

Chapter 4

MEDICAL EVACUATION OF THE MILITARY WORKING DOG

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INTRODUCTION

Military working dogs (MWDs) are employed in unprecedented numbers on the modern battlefield and in the military medical system. Contract working dogs (CWDs), which are owned by a private company and perform a Department of Defense mission, are also utilized in large numbers in the current operating environment. Both MWDs and CWDs are susceptible to combat- and noncombat-related injuries in the deployed environment and may require medical evacuation (MEDEVAC) in or out of the combat theater.

MEDEVAC is the movement of casualties (MWD and human service members) from the battlefield and other locations (eg, medical treatment facilities or MTFs) within a designated theater aboard dedicated, standardized vehicles or aircraft with medical attendants to provide en route medical care.¹ The MWD and handler may also be transported by casualty evacuation [CASEVAC], which is by any means necessary [eg, being carried or using tactical or logistical aircraft and vehicles] when a dedicated medical transport with en route medical provider is not available.²

Currently, no separate MEDEVAC system is in place for MWDs, so they are transported using existing evacuation modalities emplaced for humans (eg, MEDEVAC flights). CWDs are also eligible for MEDEVAC flights and veterinary care within the combat theater. Medically evacuating CWDs and MWDs presents unique challenges to consider and account for such as the air crew's safety and attending medical personnel's ability to provide appropriate veterinary care.

Aeromedical evacuation (AE) is a US Air Force function of moving patients under medical supervision and treatment on fixed-wing aircraft between MTFs.³ Patients may be moved within or out of the combat theater via AE. MWDs are eligible for AE out of the combat theater as well as intertheater (eg, to the continental United States) for medical care and travel along with human patients. However, AE of CWDs out of the combat theater is the owner's responsibility and is not performed by the US Air Force.¹

This chapter defines the four roles of care for MWDs that become ill or are injured while serving in combat areas, often necessitating MEDEVAC to receive the highest level of care available to recover to the fullest amount possible. Each level of care is populated with health care providers with varying skill levels and areas of expertise who are equipped with different resources that are dependent on the environment in which they serve, but all work toward one common goal: providing excellent veterinary care to the MWDs that serve alongside military members.

or injury, proximity to veterinary facilities, or mission constraints. (Definitions for Role 1–4 veterinary care are provided in Figure 4-1; these roles also appear amidst broken-arrowed continuum of care routes on the flowchart.) En route to a veterinary hospital, ill or injured MWDs often receive aid from health care providers who are not veterinary health care providers. In Figure 4-1, these individuals are denoted as “medics,” “handlers,” and “HCPs” (eg, a nurse onboard a MEDVAC flight). The HCP treating the transported MWD may also be the same HCP who provided initial first aid.

MILITARY WORKING DOG CASUALTY CONTINUUM OF CARE

Figure 4-1 illustrates the continuum of MWD care from the point of injury or illness through the various roles of veterinary care available in the Central Command, African Command, and European Command area of operations. (A similar scheme applies to the Pacific Command. Within the Northern Command and Southern Command, emergent MWD care may involve military or civilian veterinary facilities and civilian or military transport. MWDs in garrison will have local veterinary support; however, those on specific operations will have veterinary care and medical evacuation considered in their operational plans.)

In the Figure 4-1 flowchart, the MWD team is featured as the starting point in the referral network because the MWD handler is trained to be a first responder, the one who recognizes and initiates first aid to the ill or injured MWD. After initial assessment, the MWD and handler may be transported to MTFs by CASEVAC or, if available, by MEDEVAC on dedicated medical transport (eg, ground ambulance or helicopter) with one or more dedicated medical providers aboard for en route medical care.

The MWD is evacuated to Role 1, Role 2, or Role 3 veterinary care based upon the severity of its illness

The Medical Detachment Veterinary Service Support (MDVSS) forms the basis for many of the roles of in-theater veterinary care featured in Figure 4-1. Role 1 veterinary care is provided by an independent animal care specialist (68T) who is part of MDVSS or an MWD-owning unit. Role 1 and Role 2 veterinary care are provided by five veterinary service support teams (VSSTs) within the MDVSS. Roles 1, 2, and 3 are provided by the veterinary medical and surgical team (VMST) at a theater veterinary hospital. (See Exhibit 4-1 for more information about MDVSS structure in a theater.)

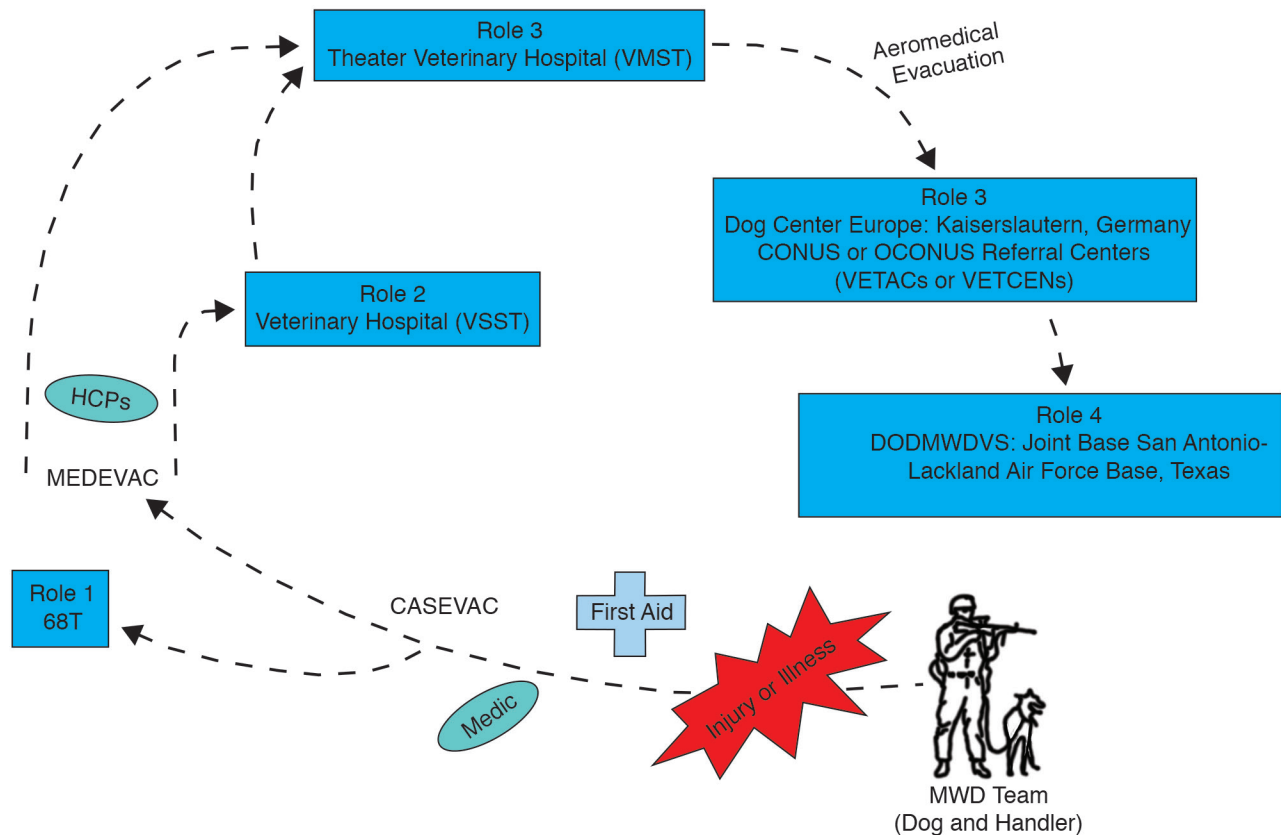


Figure 4-1. Military Working Dog Care and Referral Network: A Continuum of Care.

This flowchart illustrates the total spectrum of military working dog (MWD) care after battlefield injury or illness in the Central Command, African Command, and European Command area of operations. As the MWD passes through this medical and veterinary referral network, each role provider at respective levels 1, 2, 3, or 4 (see Roles 1–4 below) performs prescribed duties and, if necessary, refers the MWD to the next role provider until treatment is completed. Treatment assessment usually begins on the battlefield.

Role 1 is nonsurgical care provided by a 68T or veterinarian with assistance from the military working dog (MWD) handler to provide care for minor wounds, injuries or illnesses, preventive medicine, emergency intervention for airway, hemorrhage, fracture, and immobilization.

Role 2 care includes veterinarian-directed resuscitation and stabilization and may include advanced trauma management, emergency medical procedures, and forward emergency resuscitative surgery.

Role 3 care includes referral for advanced veterinary diagnostic, therapeutic, and surgical procedures. This level of care requires a veterinary clinical specialist with advanced specialty training in surgery, internal medicine, or critical care. In the combat theater, the facility is typically co-located with a Role 3 medical treatment facility (human hospital).

Role 4 care is given at the Department of Defense Military Working Dog Veterinary Service at Joint Base San Antonio-Lackland Air Force Base, Texas. This level of veterinary care not only provides Role 1 through 3-level services, but also affords additional surgical, medical, rehabilitative therapy, behavior, and convalescence capabilities.

Source: Headquarters, Department of the Army. *Army Health System*. Washington, DC: DA; August 2013. US Army Field Manual 4-02.

CASEVAC: casualty evacuation

CONUS: continental United States

DODMWDVS: Department of Defense Military Working Dog Veterinary Service

HCPs: health care providers

MEDEVAC: medical evacuation

MWD: military working dog

OCONUS: outside the continental United States

68T: animal care specialist or 68 “Tango”

VETACs: veterinary activity centers

VETCENS: veterinary centers

VMST: veterinary medical surgical team

VSST: veterinary service support team

Flowchart courtesy of chapter author.

EXHIBIT 4-1.

MEDICAL DETACHMENT VETERINARY SERVICE SUPPORT STRUCTURE, ROLE 1, ROLE 2, AND ROLE 3

The Medical Detachment Veterinary Service Support (MDVSS) provides comprehensive veterinary services in an area of operations. The animal care portion is provided by five veterinary service support teams (VSST; Roles 1–2 veterinary care) and the veterinary medical and surgical team (VMST; Roles 1–3 veterinary care). (See Figure 4-1 for the definitions of each role.)

- Each VSST is comprised of one veterinary officer (64A, general practitioner), one animal care specialist (68T) and five veterinary food inspection specialists (68R). The VSSTs are typically geographically dispersed and co-located with a Role 2 medical facility.
- The VMST consists of a veterinary clinical specialist (64F), one veterinary officer, and three animal care specialists. The VMST is usually co-located with a Role 3 medical facility.

Data source: chapter author.

MWDs that are fit to return to duty after receiving in-theater care from Role 1, 2, or 3 providers do so by standard logistical means. MWDs that require further treatment leave the Role 3 theater veterinary hospital via US Air Force fixed-wing AE, which is also referred to as “strategic aeromedical evacuation” or “intertheater evacuation.”⁴

While humans and dogs travel on the same AE flights, human casualties are transported to an MTF in Landstuhl, Germany. MWDs that require AE travel are transported to Kaiserslautern, Germany, where Dog Center Europe, a robust Role 3 veterinary activity (VETAC) that often provides definitive care, is located. (Note the route by the words, “Aeromedical Evacuation” in Figure 4-1.) (See Exhibit 4-2.)

After treatment at Dog Center Europe, MWDs that do not require intense rehabilitation will return to their normal duty station and receive follow-up at a regional Role 3 VETAC or veterinary center (VETCEN). Those MWDs that require definitive care not available at a Role 3 facility or need long-term rehabilitation go by AE to the Role 4 Department of Defense MWD Veterinary Service (DODMWDVS) at Joint Base San Antonio-Lackland Air Force Base (Lackland AFB). (Note the route from Role 3 to Role 4 in Figure 4-1.) (See other sections of this chapter and Chapter 3, Military Working Dog Procurement, Veterinary Care, and Behavioral Services, for more information about behavioral and other treatment options as well as the Level 4 capabilities available at the Lieutenant Colonel Daniel E. Holland MWD Hospital at Lackland AFB.)

EXHIBIT 4-2.

TYPES OF MILITARY WORKING DOG REFERRAL CENTERS, ROLE 3 AND ROLE 4

The 11 stateside and overseas military working dog (MWD) referral centers that provide Role 3 or 4 services are either US Army veterinary activity centers (VETACs) or US Army veterinary centers (VETCENs) or the Department of Defense MWD Veterinary Service (DODMWDVS). (See Figure 4-1 for the definitions of each role.)

- The **Role 3 VETACs** include Dog Center Europe, Kaiserslautern, Germany; Dog Center Japan, Kadena Air Base, Okinawa, Japan; Ft Shafter, Hawaii; and the 106th Medical Detachment Veterinary Service Support, Yongsan, Korea.
- The **Role 3 VETCENs** include Joint Base Lewis-McChord, Washington; Ft Carson, Colorado; Ft Hood, Texas; Ft Campbell, Kentucky; Ft Benning, Georgia; and Ft Belvoir, Virginia.
- The **Role 4 DODMWDVS** is located at Joint Base San Antonio-Lackland Air Base, Texas.

Data source: chapter author.

Delineating Initial Battlefield Treatment Providers

As previously mentioned, the handler or a nonveterinary HCP (or both) usually provide initial treatment for an injured MWD. MWD handlers are extensively trained in first-aid procedures for their dogs and follow the combat medic's principles of Tactical Combat Casualty Care or TC3 (ie, medical intervention is directed at life-saving procedures, and the degree of intervention is dictated by the tactical situation).⁵ Additionally, a combat medic, trained in human trauma management, is often available at the point of injury, and, in some instances, an Animal Care Specialist (68T) may be present to provide Role 1 urgent care to the MWD (See Figure 4-1). Initial medical care is limited to analgesia (eg, morphine), wound management, hemorrhage control, fluid therapy, and basic life-saving measures.

Reaching In-Theater Veterinary Providers

After initial treatment on the battlefield, injured or ill MWDs are transported to a veterinary provider as soon as possible. Based on the situation, the MWD team may first evacuate by CASEVAC, which is initiated when MEDEVAC assets are not readily available. In this scenario, MWDs are physically carried or mechanically transported to medical care or casualty collection points either in tactical or logistical vehicles or in aircraft with no dedicated medical personnel. In other instances, the MWD team may receive a MEDEVAC from the point of injury to the next role of medical care. MEDEVAC is the preferred means of patient evacuation because, in this scenario, the casualty is more likely to receive timely and appropriate medical care en route to an MTF.

Initiating a MEDEVAC for an MWD is done the same way one is secured for injured service members (ie, using a 9-Line MEDEVAC Request). Requests are prioritized based on the nature of injury or illness. As noted earlier in this chapter, MEDEVACs are conducted via dedicated medical vehicles such as ambulances or helicopters, and en route emergency medical care is usually administered by a nonveterinary HCP such as a combat medic. Although canine and human patients often travel together during MEDEVACs, humans have priority over MWDs in both medical treatment and MEDVAC availability. In other words, MWDs may be treated concurrently and evacuated alongside human casualties as long as human patient care is not hindered. MEDVAC crews determine whether it is safe or detrimental to human patient care to permit concurrent MWD and human patient MEDEVAC. If concurrent travel is deemed detrimental, the MWD must await additional MEDEVAC.

Whether the MWD team is evacuated to the next role of medical or veterinary care by MEDEVAC, casualty evacuation, or AE is dictated by the nature and severity of injury, proximity to facilities, and tactical situation. Ideally, the MWD is immediately evacuated to a Role 2 or 3 veterinary facility after initial treatment and stabilization. Sometimes, however, environmental conditions and tactical situations delay needed veterinary care by hours or days. To mitigate these potential treatment delays and in recognition of the HCPs' critical role in MWD combat emergencies, specific deployed providers are trained in and have access to the Joint Theater Trauma System's clinical practice guideline (CPG).⁶ This comprehensive manual helps nonveterinary HCPs successfully recognize and manage MWD medical emergencies in the absence of veterinary personnel. The MWD CPG, authored by subject matter experts and published within the CPGs for human health care, is readily available to all HCPs.

HCPs receive training in MWD CPGs via numerous venues. Many deploying hospital units receive MWD training in predeployment training such as the Joint Forces Combat Trauma Management Course. In deployed settings, available detachment veterinarians provide training. Recently, the occupational specialty Critical Care Flight Paramedic officially incorporated a number of MWD emergency management critical tasks into their medical required training.

With the publication and implementation of the MWD CPG and subsequent training, the HCP role in deployed MWD emergency care has become much more structured in recent years. Given the limited number of veterinary providers in theater, such targeted HCP intervention is pivotal to delivering timely health care to MWDs. However, even though HCPs have an important and newly defined role in managing MWD emergencies in the absence of veterinary personnel, they are not permitted to provide routine veterinary care without specific veterinary consultation and authorization.

Moving Patients through the Continuum of Care

The first veterinarian contact with an MWD is generally at a Role 2 or 3 facility in the combat zone. Here, ill or injured MWDs are assessed, stabilized, and managed according to their condition. For example, MWDs treated initially at a Role 2 veterinary facility might remain there until they are able to return to duty or transfer to a Role 3 veterinary facility if conditions worsen.

Seriously injured MWDs may require immediate surgical stabilization at a Role 2 or Role 3 veterinary facility. In the combat zone, an animal hospital is

typically co-located with a corresponding human MTF. The MTF provides the veterinary facility with diagnostic, medical, and surgical support (eg, equipment and clinical expertise).

Veterinarians determine if MWDs are treated and returned to duty in theater via usual logistical means or if they must leave the theater via AE on Air Force fixed-wing aircraft for further treatment and recovery. The United States and most coalition MWDs in the Central Command and African Command are evacuated to Dog Center Europe for further care and stabilization.

When stable to travel, MWDs transfer to the next appropriate role of care or to their home duty station (or to their home nation, if a coalition-partner animal). Although Dog Center Europe is able to perform advanced medical and surgical care for MWDs, it is not staffed to provide intermediate or long-term recovery and rehabilitation. The DODMWDVS, Joint Base San Antonio-Lackland Air Force Base, is the only Role 4 veterinary facility within the US Department of Defense.

MWDs that must leave theater on fixed-wing Air Force aircraft for further treatment, rehabilitation, or recovery must have en route medical care and access to certain medical treatment devices during transport. In fact, all medical equipment and supplies used on MWDs during AE flights must be specifically approved by Air Force Instruction 10-2909, to ensure airworthiness, reliability, and patient and aircraft safety.⁷

AE patient movement also is regulated and validated before any patient and medical attendants are manifested on a flight. ("Regulated" refers to the coordination of the patient's flight and its receiving hospital to ensure the receiving hospital and staff are prepared to accept and treat the patient upon known arrival. "Validated" refers to the flight surgeon's process of clinical review of the patient prior to approving the patient transport in order to verify that pertinent clinical and flight-related issues that must be resolved prior to going to altitude are addressed.³) The attending veterinarian initiates the mandated process of transporting an MWD via AE with patient movement requests (PMRs), forms providing a comprehensive medical review of an MWD's injuries, illnesses, and clinical status, ensuring the patient is safe to travel and that all pertinent medical issues are addressed.

A veterinarian must determine the appropriate time to transport an MWD, based upon its medical status, urgency for the next role of veterinary care, and the dog's chances of surviving the flight. MWDs that are not expected to survive an AE flight are generally not transported unless the clinical condition improves. In some instances, an MWD may have a nonsurvivable injury or illness that warrants humane euthanasia in

theater. This is usually a veterinary function, but provisions in the MWD CPG authorize an HCP to perform MWD euthanasia in extreme circumstances.⁵

The veterinarian also determines which attendants should accompany the patient, based on the clinical condition and other extenuating circumstances. Typically, an MWD handler is present; however, when the assigned handler is also a casualty, another handler assists in the evacuation. For seriously injured MWDs, a 68T or veterinarian is usually assigned as a medical attendant to provide veterinary care during the AE flight. However, if a 68T or veterinarian serves as a medical attendant, they are pulled out of the in-theater veterinary detachment to accompany the MWD to the next role of veterinary care and return to their veterinary detachment duty afterwards. No dedicated veterinary providers are assigned on AE flights for MWDs; AEs only provide dedicated medical staff for their human patients.

PMRs are validated by the MTF flight surgeon and submitted to a patient movement requirement center (PMRC) via the Transportation Command Regulating and Command and Control Evacuation System, also known as TRAC2ES.³ The requirement center provides final regulation and validation to manifest the MWD patient and any medical or nonmedical attendants out of the combat theater. The coordinating PMRC may be a joint patient movement requirements center (JPMRC), which is a deployable asset that communicates movement requirements to a theater patient movement requirement center (TPMRC).

In the absence of a JPMRC, all patient movement within a theater is coordinated with the TPMRC. The TPMRCs are permanent facilities located at two sites: one in Europe (TPMRC-E at Ramstein Air Force Base, Germany) and one in the Pacific (TPMRC-P at Hickam Air Force Base, Hawaii). A global patient movement requirements center, located at Scott Air Force Base, Illinois, handles intertheater patient movement as well as patient movement within the US Northern and Southern commands.³

As previously mentioned, US and most coalition-partner MWDs in the Central, European, and African commands that require significant care from battlefield injuries or illnesses are evacuated to Dog Center Europe. This center's AE resources parallel the human AE resources available at the Landstuhl Regional Medical Center in nearby Landstuhl, Germany. The MWDs arrive at Ramstein Air Force Base and are transported to nearby Dog Center Europe in military police or security forces vehicles. (An equivalent veterinary facility, Dog Center Pacific, is located in Okinawa, Japan, for MWDs that suffer noncombat injuries or illnesses while stationed in the Pacific Command area of operations.)



Figure 4-2. An Australian military working dog being unloaded from an ambulance after traveling via medical evacuation helicopter to Kandahar Airfield, Afghanistan. He was shot in the forelimb during combat and suffered a near amputation. The handler and a combat medic provided initial care at the point of injury. The dog traveled to a Role 2 veterinary hospital via medical evacuation and received treatment from a veterinarian and physician before transfer to the Kandahar Role 3 veterinary treatment facility. Photo courtesy of chapter author.



Figure 4-3. The Australian military working dog from Figure 4-2 being transported on an aeromedical evacuation flight from Kandahar Airfield, Afghanistan, to Bagram Airfield, Afghanistan, en route to Dog Center Europe in Kaiserslautern, Germany. He traveled on a stretcher alongside wounded service members and was accompanied by a 68T and military working dog handler. The dog underwent multiple surgeries at Kandahar Airfield in both the Role 3 medical treatment facility and Role 3 veterinary treatment facility to save his forelimb from amputation. He received definitive surgical care at Dog Center Europe, retired from military service, and became a mascot for the owning unit. Photo courtesy of chapter author.



Figure 4-4. A British military working dog (MWD) being loaded onto an aeromedical evacuation flight from Kandahar Airfield, Afghanistan, to Bagram Airfield, Afghanistan, en route to Dog Center Europe in Germany. The male MWD was shot through the pelvis in combat operations. The handler and a physician provided initial care near the point of injury. The MWD then was treated briefly at a coalition-partner Role 2 veterinary treatment facility and transferred to the Kandahar Airfield Role 3 veterinary treatment facility. He underwent multiple surgeries on his gunshot wound and had abdominal surgery and blood transfusions at the Kandahar Airfield Role 3 medical treatment facility. Photo courtesy of chapter author.



Figure 4-5. The British military working dog (MWD) from Figure 4-4 on an aeromedical evacuation flight from Bagram Airfield, Afghanistan, to Dog Center Europe in Germany. A veterinarian accompanied the MWD to this center due to the dog's critical condition. This MWD had a full recovery and returned to duty. Photo courtesy of chapter author.

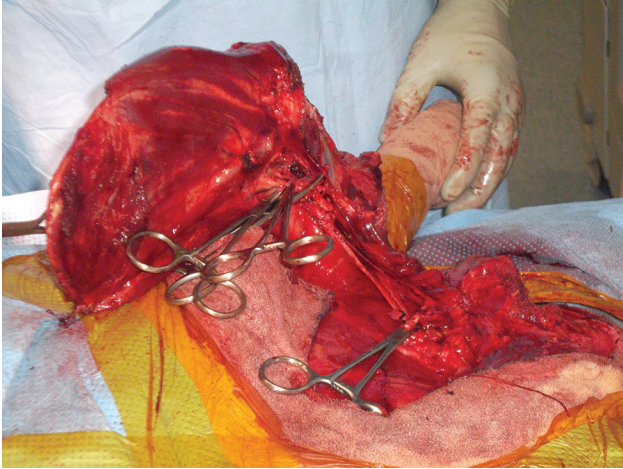


Figure 4-6. United States Marine Corps female military working dog Lucca undergoing surgical forelimb amputation at the Kandahar Airfield Role 3 medical treatment facility in Afghanistan. (She suffered a traumatic amputation of the lower portion of her forelimb from an improvised explosive device detonation.) Lucca received initial medical care from the handler and a combat medic at the point of injury and traveled via medical evacuation to Camp Leatherneck, Afghanistan, for initial veterinary treatment. She was later transferred on a nonmedical fixed-wing aircraft flight to Kandahar Airfield, accompanied by a veterinarian and handler. Veterinary and human surgeons operated on Lucca upon her arrival at the Kandahar Airfield Role 3 medical treatment facility. Photo courtesy of chapter author.

Depending on the severity of the injury or illness, several outcomes are possible for the MWDs evacuated from the combat theater and treated at Dog Center Europe. They may be (a) returned to duty in the combat theater; (b) transferred to their home duty station with local veterinary support; (c) transferred to one of the Role 3 VETACs or VETCENS located outside or within the continental United States (whichever is in closest proximity to the home duty station); or (d) transferred to the Role 4 DODMWDVS at Lackland AFB for definitive care and long-term rehabilitation.

The DODMWDVS is staffed with multiple veterinary specialties, including advanced surgery, internal medicine, critical care, diagnostic imaging, behavior medicine, and physical rehabilitation. The AE process

MWDs are extensively involved in military operations and are ever-present on the modern battlefield. Their critical role in combat operations and saving human lives with their unique skills is well known. Since they are at risk for injury and illness when



Figure 4-7. Military working dog Lucca from Figure 4-6 awaiting aeromedical transport to Bagram Airfield, Afghanistan, en route to Dog Center Europe in Germany, accompanied by a 68T and her handler. Lucca then transferred from Dog Center Europe to a Role 3 veterinary center at Camp Pendleton, California, and returned to her kennels. She eventually retired from military service and was adopted by her previous handler. Photo courtesy of chapter author.

to transfer the MWD to one of the above locations is the same as to leave the combat theater: a PMR is submitted through an MTF to a PMRC, and the request must be validated and regulated before the patient and attendants are manifested on a medical flight. However, as mentioned earlier, coalition-partner MWDs will usually return to their home nation from Dog Center Europe.

MWDs that regain full function generally return to duty. Those with some impairment to function are assessed to determine if they could serve in another capacity within the Department of Defense or a law enforcement agency. Those that cannot return to duty are evaluated for retirement and adoption. Figures 4-2 through 4-7 illustrate MWD evacuations of coalition and American dogs, their passage through divergent treatment roles, and varying outcomes. A photographic vignette at the end of this chapter illustrates how one US service member and his MWD, both injured in Afghanistan, moved through a similar continuum of care, with the MWD eventually being adopted by the service member and his family.

SUMMARY

on duty, MWDs are incorporated into the existing medical evacuation system emplaced for human service members. However, unique challenges face those coordinating the evacuation of injured MWDs such as the safety of air crew members; mandated

transportation and medical plans for the animal and all designated accompanying medical providers; and providing standardized veterinary treatment of injured animals, prior to their arrival at veterinary-staffed facilities. In the current operating environment, critically injured MWDs are routinely

evacuated from the point of injury on the battlefield, receive life-saving intervention from various human and veterinary health care providers, and are evacuated across multiple continents to receive whatever long-term physical rehabilitation is appropriate and possible.

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Figure 4-8. US Marine Corps (USMC) military working dog (MWD) Drak and his then-active-duty handler USMC Sergeant Kenneth Fischer, on a combat mission in Afghanistan. Photo courtesy of Sergeant (Retired) Kenneth Fischer.



Figure 4-9. Drak receives initial triage at Kandahar Airfield, Afghanistan. Photo courtesy of chapter author.

ATTACHMENT: HUMAN AND MILITARY WORKING DOG REHABILITATION, A PHOTOGRAPHIC VIGNETTE

US Marine Corps (USMC) military working dog (MWD) Drak and his handler, USMC Sergeant Kenneth Fischer, were both severely injured by a vehicle-borne improvised explosive device in Afghanistan, September 2011. They were evacuated separately to Camp Bastion, Afghanistan.

Drak received initial pain management and wound care at nearby Camp Leatherneck and was then evacuated to Kandahar Air Field (KAF), Afghanistan, for surgical care. Fischer was then evacuated to Landstuhl Regional Medical Center, Germany, via Bagram Air Field (BAF), Afghanistan, and eventually arrived at Joint Base San Antonio-Brooke Army Medical Center, Texas, for definitive care.

Drak underwent blood transfusions and two surgeries at KAF prior to aeromedical evacuation to Dog Center Europe (DCE) via BAF. Drak received definitive surgical care at DCE and was eventually evacuated to the Department of Defense Military Working Dog Veterinary Service (DODMWDVS) at Joint Base San Antonio-Lackland Air Force Base for rehabilitative care. (Drak and Fischer were reunited at DODMWDVS as they both underwent rehabilitative care for their wounds at Joint Base San Antonio.) (See figures 4-8 through 4-15 for this story in photos.)



Figure 4-10. Scout view computed tomography image showing large metal object in Drak's lower back. Photo courtesy of chapter author.



Figure 4-11. Drak being prepared for his first surgery at the Role 3 hospital at Kandahar Airfield, Afghanistan. Photo courtesy of chapter author.



Figure 4-12. Drak being prepared for his second surgery at Kandahar Airfield, Afghanistan. The substantial wound over his right hip is apparent, in addition to wounds on his face and all four extremities.
Photo courtesy of chapter author.



Figure 4-13. Drak with a negative pressure wound therapy dressing in place for aeromedical evacuation to Dog Center Europe. US Marine Corps Sergeant Kenneth Fischer was treated with the same device for his wounds.
Photo courtesy of chapter author.



Figure 4-14. US Marine Corps Sergeant Kenneth Fischer and Drak are reunited at the Department of Defense Military Working Dog Veterinary Service at Joint Base San Antonio-Lackland Air Force Base, Texas.
Photo courtesy of Sergeant (Retired) Kenneth Fischer.

Later, Drak was medically retired and adopted to Fischer and his family. (Fischer was also eventually medically retired due to his combat injuries.) Drak lived with the Fischer family for 3 years until he died of lymphoma in April 2015.

Data source: chapter author.



Figure 4-15. Lieutenant Colonel James T. Giles III, an Army veterinarian specializing in military working dog care, with Drak and the Fischer family at Joint Base San Antonio-Ft Sam Houston, Texas, in November 2012.
Photo courtesy of chapter author and with permission of the Fischer family.

