Check status of unit training.
- Individual training.
    - Keep individual training and NBC records up to date.
    - Ensure that arms familiarization/qualification is complete.
    - Maintain complete file of documents in the readiness folders.

E-5. Logistics Actions

The following actions are required:

- Prepare and submit unit movement and loading plans to the installation transportation office.
- Request from appropriate area Military Traffic Management Command (MTMC) commander the required number of military-owned demountable containers (MILVANs).
- Request from appropriate area MTMC commander the required packing, loading, blocking, bracing, and tie-down materials and designate teams to carry out functions.
- Ensure that each individual has a complete issue of clothing and individual equipment (CTA 50-900).
- Ensure that the following are issued as required:
    - Weapons.
    - Protective masks.
    - Flashlights.
    - Pocket knives.

E-6. Equipment, Accountability, Serviceability, and Testing Actions

The accounting for, determining the serviceability of, and the testing of the following equipment are required:

- Medical equipment sets, kits, and outfits.
- Organizational tool kits.
- Tentage, lighting, and heating equipment.
- Office equipment (for example, typewriters, field desks), to include appropriate equipment service manuals.
- Department of Defense Procurement Approval Inspection Stamps and DOD Surveillance Medical Service Stamps.

Section II. ACTIONS TAKEN ON RECEIPT OF WARNING ORDER

E-7. Personnel and Administrative Actions When Warning Order is Received

The following actions are required:

- Place pyramidal recall plan into effect.
- Conduct meeting of key unit personnel.
- Open unit journals and maintain logs.
- Begin preparation of all items listed in each readiness folder.
- Prepare roster for personnel identification cards and tags required and for required immunizations.

E-8. Operations and Training Actions

The following actions are required:

- Conduct necessary training.
- Post individual records.

- Submit request through channels for use of gas chamber, ranges, and other training areas, as required.

- Ensure knowledge of the scope of the mission, commander's intent of the mission, medical portion of the mission, operational limitations of the mission, persons and units to provide support to the veterinary mission, rules of engagement, HN support available, resources available for money to be used for humanitarian missions, if applicable, and custom's requirements.

E-9. Logistics Actions for Warning Order

The following actions are required:

- Appoint and send liaison officer to appropriate installation transportation office.
- Verify, as requested or on hand, the following:
  - Military-owned demountable containers.
  - Packing, banding, blocking, and bracing materials.
- Follow up on outstanding requisitions.
- Fit and inspect individual protective masks.

Section III. ACTIONS TAKEN ON RECEIPT OF MOVEMENT ORDER

E-10 Personnel and Administrative Actions When Movement Order is Received

The following actions are required:

- Complete all actions initiated in the warning order phase.
- Initiate required or desired pay actions, to include partial and advance payments and allotment actions.
- Complete installation clearances.
- Direct the personal affairs officer to assist personnel in preparing wills and powers of attorney, cleaning quarters, moving families, disposing of personal property, completing unit fund and unit fund property actions, and orienting personnel for overseas duty.

E-11. Security Actions

The following actions are required:

- Ensure that written instructions are available for handling classified documents accompanying the unit or to be forwarded to the unit's destination.

- Ensure that written instructions are available for the disposition of classified documents to be left behind (AR 25-400-2).

E-12. Logistics Actions for Movement Order

The following actions are required:

- Replace equipment shortages and unserviceable items.

- Draw and pack MILVAN transports and inserts.

- Begin packing organizational equipment and processing vehicles for overseas movement, if required.

- Apply markings to all packages and containers.

- Label MILVANs and containers with appropriate to accompany troops (TAT) markings. Red disk TAT is used for items which must arrive overseas before or concurrently with the unit. Yellow disk TAT is for items, such as individual weapons and personnel records, which must be accessible to the unit while it is en route to the overseas area.

- Issue containers for packing and shipping personal property.

- Prepare vehicles for movement; check with appropriate MTMC commander.

APPENDIX F

VETERINARY SERVICES IN DISASTERS

F-1. Disaster Planning

Disaster relief operations fall within the overall context of humanitarian assistance. They are conducted in emergency situations to prevent loss of life and property. Such operations may be in the form of immediate and automatic response by US military commanders. The disasters covered in this appendix include natural, chemical, and nuclear disasters in a noncombat environment. Veterinarians deployed to these environments have the training and experience to augment physicians in caring for human casualties. During emergency situations, veterinary facilities could be used to provide medical treatment for human casualties, if required. Veterinarians can also serve in public health and PVNTMED positions and can maintain the health of agricultural livestock as food sources.

a. Veterinary disaster plans are necessary for the continued function of the US Army Veterinary Service in natural disasters, isolated explosions, conventional warfare, and NBC-agent accidents. The operations concerning NBC agents augment those NBC operations addressed in Chapter 6. Disaster planning must address a range of problems, such as—

- Massive destruction of buildings, transportation networks, utility delivery systems, food and water supplies, and waste removal systems.
- Large numbers of traumatic deaths and injuries of varying severity to people and animals.
- Contamination of the environment and exposed personnel, foodstuffs, animals, animal feeds, and pastures.
- Confusion among survivors.
- Conflict which threatens safety, order, and discipline among survivors competing for limited resources.
- Increased risk of disease among depressed and debilitated survivors in the absence of proper sanitation.

b. The veterinary mission in disaster planning includes—

(1) Determining if foods are acceptable for consumption.

(2) Detecting and reporting significant increases in animal diseases that are a potential threat to humans.

(3) Providing veterinary care for government-owned animals.

(4) Supporting emergency slaughter operations of food animals.

(5) Recommending procedures for disposal of dead animals to prevent disease and contamination of the AO.

(6) Assisting civil authorities, as required and authorized, in domestic emergencies and disaster relief, or in civil defense.

(7) Accomplishing other missions as directed by command authority.

F-2. Duties of Veterinary Personnel

The duties of veterinary personnel in disaster planning are both professional and advisory. Veterinarians may be required to serve as professional assistants on the medical team in the management of human casualties. Veterinary enlisted personnel will continue to function in their assigned duties. Animal care specialists may assist in support of trauma cases. Food inspection specialists may assist in basic food preparation sanitation and overall facility and personnel hygiene and sanitation.

a. Professional duties may include the following:

(1) Inspecting food supplies for evidence of contamination by known or unknown agents, and declaring the food wholesome for consumption or designating it for disposal.

(2) Coordinating with PVNTMED units in the evaluation of food service facilities and activities for serviceability or contamination, and recommending protective measures.

(3) Assisting the surgeon in assessing—

- The human hazards from animals as a result of environmental contamination.
- The increased incidence of animal diseases that are a potential threat to humans.

(4) Assisting in the examination of animals to be used as food, to include emergency slaughter if necessary.

(5) Providing veterinary care for MWDs and other government-owned animals.

b. Additional duties may include the following:

(1) Maintaining liaison with animal health and sanitation authorities in local HN health departments.

(2) Assisting in establishing protective measures for local animal populations and evaluating potential or actual hazards of contamination to local HN livestock.

F-3. Actions Before Disaster Operations

a. Preparations. As outlined by orders, plans, and policies of higher headquarters, all veterinary units should make the following preparations before disaster operations:

(1) Prepare specific plans or SOPs that specify the duties of unit personnel in disaster operations.

(2) Conduct continuing training in preparedness for deployment.

(3) Secure supplies necessary to sustain veterinary personnel during emergencies in accordance with command information and authority.

(4) Establish procedures for continued liaison with PVNTMED, engineer, and quartermaster personnel and appropriate civil authorities.

(5) Familiarize all personnel with alert warning systems and call-up musters.

b. Notification of Personnel. When a disaster warning alert is received, all veterinary units should execute plans for notification of personnel.

F-4. Actions During and After the Disaster

Veterinary units take the following actions:

a. Require that personnel stay in protective areas until the area is declared safe, or it is determined that movement would improve survivability.

b. Provide personnel, as required, to—

(1) Monitor subsistence.

(2) Determine other valuable food sources.

(3) Monitor domestic animal control.

(4) Coordinate with local civilian agencies on veterinary issues.

c. When resumption of operations is authorized, the veterinarians in charge should survey the local area and make an estimate of the situation. See Appendix A for an example of the format for the veterinary estimate. Support may be given to the civil government in evaluating the hazards resulting from contamination of food animals or the ravages of zoonotic diseases.

d. If appropriate, veterinary service units may prepare and forward chemical and biological specimens for shipment to AMLs for analysis.

F-5. Request for Assistance from Civil Authorities

After a disaster, civil authorities may request assistance and guidance from military veterinary units. Veterinary officers should contact animal health authorities and local civilian defense agencies through command channels to offer advisory assistance in protective and decontamination measures. This advisory assistance relates to guarding against environmental hazards to food animals and to the disposition of contaminated food animals and subsistence.

F-6. Concept of Operations

a. Epidemiological mapping shows that most disasters occur in countries already adversely affected by ill-health and poor economic conditions. Veterinary teams will most likely be deploying into disrupted developing nations and should be prepared with 100 percent of their personnel and equipment to support any anticipated configuration for future rapid response. The veterinary teams are designed on a modular concept, are not self-sufficient, and must be attached to a larger element for logistic and administrative support. Each disaster will require different configurations for each deployment. Obtaining current medical intelligence and having flexibility will be the key to successful mission accomplishment.

b. In disasters including natural, nuclear, or chemical occurrences, the primary veterinary goal is the reestablishment of normal veterinary services. A two-phase program of intelligence and execution is required to meet this goal.

(1) *Intelligence Phase*. Initial reports from any disaster are routinely inaccurate and incomplete. Intelligence information gathered to determine present conditions of the AO and actions required is most important. An advance team, including one experienced senior veterinary officer and one senior veterinary noncommissioned officer, is essential for gathering information. This advance team will be the first veterinary personnel into the area. The advance team's primary duties and responsibilities are to—

- Report the results of a quick survey of the area affected by the disaster, quantifying damages and determining requirements for personnel, materiel, equipment, and facilities.
- Establish points of contact and a cooperative atmosphere within the local government or HN's public health, natural resources, and national governmental infrastructure.
- Become the veterinary C2 element or senior veterinary staff officer when veterinary personnel and equipment arrive on location and continue the responsibility throughout the relief effort.
- Supervise veterinary redeployment operations when the relief effort is concluded.

(2) *Execution Phase*. This phase can be exceedingly variable depending on the disaster. Disasters can be grouped into the following basic categories:

(*a*) Natural (usually a high-intensity earthquake).

(*b*) Nuclear.

(*c*) Biological.

(*d*) Chemical.

F-7. A High-Intensity Earthquake

Actions during a high-intensity earthquake are divided into two basic classifications:

- Those actions to be taken immediately within the early days of planning and deployment.
- Those actions to be taken after the first units are deployed and established in the AO.

a. Initial Action Considerations.

(1) Identify possible resources of foods of animal origin for stricken populations. Ensure that such foods are edible and establish procedures for preservation of available foods, such as cooking meat, boiling milk, and freezing foods.

(2) Find places for the slaughter of injured animals or animals intended for human consumption when feasible.

(3) Organize the collection and destruction of carcasses and other damaged materials of animal origin that are not safe for human consumption.

(4) Collect and identify those animals that have lost contact with their owners and provide feed, water, and basic animal husbandry care.

(5) Control epizootics by limiting animal movements and preventing animals of unknown origin from entering the affected area. A quarantine should be implemented for the affected area.

(6) In coordination with local public health officials, prevent the possible occurrence of zoonoses by keeping people from coming in contact with animals and carcasses at risk of transmitting diseases.

(7) Carry out necessary medical and surgical treatments of domestic animals.

b. Continuing Action Considerations.

(1) Continue to supply involved populations with food of animal origin, ensuring their wholesomeness and safety.

(2) Resume normal activities of slaughter, inspection, collection, storage of milk, and distribution of foods of animal origin.

(3) Provide emergency shelter and feeding of livestock, remembering unused human foodstuffs can be fed to animals.

(4) Supply necessary medicines, vaccines, sera, and disinfectants.

(5) Continue vaccination campaigns started before the disaster.

(6) Determine the requirement for euthanasia and disposal of animals which are affected by transmissible diseases. These actions must be made in coordination and conjunction with HN authorities.

(7) Identify and evaluate dead or slaughtered animals for possible indemnity.

(8) Start a program for sanitation and disinfection in such areas as slaughter houses and food-production facilities.

(9) Organize a program for stray animal control.

(10) Suggest possible ways to improve the pre- and post-disaster veterinary services of the HN.

F-8. A Major Chemical Disaster

Actions during a major chemical disaster are also divided into two basic classifications:

- Those actions to be taken immediately within the early days of planning and deployment.
- Those actions to be taken after the first units are deployed and established in the AO.

a. Initial Action Considerations.

(1) Identify the substance (if this has not been determined) by clinical and pathological evaluation of affected animals.

(2) Conduct epidemiological investigation of plants, animal species, areas involved, and so forth.

(3) Identify the pollution-endangered area and, if the substance is firmly determined as toxic and not infectious, take the following actions:

(*a*) Identify affected farms.

(*b*) Move animals to unexposed areas as soon as possible.

(*c*) Maintain animals in unexposed areas.

(4) Keep animals alive—

(*a*) If a therapy is possible.

(*b*) If residues are nonpersistent (nonpersistent residues have a short half-life and will disappear without harm to the animal).

(c) When an investigational group of animals is required to study the toxokinetics of the substance.

(*d*) When animals serve as legal evidence for claiming compensation.

(5) Monitor closely the safety of animal feeds and foods of animal origin.

(6) Determine the requirement for euthanasia and disposal of animals and products of animal origin.

b. Continuing Action Considerations. The general principles given for natural disasters apply to this situation. If toxins have a long residual effect, water table contamination must be considered before burying animals or their excreta.

F-9. A Major Nuclear Disaster

Our knowledge of the events occurring following nuclear accidents, when compared with other types of disasters, allows a more detailed description of the intervention procedures. The contamination actions on animals and their products are backed with special historical reference, such as the Chernobyl disaster. The veterinary actions taken in a nuclear disaster should be an integral part of the general scheme given for the other disasters previously discussed. Possible nuclear disasters could include those incidents in stationary or mobile nuclear power plants, or those incidents occurring during transportation of radioactive substances or weapons. These incidents may cause contamination of wide areas and call for highly coordinated countermeasures, or they could involve restricted areas and require limited countermeasures. Veterinary intervention in nuclear disasters demands close coordination with other Services and agencies, such as physical sciences and agriculture, for determining the levels of radionuclides in air, soil, and water and their effect on food and animals.

a. Initial Action Considerations. Monitoring is the only task during the initial phase in nuclear disasters. Prior to the nuclear disaster, veterinary personnel should have limited baseline recorded data readings at subsistence storage facilities and of wild and domestic animals in the area. This data provides background information for use as comparisons and to assess the initial impacts in the event of a nuclear disaster.

b. Continuing Action Considerations.

(1) *Identification of released radionuclides*. The released radionuclides must be identified. National agencies will monitor the quality, quantity, and duration of the emissions. Knowing these statistics

will allow veterinarians to determine the target organs and the tissues which will need to be monitored. As examples, if the isotope is an iodine isotope (131-I), special attention will be given to the thyroid and milk. If cesium isotopes are concerned (134-Cs and 137-Cs), soft tissues, muscles, and milk will be checked. If strontium 90 is the isotope, then bones and milk will be checked.

(2) *Radiometric control of animal foodstuffs*. This is the most important substance to monitor because green and dried roughages and contaminated cereals represent the almost sole means of animal contamination.

(3) *Radiometric control of animal-origin foods*. The results of this monitoring is indispensable to determining the levels of different radionuclides present; in addition, this is the unique means of having legal value for the acceptance or condemnation of such food for human consumption.

(4) *Countermeasures implementation*.

(*a*) Removal of animals from contaminated pastures.

(*b*) Drying and storing exposed roughage may help, especially since iodine isotope (131-I) has a half-life of only eight days and will drop down to 6 percent of its initial value within a month.

(*c*) Adding bentonite to the diet. This substance is effective in sequestering cesium in the intestines. A level of 300 g of bentonite/cow/day will allow a 55 percent decrease of the cesium level in milk when compared with control values, along with a similar drop in the cow's muscle.

(*d*) Adding stable iodine to the diet. Administering 5 to 7 mg/kg/day of sodium iodide (NaI) or potassium iodide (KI) together with iodine-contaminated roughage (in cases where no safe roughage is available) lowers thyroid retention of radioiodine by as much as 90 percent and milk excretion by 5 percent.

(*e*) Adding calcium salts to the diet lowers the absorption of strontium in the intestines.

(*f*) Postponing slaughter of radiocesium-contaminated animals. The time required to obtain a 50 percent reduction in the body level of cesium, starting from the discontinuance of a contaminated feed, is 30 days in cattle, 17 days in sheep, and 18 days in swine. Holding these animals for more than one biological half-life before slaughter will result in a noticeable reduction in the muscle levels of 134-Cs and 137-Cs.

APPENDIX G

VETERINARY ROLE IN CIVIL-MILITARY OPERATIONS

G-1. Civil-Military Operations

a. Civil-military operations involve the decisive and timely use of military capabilities to perform activities ranging from support to combat operations to traditionally nonmilitary roles assisting countries in bringing about political, economic, and social stability. At the tactical level, CMO are the activities military units conduct to enhance military effectiveness, to support national objectives, and to reduce the negative aspects of military operations on civilians.

b. Civil-military operations missions activities as described in FM 41-10 pertain to—populace and resources control, foreign nation support, humanitarian assistance, military-civic action, and civil defense. Veterinary support for humanitarian assistance and military-civic actions is discussed in this appendix. For definitive information on CMO, see FM 100-16.

G-2. Military-Civic Action Projects

a. Military-civic action projects are designed to enhance the effectiveness, legitimacy, and image of a foreign government or military. For definitive information, see FM 41-10. Civic action can be defined as activities by the military, using noncombat skills for the benefit of the civilian population. Civic action enhances the image of the military in the eyes of the population. In developing nations, the goal is to assist in efforts contributing to the economic and social development of the nation. There are three types of civic action—humanitarian, developmental, and military.

(1) *Humanitarian-civic action* is humanitarian assistance by the military in the form of short-range programs aimed at ending or alleviating present suffering. These programs are usually conducted in response to natural or man-made disasters, including combat.

(2) *Developmental-civic action* is developmental assistance by the military in the form of long-range programs to develop the infrastructure of a nation and aid in social and economic progress.

(3) *Military-civic action* uses mainly indigenous military forces on projects that are useful to the local population at all levels in such fields as—

- Education.
- Training.
- Public works.
- Agriculture.
- Transportation.

- Communications.
- Public health.
- Others contributing to economic and social development, which would also serve to improve the standing of the military forces with the population and enhance relations between the US military forces and the local HN population.

b. When authorized by the appropriate command authority, military-civic action programs may be conducted within the US. Civic action is one of the major activities of civil affairs, as described in FM 41-10 and FM 100-16.

G-3. Responsibility for Determination of Civic Action Projects

a. Command Function. Civil affairs is a function of command. All military units can perform some civil affairs functions. Commanders promote and support military-civic action programs to assist in the social and economic development of countries. Within the scope of organization, funds, mission, and terms of agreement with host countries, commanders may undertake projects. Also, commanders may motivate host country counterparts to develop civic action programs and assist them in planning projects, procuring essential equipment or supplies, and training participating personnel.

b. Coordination. Participation by veterinary units and personnel in civic action projects must be coordinated first with the next higher headquarters and then with the agencies designated by that headquarters. Plans to control animal traffic and to quarantine animals should be coordinated fully with Civil Affairs and military police. Medical supplies should be dispensed carefully to preclude their diversion into enemy hands or illicit markets. Locally developed policies and procedures are required to prevent such diversions.

c. Improved Army Community Relations. Improved community relations are an important by-product of the civic action effort. Military-civic actions should be designed to make lasting improvements in the social, economic, or political environment. Such actions should emphasize assistance, guidance, and initiation of self-help programs. Teams of military specialists or individual members may engage in independent civic action projects when properly coordinated and approved.

d. Types of Activities. Civic action operations include directed and voluntary activities. Directed activities usually involve specific assignments, government funding, and authorization to use military resources. Voluntary activities are intended mainly to encourage, direct, and support self-help programs. Directives in military units should encourage self-help, provide program guidelines, and prescribe how the authorization for use of equipment and facilities can be obtained.

G-4. Veterinary Civic Action Projects

Military-civic action projects may be as diversified as the needs of an area. They require command authorization to implement and are limited by capabilities of the military organization supporting the

project. Projects will be in areas contributing to economic and social development. The greatest accomplishments will be achieved where military planning, administrative ability, and technical knowledge are used to stimulate self-help programs in civilian communities. The use of local facilities, such as hospitals, medical clinics, dental and veterinary schools, and their associated staffs, should be considered. Civil Affairs personnel assist in planning for the maximum of HN support. They also assist in carrying out HN agreements. The CMO staff can provide liaison with indigenous health professionals and organizations.

a. Animal Care. Overseas, veterinarians can aid the local people with veterinary support of livestock. Diagnosis and treatment of diseases with the use of unit supplies, equipment, and laboratory facilities may prevent or minimize economic losses. However, veterinary personnel should encourage the people to seek help from their government in obtaining vaccines and drugs for the prevention or eradication of diseases. For example, when military veterinarians diagnose hog cholera, foot and mouth disease, or rinderpest, these diseases may be controlled (if not contrary to HN policy) with vaccines and serums obtained through local governments.

b. Veterinary Preventive Medicine and Immunization Projects. These projects teach the people how to properly care for and treat livestock. Regular deworming, vaccination, spraying for external parasites, rotation of grazing areas, and feeding programs are involved. Rabies vaccination clinics can be held for dogs and other small pets. Activities should be coordinated with the personnel from the United States Agency for International Development/Peace Corps if they are present in the country. The veterinarian may aid US military units in a variety of projects designed to improve relations between military personnel and the local populace. Veterinary units may be used to assist in the control of animal diseases that present a risk to the human population, or to the agricultural economy.

c. Food Industry. One of the most beneficial and proper civic action functions in developing nations is to assist the food industry in establishing sanitary standards and processing procedures that will permit sale to US Armed Forces. The veterinary service can be an effective instrument in assisting food industries to survive economically. Their survival may, in turn, be a key factor in the survival of the host country as an independent nation. Veterinary units can evaluate the local crops and animals for availability and suitability as fresh food sources. As a TO expands and matures, more fresh food will be needed to support US forces. Veterinary units will also inspect subsistence fed to dislocated civilians and enemy prisoners of war to prevent foodborne diseases, as required. This will limit the impact these populations have on AMEDD resources. Although other units of the command are responsible for procuring food, appropriate veterinary service or PVNTMED detachments are responsible for food wholesomeness, hygiene, safety, and quality assurance.

APPENDIX H

TRAINING

H-1. Objective of Training

The objective of training is to attain and maintain a state of operational readiness required to support the assigned mission. Training is necessary to ensure that the unit is capable of conducting combat operations and supporting civil authorities.

H-2. Performance-Oriented Training

This is a training strategy in which learning is achieved through individual or collective performance of one or more *tasks*, under specified *conditions*. This is continued until the individual or unit can demonstrate the level of proficiency established by the training *standard*.

H-3. Unit Training

Unit training, either individual or collective, is conducted in a unit.

H-4. Individual Training

This training is provided to prepare officer and enlisted personnel to perform specific duties and tasks related to a special skill identifier, MOS, or duty position. This training is provided in basic combat or orientation centers, advanced individual training centers, US Army schools, civilian institutions, US Army extension programs, and by on-the-job experience.

H-5. Collective Training

This training prepares soldiers to perform those team or unit tasks vital to the accomplishment of a unit's mission. Department of the Army publications for Active Army and Reserve Component units provide a list of training and evaluation outlines that contain minimum collective training objectives and guidance pertaining to specific missions.

H-6. Army Training and Evaluation Program

Each Army Training and Evaluation Program provides a listing of training and evaluation outlines that contain minimum collective training conditions and standards pertaining to specific missions. When supplemented with appropriate directives, it serves as a training tool designed to assist the commander in preparing a unit to perform successfully in combat.

H-7. Training Literature

Several types of training literature are used to guide and implement training. Some examples of training literature are—

- Programs of instruction.
- Soldier training publications (soldier's manuals/trainer's guides).
- Training extension courses.

APPENDIX I

VETERINARY SERVICES—MEDICAL REENGINEERING INITIATIVES

I-1. Operational Concept

The new veterinary operational concept was developed as a part of the MRI. The focus of the MRI was to determine how the AMEDD will provide battlefield CHS as it moves into the twenty-first century. The overall CHS concept, which includes the veterinary operational concept, outlines how the AMEDD will support Force XXI. The MRI CHS concept is the AMEDD's evolving vision of future medical operations and organizational designs. It includes a number of new programs, initiatives, and modernization efforts that were generated as a result of the MRI. It encompasses the required capabilities for all AMEDD functional areas. It is influenced by the strategic, operational, and tactical levels of war and supports all mission requirements across the operational continuum. All other functional areas for MRI concepts should be approved in FY 97.

I-2. Mission

The mission for the Veterinary Corps has not changed. The Army is responsible for DOD veterinary support. The Army Veterinary Service provides support to all military Services and other DOD agencies on an area basis. This support is provided by the appropriate mix of veterinary units. These units can be task-organized to support food safety and quality assurance and the health care mission for government-owned animals. Services include sanitary surveillance for food source and storage facilities, procurement, and surveillance and examination of foodstuffs for wholesomeness and quality. The veterinary unit is responsible for publication of a directory of approved food sources for the theater/AO. Veterinary animal health care provides an effective combat multiplier through DS for monitoring endemic animal disease threats of military significance. It provides complete medical care to all MWDs supported in the AO. When deployed in military operations, SASO, and other DOD contingencies, these capabilities reduce the vulnerability of US and coalition forces to DNBI. The CONUS-based force projection Army requires an early veterinary presence with the soldier in the AO wherever subsistence, bottled water, and ice are procured, shipped, stored, or issued. Food inspection is necessary to ensure food safety and quality assurance and adequate food hygiene. The potential of foodborne disease, the threat of NBC contamination of subsistence, the need to assess the zoonotic endemic disease threats, and the need to provide health care to MWDs requires a veterinary presence early throughout the entire AO. Comprehensive veterinary medical and surgical programs are required to maintain the health of government-owned animals. The assessment, prevention, and control of a military-significant animal disease (zoonotic) threat requires a comprehensive veterinary PVNTMED program. The Army Veterinary Service can expect to increase participation in joint uniformed military, combined, multinational, and humanitarian operations. Future Army challenges will center on support and participation of the CONUS-based force projection Army operations. Veterinary units will be modular-organized for interchangeability and expandability and will be tailorable to meet the dynamic mission and needs of the CONUS-based force projection Army.

I-3. Major Changes

Under MRI, changes for the veterinary unit include—

a. The Medical Detachment, Veterinary Service Headquarters, TOE 08409L000, **replaced by** the Headquarters and Headquarters Detachment, Medical Battalion (Veterinary Support), TOE 08416A000. This redesign will enhance C2 over veterinary assets operating throughout the AO. It also reduces the cost of multifunctional headquarters structure redundancies and consolidates training and mission capabilities.

b. The Medical Detachment, Veterinary Services, TOE 08417L000, **replaced by** the Medical Detachment, Food Procurement (Veterinary Support), TOE 08417A000. The following changes have been applied:

(1) Implement field microbiological food testing capabilities.

(2) Provide an in-theater Class I food procurement function.

The operational cost for this unit is substantially lower while providing enhanced capabilities. The difference in cost is primarily due to the deletion of administrative personnel, a decrease of food inspection personnel and equipment.

c. The Medical Detachment, Veterinary Medicine, TOE 08418L000, **replaced by** the Medical Detachment, Animal Surgery (Veterinary Support), TOE 08418A000. This unit now has modularity that allows deployable mobile teams to conduct split-base operations.

d. The Medical Detachment, Veterinary Service (Small), TOE 08419L000, **replaced by** the Medical Detachment, Veterinary Surveillance (Veterinary Support), TOE 08419A000. The changes implemented with this new unit include—

(1) Support for field Class I supply point/ration breakdown inspections, commercial sanitary inspections, and assessment of NBC surveillance missions related to subsistence.

(2) Support of the medical detachment, food procurement, in microbiological food testing capabilities and with in-theater Class I food procurement functions.

I-4. New Units

The information provided below identifies each of the new veterinary units, their mission, assignment, capabilities, allocations, and strengths.

a. Headquarters and Headquarters Detachment, Medical Battalion (Veterinary Support), TOE 08416A000.

(1) *Mission*. The mission of this unit is to provide C2, coordination, administrative assistance, and technical guidance to assigned and attached veterinary units in the AO and to coordinate and implement the DOD policies established by the senior medical officer within the TO.

(2) *Assignment*. This unit is assigned to a medical brigade or a MEDCOM. It may be attached to the USN, USMC, USAF, State Department, or other federal agencies in support of the DOD veterinary mission, as directed. May also be assigned to a Joint Task Force health service support C2 element.

(3) *Capabilities*. At organizational Level 1, this unit—

(*a*) Provides C2 for up to four subordinate detachments.

(*b*) Coordinates with logistical officers of other uniform services and federal agencies on veterinary support missions.

(*c*) Monitors and evaluates environmental and zoonotic (infectious) diseases, food exposed to biological and chemical agents, and food quality assurance data. Advises higher commanders on prevention and control of these environmental hazards.

(*d*) Provides one light-wheeled vehicle maintainer to supplement the maintenance capabilities of the unit to which assigned or attached.

(4) *Allocation*. One veterinary support battalion is authorized per three subordinate units. This may include a combination of Medical Detachment, Food Procurement (Veterinary Support), TOE 08417A000, Medical Detachment, Animal Surgery (Veterinary Support), TOE 08418A000, and Medical Detachment, Veterinary Surveillance (Veterinary Support), TOE 08419A000.

(5) *Strength*. This unit has a total of 15 personnel assigned. This total includes 3 officers, 1 warrant officer, and 11 enlisted personnel.

b. Medical Detachment, Food Procurement (Veterinary Support), TOE 08417A000.

(1) *Mission*. The mission of this detachment is to provide veterinary technical expertise for conducting in-plant inspection and monitoring of host country commercial food-producing facilities that provide Class A Rations to US military forces.

(2) *Assignment*. It is assigned to the Medical Battalion (Veterinary Support), TOE 08416A000.

(3) *Capabilities*. At organizational Level 1, this unit—

(*a*) Divides into two sections of six persons, with each section capable of dividing into three teams. The teams are capable of performing different food procurement missions in different locations across the TO.

(*b*) Publishes a directory of approved food procurement establishments.

(*c*) Conducts inspection of all government food storage facilities.

(*d*) Provides field and in-plant microbiological testing for quality assurance/food safety of fresh fruits and vegetables, red meats, poultry, fish, fresh eggs, bakery items, bottled water, ice, and fresh dairy products procured or stored in the TO.

(*e*) Assists in the evaluation of environmental and zoonotic diseases and food quality assurance data, to include those foods exposed to biological and/or chemical agents; and apprises higher headquarters of those factors posing a potential threat.

(*f*) Coordinates with supported logistical organizations of all Services and other federal agencies, HN public health officials, and the State Department for the procurement and storage of subsistence.

(4) *Allocation*. One food procurement detachment per 275,000 DOD personnel in the theater.

(5) *Strength*. This unit has 2 officers, 1 warrant officer, and 13 enlisted personnel for a total of 16 personnel assigned.

c. Medical Detachment, Animal Surgery (Veterinary Support), TOE 08418A000.

(1) *Mission*. This detachment's mission is to provide technical expertise capable of conducting definitive, comprehensive veterinary medical care to government-owned animals and veterinary medical support for civic action programs and military operations. It conducts veterinary PVNTMED and public health functions in support of the overall CHS system throughout the TO.

(2) *Assignment*. This detachment is assigned to the Medical Battalion (Veterinary Support), TOE 08416A000.

(3) *Capabilities*. At organizational Level 1, this unit provides—

(*a*) Comprehensive (primary through tertiary) veterinary medical and surgical care to government-owned animals, to include hospitalization for MWDs.

(*b*) Support for civic action and SASO programs.

(*c*) Mobile teams in support of forward deployed units.

(d) Coordination with supported organizations of all uniform services and other federal agencies resourced with government-owned animals.

(4) *Allocation*. One per 200 DOD MWDs.

(5) *Strength*. This unit has 3 officers and 9 enlisted personnel for a total of 12 personnel.

d. Medical Detachment, Veterinary Surveillance (Veterinary Support), TOE 08419A000.

(1) *Mission*. This detachment's mission is to provide veterinary service support in the area of approved food sources, facility sanitation, and procurement and surveillance inspections of food and environmental zoonotic disease hazards. It provides Levels I and II veterinary care for government-owned animals; also, it provides veterinary PVNTMED and public health functions for all branches of the uniformed services and federal agencies through the AO. In SASO, it supports animal health programs and conducts public health programs to minimize foodborne and zoonotic disease threats to the military population in the AO.

(2) *Assignment*. It is assigned to the Medical Battalion (Veterinary Support), TOE 08416A000.

(3) *Capabilities*. At organizational Level 1, this unit provides—

(*a*) Inspection services for commercial food sources in support of procurement organizations.

(*b*) Assistance in the publication and distribution of a directory of approved food procurement establishments.

(*c*) Inspection of all government food storage facilities. Each surveillance detachment consists of five teams capable of dividing into three subteams (elements) with three different missions in different locations.

(*d*) Inspection of all food at time of receipt from procurement action or as government-owned, and surveillance inspection of all food in storage and at time of issue/resale.

(*e*) Augmentation for the Medical Detachment, Food Procurement (Veterinary Support), TOE 08417A000, when Class I procurement mission dictates.

(*f*) Monitoring and evaluation of environmental and zoonotic disease and food safety data, to include those foods exposed to NBC agents; apprises the command surgeon of those factors posing a potential adverse affect on the overall CHS mission.

(*g*) Level I (primary) veterinary medical care of DOD military units with government-owned animals and veterinary support for other military operations.

(*h*) Investigations and postmortem examinations of reported animal deaths for unknown reasons.

(*i*) Subject matter experts at Class I supply points for all food-related issues.

(*j*) Coordination with supported logistical organizations of all Services and other federal agencies, military units resourced with government-owned animals, HN public health officials, and the State Department.

(4) *Allocation*. One per 100,000 DOD personnel in the corps and one per 200,000 DOD personnel in EAC.

(5) *Strength*. This unit has 5 officers and 33 enlisted personnel for a total of 38 personnel assigned.

I-5. Doctrine

a. The emerging MRI doctrine coincides with much of the current Medical Force 2000 philosophy for veterinary services. Veterinary support from the forward line of own troops to the CONUS base continues to form the basis of our doctrine. Operational procedures described in this manual for Medical Force 2000 are also applicable for the new veterinary units.

b. The changing nature and differing complexity of SASO require task organization of functional increment of a veterinary unit and personnel. The concept for such operations is sound and the restructure can support SASO. Veterinary services support will continue to be joint and combined in nature. The US Army Veterinary Services continues to be the DOD Executive Agent for veterinary support for all Services. One goal of the new MRI veterinary units is to increase command awareness and interest in the military-significant animal disease threat. Another goal is to increase veterinary involvement in early planning stages of all future operations.

c. The merger of current organizational structure of veterinary detachments (medical detachment, veterinary large, small, and veterinary medical) conforms to the doctrine of modularity, flexibility, and capabilities of conducting split-base operations. This will enhance the C2 for veterinary support operations.

GLOSSARY

ABBREVIATIONS AND ACRONYMS

AC hydrogen cyanide (also called hydrocyanic acid)

ADC area damage control

AMEDD Army Medical Department

AMEDDC&S Army Medical Department Center and School

AML area medical laboratory

AO area of operations

AR Army regulation

ATTN attention

BAL British anti-lewisite (dimercaprol)

BCOC base cluster operations center

BZ an incapacitating agent

C2 command and control

CA bromobenzylcyanide (riot control agent)

CANA convulsant antidote for nerve agent

CG phosgene (lung-damaging/choking agent)

CHS combat health support

CK cyanogen chloride (lung-damaging agent)

CMMC Corps Materiel Management Center

CMO civil-military operations

CN chloroacetophenone solution (riot control agent)

CNS central nervous system

COA course(s) of action

COMMZ communications zone

CONUS continental United States

COSCOM corps support command

CS combat support/O-chlorobenzylidene malononitrile (tear gas)

CSG corps support group

CSS combat service support

CTA common table(s) of allowances

CZ combat zone

DA Department of the Army

DD Department of Defense

DISCOM division support command

DLA Defense Logistics Agency

DLAR Defense Logistics Agency regulation

DMMC Division Materiel Management Center

DNBI disease and nonbattle injury

DOD Department of Defense

DPSC Defense Personnel Support Center

DS direct support

DSA division support area

DSU direct support unit

EAC echelons above corps

ED emergency deployment

EDRE emergency deployment readiness exercise

EMT emergency medical treatment

FID Foreign Internal Defense

FM field manual/titanium tetrachloride

FRBP forward ration breakdown point

FS sulfur-trioxide chlorosulfonic acid solution

FSB forward support battalion

FSC Federal Supply Classification

FSS Federal supply schedule

g gram(s)

GD Soman (a G-agent)

GS general support

GSU general support unit

HC a chemical mixture of grained aluminum, zinc oxide, and hexachloroethane (used to produce smoke)

HN host nation

HQDA Headquarters, Department of the Army

IDAD Internal Defense and Development

IM intramuscular

IV intravenous

kg kilogram

KI potassium iodide

kw kilowatt

LRA local reproduction authorized

LTOE living table(s) of organization and equipment

MACOM major Army command

MAIT Maintenance Assistance and Instruction Team

MED medical

MEDCOM medical command

MEDLOG medical logistics

MES medical equipment set

METT-T mission, enemy, terrain, troops and time available

mg milligram

MILVAN military-owned demountable container

ml milliliter

MMC Materiel Management Center

MOPP mission-oriented protective posture

MOS military occupational specialty

MRI Medical Reengineering Initiative

MSB main support battalion

MSR main supply route

MST mobile support team

MTMC Military Traffic Management Command

MTOE modification table(s) of organization and equipment

MWD military working dog

NaI sodium iodide

NAPP Nerve Agent Pyridostigmine Pretreatment

NBC nuclear, biological, and chemical

NEO noncombatant evacuation operations

NSN national stock number

OPCON operational control

OPLAN operation plan

2 PAM Cl pralidoxime chloride

PBO property book officer

PLL prescribed load list

PM preventive maintenance

PMCS preventive maintenance checks and services

POL petroleum, oils, and lubricants

POM preparation for oversea movement

PSRD personnel shipment ready date

PVNTMED preventive medicine

RBP ration breakdown point

SASO stability and support operations

SB supply bulletin

SOF Special Operations Forces

SOP standing operating procedure

SP supply point

SVC service

TA theater Army

TAA Theater Army Area

TAACOM Theater Army Area Command

TAMMC Theater Army Materiel Management Center

TAT to accompany troops

TB technical bulletin

TDA table(s) of distribution and allowances

TM technical manual

TO theater of operations

TOE table(s) of organization and equipment

TSOP tactical standing operating procedure

UM unit maintenance

US United States

USAF United States Air Force

USAID United States Agency for International Development

USMC United States Marine Corps

USN United States Navy

UW unconventional warfare

vet veterinary

VX O-ethyl methyl phosphonothiolate (nerve agent)

WP white phosphorus

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