THE ASSISTANT SECRETARY OF DEFENSE

1200 DEFENSE PENTAGON
WASHINGTON, DC 20301-1200

HEALTH AFFAIRS

Nov 14, 2011

MEMORANDUM FOR ASSISTANT SECRETARY OF THE ARMY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE NAVY (MANPOWER AND RESERVE AFFAIRS)
ASSISTANT SECRETARY OF THE AIR FORCE (MANPOWER AND RESERVE AFFAIRS)
DIRECTOR, JOINT STAFF

SUBJECT: Human Rabies Prevention During and After Deployment

Reference: Assistant Secretary of Defense for Health Affairs Memorandum, Human Rabies Prevention During and After Deployment, September 23, 2011

This memorandum and attachment supersede the memorandum and attachment of the same title, referenced above, dated September 23, 2011. Endemic animal rabies in locations around the world often poses an elevated risk of rabies to deployed Service members, Department of Defense (DoD) civilians, and contractors. The investigation into a recent rabies fatality involving a soldier bitten by a dog while deployed to Afghanistan resulted in a review of DoD and Service policies, procedures, and practices on rabies prevention and treatment. The review identified the need for strengthened prevention measures to protect our personnel from this almost universally fatal disease. Most importantly is the need for enforcement of the existing policy in U.S. Central Command (USCENTCOM) General Order 1, prohibiting contact with all domestic or wild animals while deployed. Enforcement of this order in USCENTCOM and in other locations will help ensure that rabies and other zoonotic diseases are not acquired from stray or feral animals. Enhanced rabies prevention emphasis is needed in the following areas, which are further delineated in the attachment:

- Ensuring pre-exposure rabies immunization protocol for selected individuals;
- Reporting and documenting all potential rabies exposures (wild, stray, or feral animals);
- Completion of rabies risk assessments for possibly exposed individuals;
- Adherence to risk-based, post-exposure rabies prophylaxis protocols; and
- Review and quality assurance of all potential rabies exposures reported in theater.

I appreciate your support of these actions to help ensure our deployers with potential rabies exposures are clinically evaluated, treated, and tracked. Questions about this policy should be directed to Dr. Craig Postlewaite, Force Health Protection and Readiness Programs. Dr. Postlewaite may be reached at (703) 578-8513, or at Craig.Postlewaite@tma.osd.mil.

Jonathan Woodson, M.D.

Attachment:
As stated

cc:
Under Secretary for Health, Department of Veterans Affairs
Surgeon General of the Army
Surgeon General of the Navy
Surgeon General of the Air Force
Joint Staff Surgeon
Director, Marine Corps Staff
Medical Officer of the Marine Corps
Director, Health, Safety, and Work-Life, U.S. Coast Guard
Surgeon General, National Guard Bureau
Chief Surgeon, Army National Guard Bureau
Department of Defense Deployment Health Clinical Center

Department of Defense Human Rabies Prevention
During and After Deployments

Rabies Prevention Measures

1. Ensuring pre-exposure rabies immunization for selected individuals

NOTE: Pre-exposure rabies immunization does not eliminate the need for medical evaluation, wound treatment, and rabies post-exposure prophylaxis (PEP) as soon as possible after exposure to a potentially rabid animal. Pre-exposure and post-exposure vaccination will be administered in accordance with Centers for Disease Control and Prevention Advisory Committee on Immunization Practices guidelines (www.cdc.gov/rabies/resources/index.html), Joint policy (Army Regulation 40-562/BUMEDINST 6230.15A/Air Force Joint Instruction 48-110/Coast Guard COMDTINST M6230.4F, *Immunizations and Chemoprophylaxis*) and Service policy.

Pre-exposure rabies immunizations are to be administered to those individuals who have an occupational risk of exposure to potentially rabid animals, particularly to dogs and cats:

a. Animal handlers such as military working dog (MWD), improvised explosive device detector dog (IDD), and tactical explosive detector dog (TEDD) handlers.
b. Veterinary personnel with animal contact.
c. Certain laboratory personnel who work with rabies-suspect samples.
d. All animal control personnel and certain security personnel, preventive medicine technicians, and civil engineers occupationally at risk of exposure to rabid animals.
e. Special operations and civil affairs personnel, per Joint and Service policies.
f. For pre-deployment planning purposes only, also consider pre-exposure rabies vaccination for personnel who are not expected to be able to receive prompt medical evaluation and risk-based rabies post-exposure prophylaxis within 72 hours of an exposure to a potentially rabid animal. Immediate thorough washing of the wound must be followed by medical evaluation, including wound treatment and, when indicated, rabies prophylaxis appropriate for the individual's rabies immunization status is standard of care for all potential rabies exposures.

Maintenance of immunity is indicated for individuals with frequent risk of rabies exposure. The frequent-risk category includes, but is not limited to, certain laboratory workers (e.g., those performing rabies diagnostic testing), veterinarians and staff, animal control personnel, and special operations personnel. These individuals should have their serum tested for rabies virus neutralizing antibody every 2 years according to CDC/ACIP guidelines. If the titer is less than complete neutralization at a 1:5 serum dilution (per ACIP guidelines) or less than 0.5 IU/mL (per World Health Organization (WHO) guidelines, which are more conservative than ACIP guidelines) by the rapid fluorescent focus inhibition test, the person should receive a single booster dose of vaccine. If time constraints prevent measurement of rabies antibody titer prior to

deployment, the provider may order a single booster dose of vaccine, according to exposure risk assessment. Individuals administered booster vaccination require the post-exposure prophylaxis for a person previously vaccinated (i.e., days 0 and 3 vaccination) after a possible exposure to rabies. Refer to Centers for Disease Control and Prevention Advisory Committee on Immunization Practices guidelines (www.cdc.gov/rabies/resources/index.html), World Health Organization guidance (http://www.who.int/rabies/human/en/) and Army Regulation 40-562/BUMEDINST 6230.15A/Air Force Joint Instruction 48-110/Coast Guard COMDTINST M6230.4F, *Immunizations and Chemoprophylaxis*.

For individuals in the infrequent exposure risk category, and who completed a full pre-exposure rabies immunization series with licensed vaccines according to schedule, routine serologic verification of detectable antibody or routine pre-exposure booster doses of vaccine are not typically required prior to duties in areas where rabies is rare. These individuals may be considered immunologically primed against rabies and require post-exposure prophylaxis for a person previously vaccinated (i.e., days 0 and 3 vaccination) if exposed to rabies. If the individual is scheduled to deploy into a frequent exposure risk category two years or more after the most recent dose of rabies vaccine, the provider should order a serum sample for rabies virus neutralizing antibody testing according to CDC/ACIP guidelines. If the titer is less than complete neutralization at a 1:5 serum dilution (ACIP guidelines) or less than 0.5 IU/mL (WHO guidelines, which are more conservative than ACIP guidelines) by the rapid fluorescent focus inhibition test, the person should receive a single booster dose of vaccine. Individuals administered booster vaccination require the post-exposure prophylaxis for a person previously vaccinated (i.e., days 0 and 3 vaccination) after a possible exposure to rabies. Refer to Centers for Disease Control and Prevention Advisory Committee on Immunization Practices guidelines (www.cdc.gov/rabies/resources/index.html) and World Health Organization guidance (http://www.who.int/rabies/human/en/).

2. Reporting and documentation of all bites or instances of possible rabies exposure resulting from contact with wild, stray, or feral animals

a. All U.S. personnel who are exposed to rabies or potentially exposed to rabies must report their animal exposure and seek medical treatment from a health care provider as soon as possible, preferably within 24 hours. Exposure events include a bite from an animal capable of spreading rabies, salivary contact with an open wound or mucous membranes, or possible contact with a bat (See pages 4-5).
b. Health care providers shall initiate and complete DD Form 2341, *Report of Animal Bite – Potential Rabies Exposure*, for each patient with possible exposure to rabies and include the DD 2341 in medical record documentation. Completion of DD Form 2341 ensures the completion of a multi-disciplinary rabies risk assessment and committee recommendation for rabies prophylaxis or other recommendations, tailored to each case. (Ref: Army Regulation 40-905/ SECNAVINST 6401.1B, AFI 48-131, *Veterinary Health Services*).
c. Any need for risk-based rabies post-exposure prophylaxis applies to all individuals after potential rabies exposure regardless of their pre-exposure immunization status.

However, post-exposure prophylaxis schedules differ for unvaccinated persons, individuals who were vaccinated previously, and for individuals considered to be immunosuppressed (Centers for Disease Control and Prevention Advisory Committee on Immunization Practices guidelines (www.cdc.gov/rabies/resources/index.html).

d. Individuals should be encouraged to list any possible rabies exposures on their Post-Deployment Health Assessment (DD Form 2796) and/or Post-Deployment Health Reassessment (DD Form 2900) as "animal bite" or in free-text sections of the forms.

3. Accomplish and document a rabies risk assessment for all potential rabies exposures

a. The need for post-exposure prophylaxis is to be based on a case-specific risk assessment by the attending provider, in consultation with the Rabies Advisory Team, and documented on DD Form 2341 (Ref: Army Regulation 40-905/SECNAVINST 6401.1B, AFI 48-131, *Veterinary Health Services*), Service policy, and DD Form 2341 (See Pages 4-5).

b. Completion of the DD Form 2341 includes multi-disciplinary review of the circumstances of each potential rabies exposure by the Rabies Advisory Team (or Rabies Advisory Committee/Board). This review must occur as soon as possible following exposure. The individual case DD Form 2341 documents rabies infection risk assessment, management of the case, treatment recommendation, and case disposition. (See Pages 4-5).

c. The Rabies Advisory Team will be comprised of a US military veterinarian, and at least two US military health care providers trained in rabies risk assessment or in preventive medicine.

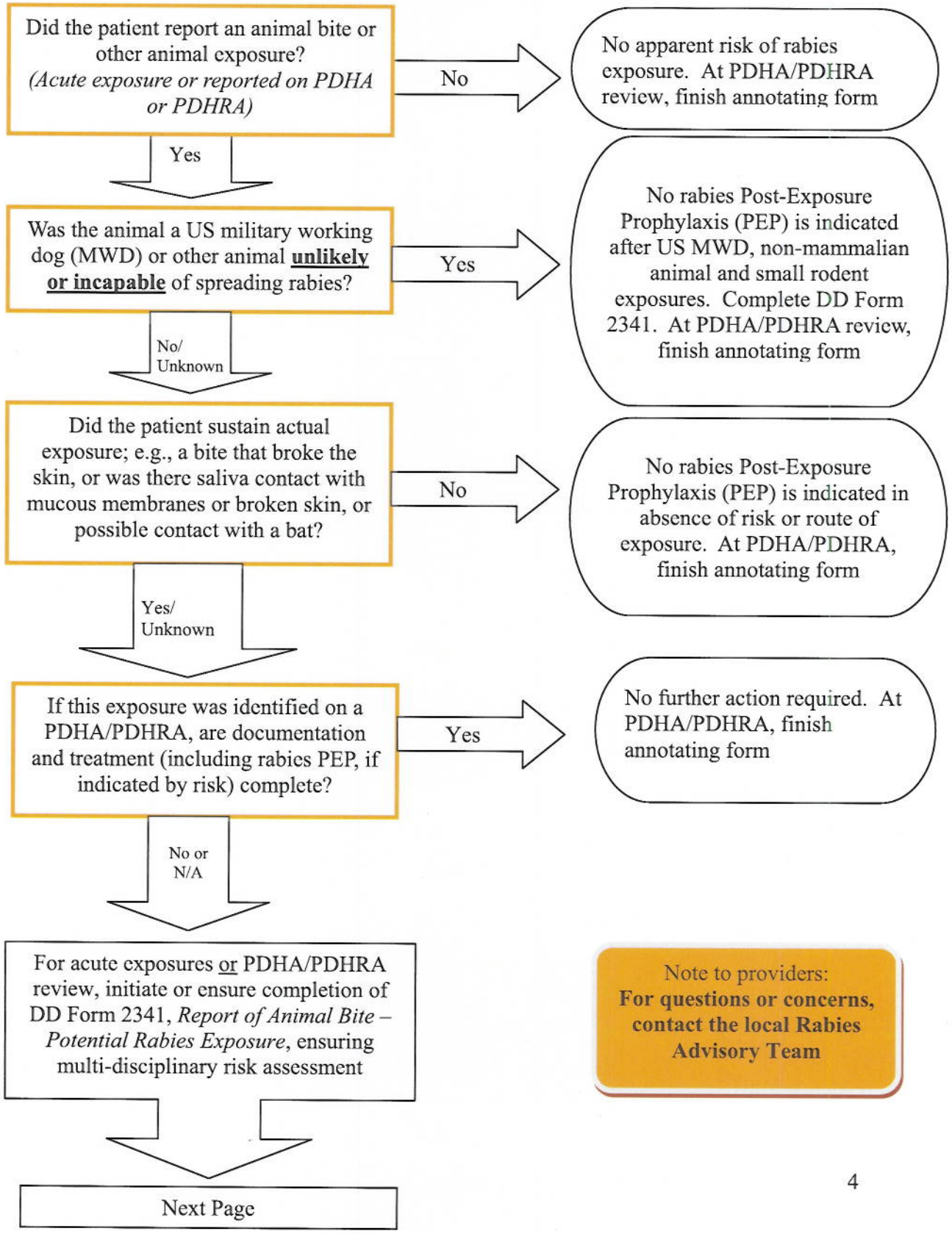
4. Adherence to risk-based post-exposure rabies prophylaxis protocols in accordance with the Centers for Disease Control and Prevention (CDC) Advisory Committee on Immunization Practices (ACIP) guidance.

Immediate thorough washing of the wound by the individual minimizes rabies virus load. Medical treatment must be sought promptly, within hours of the animal bite or other exposure. Treatment consists of additional wound cleansing, appropriate wound care and, as indicated by the rabies risk assessment, complete CDC/ACIP rabies post-exposure prophylaxis (See Pages 4-5). The CDC/ACIP rabies post-exposure prophylaxis schedule to be used depends upon the rabies immunization status and immunosuppression status of the individual. When rabies prophylaxis is initiated, measures will be in place to ensure the completion of the protocol without deviations. (www.cdc.gov/rabies/resources/index.html)

5. Review and quality assurance for all animal bites reported in theater

All DD Form 2341s should be reviewed within 30 days of the initiation of each report for final disposition of the case. Each report/case will be reviewed by the Rabies Advisory Team for proper disposition, ensuring that all necessary measures have been taken to reduce any risk of rabies to the maximum extent possible.

Rabies Exposure Risk Assessment/Evaluation/Treatment: Deployment-Related Potential Rabies Exposures



Note to providers:
For questions or concerns, contact the local Rabies Advisory Team

Has the animal been tested and confirmed rabies-negative?

Yes → No Post-Exposure Prophylaxis (PEP) is indicated; verify assessment is complete in the health record and DD 2341

No / Unknown ↓

Direct rabies PEP based on provider's clinical judgment and provide DD Form 2341 to the Rabies Advisory Team as soon as possible for multidisciplinary risk assessment

Human Rabies Prevention – United States, 2008 Recommendations of the Advisory Committee on Immunization Practices (ACIP); MMWR No. RR-3, May 23, 2008 (www.cdc.gov/rabies/resources/index.html)

Use of a Reduced (4-Dose) Vaccine Schedule for Postexposure Prophylaxis to Prevent Human Rabies; Recommendations of the ACIP, MMWR No. RR-2, March 19, 2010 (www.cdc.gov/rabies/resources/index.html)

Precautions or Contraindications for Rabies Vaccination; CDC, June 30, 2011 (http://www.cdc.gov/rabies/specific_groups/doctors/index.html)

- **Wound cleansing** (for both previously vaccinated and unvaccinated individuals)
- **Human Rabies Immune Globulin** (HRIG), 20 IU/kg, only for previously unvaccinated persons and those first vaccinated within the past 7 days, according to ACIP schedule:
  - Inject the full dose around and into the wound site, if anatomically feasible. Any remaining volume should be administered IM distant from vaccine administration (not in gluteal region).
- **Vaccine** (HDCV or PCECV), 1.0mL dose, IM (deltoid area) according to ACIP schedule:
- **Unvaccinated individuals**: 1.0mL dose on days 0, 3, 7 and 14 (and day 28, with rabies antibody test, if there is a history of immunosuppression or use of anti-malarials)
- **Previously Vaccinated individuals**: 1.0mL dose on days 0 and 3 post-exposure

Complete treatment according to CDC/ACIP guidance; document medical record, DD Form 2341, immunization record (if PEP was directed and administered), and/or complete PDHA/PDHRA in accordance with policy.

Policy References:

- **DoDD 6205.02E, *Policy and Program for Immunizations to Protect the Health of Service members and Military Beneficiaries*, Sept 2006.**
- **DODI 6490.03, *Deployment Health*, Aug 11, 2006**
- **AR 40-905/SENAVINST 6401.1B/AFI 48-131, *Veterinary Health Services*, Aug 29, 2006.**
- **DA PAM 40-11, *Preventive Medicine*, Oct 19, 2009**
- **BUMEDINST 6220.13, BUMED-M11, *Rabies Prevention and Control*, May 28, 2004**
- **AFI 48-105, *Surveillance, Prevention, and Control of Diseases and Conditions of Public Health Significance*, Mar 1, 2005**