

TEST AND SUBMISSION GUIDE

March 2002

Veterinary Laboratory Europe

CMR 402

APO AE 09180

PREFACE

Since the inception, this guide has had numerous printings with copies distributed in over twelve countries. Significant revisions have been made in the guidelines for submission of pathology samples. Additionally, guidelines for the submission of blood for a rabies titer to meet Hawaii's quarantine requirements have been added.

As in the past, this edition of the Veterinary Laboratory Europe's Test and Submission Guide is designed to provide useful information for our customers at all levels of the Veterinary Services. We have retained the original user-friendly format while updating references, addresses, and phone numbers.

Our goal is to provide you with accurate results in a timely manner. Adherence to the guidelines and principles of this guide will maximize our service to you and improve efficiency. Please contact us if you need further clarification on sample submission, and let us know if we can do anything to make your job easier.

TIMOTHY H. STEVENSON
MAJ, VC
Commander

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TEST AND SUBMISSION GUIDE VETERINARY LABORATORY EUROPE

I. General Submission Guide Information

A. Purpose And Scope

This guide provides procedures for preparation, packaging, and shipment of samples to the Veterinary Laboratory Europe (VLE). It provides a list of the tests (Appendix A) available at VLE. A customer comments/complaints form is included (Appendix B).

B. Responsibilities

The Commander and Deputy Commander for Veterinary Services are responsible for the accountability and management of food samples submitted for laboratory testing (AR 40-70, Department of Defense Veterinary Medical Laboratory Food Safety and Quality Assurance Program, 1 Feb 95). The veterinary food inspector is responsible for insuring food samples are packaged and shipped IAW this guide.

C. General

This guide deals primarily with laboratory support from the VLE in Landstuhl, Germany. VLE can accomplish the vast majority of lab testing required by veterinary service units in EUCCOM/CENTCOM. If a situation arises where it is necessary to consult with another laboratory, contact the Commander, Veterinary Laboratory Europe for guidance and instructions.

II. Food and Water Sample Submissions

A. Sample Handling

1. Sample Type

The samples must be representative. Follow instructions of subsistence contracts, specifications, and Military Standards.

2. Sample Containers

For food samples not submitted in their original containers, use containers which are sterile, leakproof, wide-mouthed, nontoxic, and designed for easy opening and closing (screw cap).

3. Sample Identification

Label each sample with an indelible sample number on the actual sample container and not the bag the sample is in. When dry ice is used, make sure samples are separated from the dry ice with sufficient packing material or the labels may come off and the plastic coverings may break. When submitting samples for pathology, be sure the sample container includes the name of the submitting veterinary treatment facility, the identity of the animal, and the date.

4. Sample Preservation

Perishable samples collected in the non-frozen state must be refrigerated, preferably at 0 to 4.4°C, from the time of collection until receipt at the lab. Samples collected while frozen should be kept frozen. If samples must be stored prior to shipment, store chilled samples at 0 to 4.4°C and frozen samples at -20°C or below. When shipping perishable items, include an additional sample item marked "pilot sample" to be used for determining receipt temperature. If the product is in a dry condition or is canned, it need not be refrigerated for shipment. Refrigerants include wet ice, frozen water in plastic bottles, cold packs, and dry ice.

5. Test Request Forms

A blank submission form, MEDCOM Form 676-R (Request For and Results of Tests) is included for reproduction at the unit level (Appendix D). If applicable, include can/package code, date of pack, closed and open package inspection results, and storage conditions. Specify test(s) to be performed. Provide complete mailing address, telephone number, and fax number in block 2 so that the lab will be able to contact the submitting station for more information and/or notify them concerning the testing results. The MEDCOM Form 676-R can be found on Lotus Notes, at the Ft. Sam Houston web site:
<http://vets.amedd.army.mil/vetlab/default.htm>, and at VLE web page:
<http://vet1.amedd.army.mil/vetsvcs/Europe/scadisc.nsft>.

6. Packing

Pack samples so as to prevent damage and minimize temperature change during transit. Use sturdy, completely insulated containers for shipping perishable samples. Ship with sufficient refrigerant to maintain proper temperature during transit. Insure that sample containers are tightly sealed. Place each labeled sample in a separate leakproof (polyethylene) bag.

7. Shipping Container Labeling

Label the outside of the shipping container with (as appropriate):

MEDICAL MATERIAL - PERISHABLE - KEEP CHILLED

MEDICAL MATERIAL - PERISHABLE - KEEP FROZEN

B. Sample Shipping

1. Shipping Mode

Ship perishable samples by the most expeditious mode. If there is a regularly scheduled medical courier from your area to Landstuhl Regional Medical Center, please use it.

2. Laboratory Shipping Address and Telephone Number

<u>SHIPPING ADDRESS:</u>	<u>TELEPHONE NUMBERS:</u>
Commander	DSN:486-8300/7241
Veterinary Laboratory Europe	CIV:06371-86-8300
CMR 402	DSN FAX:486-7075
APO AE 09180	CIV FAX:06371-86-7075
<u>INTERNATIONAL ADDRESS</u>	<u>TELEPHONE NUMBERS:</u>
Commander	CIV:49-(0)6371-86-8300
Veterinary Laboratory Europe	FAX:49-(0)6371-86-7075
Gebäude 3810, Rm 122B	
66849 Landstuhl, Kirchberg	
Germany	
email address: first name.last name@LND.amedd.army.mil	
<u>VETCOM LABORATORY ADDRESS:</u>	
DOD Veterinary Laboratory	
ATTN: MCVS-SCL-D	
2472 Schofield Rd, Bldg 2632	
Fort Sam Houston, TX 78234-6232	

C. Procedures

1. Fresh Dairy Products

Official Government Testing Station samples should be submitted expeditiously. All fluid products except UHT items, cultured items (cottage cheese, buttermilk, sour cream, yogurt, etc.), and frozen desserts must be sampled and shipped so that testing may commence within 48 hours from receipt at destination. In order to meet the 48 hr requirement, destinations will have to sample and ship on the day the items are received. All dairy samples should be shipped so they arrive at the lab on Monday through Wednesday. Avoid shipping samples when the scheduled arrival date falls on a holiday or the day prior to a holiday.

a. Fluid and cultured dairy products

Send samples in their unopened original container. Milk from containers larger than one gallon should be aseptically sampled and placed in a sterile sample container. A "pilot" sample for temperature determination must be included in each box of samples shipped. An extra container of a product should be used for the pilot and this container must be clearly labeled "Pilot". Ship with sufficient refrigerant so the samples are maintained between 0 and 4.4°C until they arrive. Freezing fluid dairy samples causes a significant decrease in the viable bacterial count. Fluid dairy samples received at the lab either frozen or above 4.4°C will not be tested. Milk for cryoscopic and protein-reducing substance testing must not be frozen. "Keeping quality" tests require duplicate samples of the same code date (i.e. submit three containers of product instead of two, one container for chemistry testing and two containers for microbiology testing). Tape closures of cartons of cottage cheese and similar containers to prevent leakage. Include the date of pasteurization and the date of delivery at destination for each product listed on the MEDCOM Form 676-R.

b. Ice cream and frozen desserts

Send samples of 1/2 gallon or less in their unopened original containers. For samples in

larger containers, aseptically collect a representative portion in a sterile sample container. For microbiological and chemical testing of novelties, send a minimum of six units or the equivalent of one pint as a sample. Novelties must be completely wrapped to avoid contamination. Dry ice is the preferred refrigerant.

2. Meat and Meat Products

Ship chilled samples at 0 to 4.4°C. Duplicate samples from the same code of each meat cut and type need to be submitted. Seal sample containers to prevent loss of moisture. Submit at least a one pound (1 lb.) extra sample of a similar meat sample marked "pilot" to be used for receipt temperature determination. Ground beef for microbiological and chemical indications of off-condition should be submitted frozen. Include the date of grind, date of sampling, temperature of product at time of sampling, date sample was frozen, and the point of sampling (retail display case, packaging machine, etc.). The commercial source of the products should be identified on the MEDCOM Form 676.

3. Salads and Prepared Foods

Send unopened original container or a 100 gram aseptically sampled portion in a sterile screw-cap container. Identify the actual source in block 4 of the MEDCOM Form 676. If it is a chilled item, ship it using the same guidelines for fluid dairy products. Include an extra container of salad marked "pilot" to be used for receipt temperature determination.

4. Semi-Perishable/Perishable Foods for Wholesomeness or Condition

- a. Reasons for submittal include: product exhibits an unexplained deterioration, an undesirable quality, deterioration prior to the expiration of the warranty period, or suspicion of containing foreign material.
- b. Testing is economically feasible when there is a significant quantity and/or dollar value of the product on-hand such that the value of the product significantly exceeds the cost of testing. A guideline to follow is: send products for testing if the product on-hand

value is over \$250.00. If the product on hand value is under \$250.00, condemn it.

- c. Send a minimum of six cans/packages (three normal and three defective). Submit cans which are non-dented. Label samples as to whether they are normal or defective. Pack samples so as to avoid damage in transit.
- d. Samples (non dairy) that are submitted due to a customer complaint should consist of the sample in question, three samples of the same lot number and three samples of another lot which is observed to be free of defects; and a copy of the customer complaint form.

5. Foodborne Illness Samples

Investigation and determination of foodborne illnesses is a joint veterinary unit/preventive medicine unit responsibility. All veterinary units should coordinate with the preventive medicine units in their area to establish and maintain a good, working relationship. Furnish the following information so laboratory personnel can select the most logical battery of tests to identify the cause of the outbreak:

- a. Depending upon the circumstances (clinical symptoms, incubation time and type of foods incriminated), materials collected for examination should include such items as leftover food from incriminated or suspected meal(s).
- b. Furnish a detailed history and epidemiological data by: completing a Foodborne Illness Outbreak Investigation Data Form, (see Appendix C).
 - (1) Number of people who were exposed and became ill. Number of people who were exposed and did not become ill. Number who were not exposed and became ill. Date and time each person became ill.
 - (2) List foods eaten within 36 - 72 hours prior to symptoms, including the time they were eaten. Through interviews, develop a matrix that shows the number of people who ate each food and got sick, and the number who ate each food and did not get sick.

Report any mishandling of the involved foods.

- (3) List the predominant symptoms (nausea, vomiting, abdominal cramps, diarrhea, bloody stool, headache, fever) in order of precedence, and their duration. Give physician's diagnosis and number of persons hospitalized.
- (4) Send each suspect sample in a separate sample container. Submit swabs in transport medium (e.g., Culturettes). Submit 100 grams of each food sample, or entire specimen, if less than 100 grams is available. Non-bulk foods packaged in unopened original containers should be submitted in their containers. Keep chilled foods chilled and frozen foods frozen until they arrive.
- (5) Identify each food sample with type of food, date collected, and name of individual shipping the sample.
- (6) Foodborne microorganisms include:
Bacillus cereus, *Campylobacter jejuni*,
Clostridium botulinum, *Clostridium perfringens*, *Escherichia coli*, *Listeria monocytogenes*, *Salmonella*, *Shigella*,
Staphylococcus aureus, *Streptococcus* Group A, *Vibrio cholerae*, *Vibrio parahaemolyticus*, and *Yersinia enterocolitica*.

6. Samples to be Tested for Pesticides

- a. Maintain bottled water, food and animal specimens, dairy products, fruits, vegetables, meats, fish, birds, animal tissue, and serum chilled until they arrive at the laboratory. Send a minimum of 450 grams of each product, 5 mLs of serum and two liters of water. If glass containers are used to collect the product, pre-rinse the glass containers with hexane or acetone and follow with thorough drying of the bottles.
- b. Like items of soil, feeds, fruits, vegetables, fish, and meats may be combined into one composite sample for testing.

- c. Submit sample in its original container, in a glass screw-capped bottle, or wrapped in aluminum foil. Screw caps should be lined with Teflon or aluminum foil. Avoid placing samples in plastic bottles and polyethylene bags, since plastic can absorb pesticides. Do not add any preservatives. Shield samples from light.
- d. Samples should arrive at the lab expeditiously, since pesticides decompose rapidly even under proper storage conditions.

7. Environmental Samples

The preferred means to sample food contact surfaces for evaluation of cleanliness and sanitation is by the use of sterile sponges moistened with an appropriate medium. This medium will neutralize any residual sanitizer which may be present and maintain viability of bacteria during shipment. Sponges used with aseptic technique have the advantage of covering a larger area than swabs, and they can also be used to cover irregular surfaces. There are no definitive guidelines. The sponge technique is used in industry for various specific bacteria such as *Listeria* sp. or *Salmonella* sp. where the standard is zero tolerance. Analysis of sponges for total aerobic counts and coliforms can also be performed. Once a surface is aseptically sampled, the sponge must be inserted into a sterile, leakproof whirlpac bag provided by the lab and immediately placed on ice or gel packs to quickly chill the sponge. Ship to the lab the same day so that testing can be commenced in less than 24 hrs after sampling.

Temperature must be maintained between 0-7.2°C to minimize growth while in transit. Description of the equipment and surface area sampled must be accurately stated and careful aseptic techniques must be ensured throughout the procedure. This technique is most useful in the evaluation of food contact surfaces ready for use at a commissary/dining facility.

8. Bottled Water Samples

Send samples in their unopened original container. Refrigeration is not necessary. It is important to include code dates, contract number, type of inspection (i.e., reason for submission), plant name, and plant address on the MEDCOM Form 676-R.

- a. **Initial testing:** Microbiologic testing requires at least three unopened containers with a minimum total volume of three liters. Chemical analysis requires a minimum total volume of four liters (in addition to the microbiological samples).
- b. **Annual testing:** Microbiologic testing requires one liter of an unopened container.

9. Definition of Types of Bottled Water

- a. **Mineral water:** The source is an underground water reservoir that is protected against dirt and fed by a spring. It has special contents of minerals and trace elements as described in the contract.
- b. **Spring water:** The source is an underground water reservoir that is produced from one or more springs. It has only been treated or filtered in accordance with contract regulations.
- c. **Table water:** Table water is spring water that contains additives such as sodium chloride, calcium chloride, sodium carbonate, sodium hydrogen carbonate, calcium carbonate, magnesium carbonate, or carbon dioxide. All components listed must not exceed standards set in the contract. If there is a question as to the water type, submit the sample as bottled water.

III. Diagnostic Sample Submission

A. General

The degree to which a pathologist can assist the clinical veterinarian in the management of an animal is highly dependent upon the completeness of the data provided about the animal, including signalment, history, and a description of clinical signs and lesions.

B. Sample Identification

When submitting samples for microscopic evaluation, be sure both the sample container and submission form list the following (see additional instructions below):

1. The name of the submitting veterinary treatment facility.
2. Identity of the animal.

3. Site of lesion.
4. Date collected.

C. Sample Shipping

1. Use the address listed below for MPS (APO) delivery. PLEASE DO NOT INCLUDE THE WORD "PATHOLOGY" IN THE ADDRESS LINE. This will cause samples to be diverted to the LRMC department of pathology and result in processing delays. Use the listed DSN numbers below for service within Europe, and the listed civilian numbers for service within Germany.

SHIPPING ADDRESS:	TELEPHONE NUMBERS:
Commander	DSN: 486-8300
Veterinary Laboratory Europe	CIV: 06371-86-8300
CMR 402	DSN: FAX:486-7075
APO AE 09180	CIV: FAX: 06371-86-7075

email address: first name.last name@LND.amedd.army.mil

2. Use the address listed below for civilian and/or international express mail delivery. Remember that these shipments must pass through German customs, and may experience some delivery delays. Again, please do not include the word "Pathology" in the address line. Use the listed DSN numbers below for service outside Europe, and the listed civilian numbers for service outside Germany.

INTERNATIONAL ADDRESS	TELEPHONE NUMBERS:
Commander	CIV: 49-6371-86-8300
Veterinary Laboratory Europe	FAX: 49-6371-86-7075
Gebäude 3810, Rm 122B	
66849 Landstuhl, Kirchberg	
Germany	

email address: first name.last name@LND.amedd.army.mil

D. Pathology Request Forms

1. Standard Form 515 / Tissue Examination

- a. This form may be used for the following:
 - (1) Cytology slide submissions from MWD's or privately-owned animals;
 - (2) Surgical biopsy submissions from MWD's or privately owned animals;

- (3) Necropsy tissue submissions from privately owned animals, or for submissions of sentinel (stray or wild) animals found dead on military installations. Please contact VLE before submitting samples.
 - (4) See Appendix E for a blank copy and example copy of SF 515.
 - (5) While SF 515 is acceptable for necropsy submissions of non-government owned animals, the use of DD 1626 is encouraged for all necropsy submissions.
- b. DO NOT use the SF 515 form for MWD necropsy submissions; rather, use the new DD 1626, Veterinary Necropsy Report Checklist and Guidelines, dated OCT 2001 (see paragraph B below). The DD 1626 is also ideal for use in necropsy submissions from non-government owned animals.
- c. Instructions for use of SF 515
- (1) In the "SPECIMEN SUBMITTED BY" block , enter attending veterinarian name, clinic phone number, and fax number.
 - (2) In the "SPECIMEN" block, enter a brief gross anatomical description of the submitted specimen.
 - (3) In the "BRIEF CLINICAL HISTORY" block, enter case history and any other information regarding the submitted specimen. Include such items as history, clinical signs, physical exam findings, laboratory or diagnostic imaging data, distribution of lesions, administered therapies (such as corticosteroids, antibiotics, etc.), response to treatment, travel history of animal, other affected animals in the household, etc.
 - (4) In the "PATIENT'S IDENTIFICATION" space at the bottom of the form, enter the name of the animal, the owner's last name, and animal signalment (include age, sex, species, and breed). If completing an electronic version of the SF 515 on a computer and you are unable to complete this block, the information also may be

entered in the "BRIEF CLINICAL HISTORY" block.

- (5) Prepare an SF 515 for each animal, but only use one form when submitting multiple specimens from an individual animal.
- (6) If the case requires a "RUSH" priority or telephonic notification of results, please request this service boldly on the top of the form.

2. DD Form 1626 / Veterinary Necropsy Report

- a. The new version of the DD 1626 dated OCT 2001 is now available for use. Contact VLE for an electronic copy, see Appendix F at the end of this guide for a hard copy, or consult the website in paragraph C below.
- b. This form is used for the following:
 - (1) Submission of MWD necropsy materials and tissues to VLE or the Armed Forces Institute of Pathology (AFIP).
 - (2) Submission of necropsy materials and tissues from privately owned animals or sentinel animal deaths to VLE. Use of this form for all animal necropsies is highly encouraged by the VLE staff pathologist because the procedures and guidelines outlined in the form yield optimal sampling results.
 - (3) In addition to DD 1626, consult the TB Med 283 for complete details on MWD necropsy procedures; if you need a copy of TB MED 283, contact the staff pathologist at VLE. The official updated TB Med 283 is now available as of May 2001.
 - (4) MWD necropsy materials may be sent directly to AFIP for evaluation, or submitted to VLE. If possible, please contact the pathologist at VLE prior to MWD necropsy submissions.

3. DD Form 2834, AFIP Veterinary Consultation Request

- a. This form is used for the following:
 - (1) As a transmittal sheet for every MWD necropsy report submitted to the Armed Forces Institute of Pathology (AFIP). Use

of this form is also encouraged for MWD necropsy submissions to VLE.

(2) For submission of uroliths for chemical analysis directly to the AFIP. VLE does not perform chemical analysis of uroliths.

(3) See Appendix G for a hard copy of this form; an electronic version is available at the AFIP website:

<http://www.afip.org/vetpath/index.html>

b. The turn-around time for either MWD necropsy or urolith submissions to the AFIP is approximately two months.

c. Electronic versions for most DoD form-fill programs or Adobe Acrobat Reader are also available at:

<http://www.gsa.gov/forms/gsaalpha.htm>

E. Histopathology

1. Specimen Collection Guidelines - (Histopathology)

- a. The submitted specimen should include the lesion and some adjoining lateral and deep "normal" tissue.
- b. To ensure proper fixation of tissue samples larger than 2 centimeters in thickness, make multiple partial cuts (bread loaf), approximately 1 cm apart.
- c. When making incisions into cutaneous masses, cut from the skin surface downward; leave the partially hemisectioned tissues attached to each other at the deep border in order to retain orientation and to allow microscopic evaluation of completeness of surgical excision.
- d. Immediately fix the tissue by immersion in a volume of 10% neutral, buffered formalin that is at least 10 times the volume of the tissue sample (20 X for eyes); allow 24 hours for complete tissue fixation. After 24 hours, replace the original formalin with fresh formalin, and fix for an additional 24 hours.

2. Specimen Shipment Guidelines - (Histopathology)

Plastic pathology submission jars are superior to urine cups. If using urine cups, seal them with Parafilm™ to prevent leakage, and then double wrap

the specimen cup in a sealable plastic bag. Wrap specimens in a small amount of gauze that has been soaked in formalin; avoid sending specimens in liquid formalin.

- a. Ship specimens in a sturdy cardboard box (not in paperboard boxes or envelopes) to protect the samples. Place padding around the tissue containers to prevent excessive agitation and to absorb any formalin that leaks.
- b. Submissions of multiple biopsies from an individual animal from different **anatomic sites should be packaged and labeled separately**, unless the gross appearance and contributor's description of the tissues allow for sample differentiation. Sutures can be used to identify or distinguish some specimens.
- c. Tissue sections of multiple organs from animal necropsies should be shipped together, using one or multiple containers when needed. Again, wrap each specimen with a small amount of gauze that has been soaked in formalin; avoid sending specimens in liquid formalin.
- d. Small tissue sections of important lesions that might be overlooked should be packed separately and properly labeled; tissue cassettes or red top vacutainer tubes containing a **small amount** of formalin work well for this function.
- e. Commercially prepared formalin is inexpensive (\$15 / gal) and widely available. Five-gallon carboys (\$75) with a dispensing valve are ideal. If you need a source, contact VLE.

F. Cytology

1. Sample Collection Guidelines - (Cytology)

- a. Use glass slides with a frosted end in order to properly label samples.
- b. Label glass slides with the animal's name and collection site on the frosted end. Use a sharp pencil, alcohol-proof ink pen, or another permanent labeling method. **Be sure to place the specimen and label on the same side of the slide.**
- c. Clean slides with alcohol and a lint-free cloth before use. Always handle slides and coverslips by the edges to prevent

fingerprints, which can cause confusion in cytologic evaluation and alter interpretation of findings.

2. Sample Staining and Microscopic Evaluation Guidelines - (Cytology)

- a. Submit two to three Diff-Quik™ stained smears and two to three methanol-fixed unstained slides from each lesion. Prior to sending the cytologic samples, you are encouraged to examine the slides yourself and record your observations on the submission form. In this way, you also evaluate the suitability and staining quality of the sample, preventing submission of non-diagnostic specimens and potential delays in diagnosis.
- b. If possible, coverslip stained slides using 24 x 60-mm coverslips and permanent mounting media. Coverslipping protects the specimen and provides better optical clarity at higher magnifications.
 - (1) If you do not have coverslip mounting media, place a drop or two of immersion oil between the slide and a coverslip and examine at 200X and 400X. A coverslip is not needed at 40X and 100X.
 - (2) If a cytology staining kit is not available at your location, you may simply submit air-dried, unstained slides. Prevent exposure of unfixed/unstained cytologic specimens to formalin vapors; even limited exposure of cytologic specimens to formalin fumes will cause severe cellular distortion and non-diagnostic results.

3. Sample Shipment Guidelines - (Cytology)

- a. Send glass slides in labeled slide containers. Contact VLE if you need a supply of slide boxes or slide folders for mailing cytologic samples; we will send them if available. Ship plastic slide containers in sturdy cardboard boxes to help prevent breakage of glass slides.
- b. If you ship coverslipped slides, use "lay flat" cardboard slide folders instead of slotted plastic slide boxes; otherwise the slides can

bind within the plastic box should mounting media seep from around the edges of the slide.

- c. When shipping cytologic samples together with formalin-fixed tissue, be sure the glass slides are in a secondary, airtight container (double plastic bags).
- d. DO NOT SEND LIQUID SAMPLES FOR CYTOLOGIC DIAGNOSIS TO VLE. **THEY WILL BE DISCARDED IMMEDIATELY UPON ARRIVAL.**
 - (1) By the time liquid samples arrive at VLE, the cells have either autolyzed or undergone such morphologic change as to be non-diagnostic.
 - (2) As an alternative, prepare air-dried unstained slides, as outlined above, from liquid samples.
 - (3) For samples with low cellularity, such as effusions or urine, centrifuge the liquid in order to concentrate the cells. The cellular sediment from the liquid sample is then used to make the cytologic preparation.

G. Uroliths

1. Due to the prohibitively high cost per sample, VLE no longer offers urolith analysis. However, the Armed Forces Institute of Pathology does perform urolith analysis. Rinse and dry the collected stones, and place them in a clean urine cup.
2. Submit uroliths directly to the AFIP using DD 2834, Consultation Request Form. See Appendix G for a hard copy of this form; an electronic version is available at:
<http://www.afip.org/vetpath/index.html>

H. Specimen Submission For Rabies Diagnostics

1. Specimen Preparation Guidelines - (Rabies)

- a. Immediately upon death of the animal, remove its head and rinse off excess blood. Place the head in a heavy plastic leak-proof bag. Place this bag in another bag for additional protection against leakage.
- b. After double bagging the head, cool the specimen immediately. If the specimen will reach VLE within two days, keep it at 0 to 4°C

by transporting it with multiple freezer packs in a Styrofoam insulated box. **Do not freeze the specimen unless it will be several days before reaching VLE. Do not use dry ice, as acid produced by the carbon dioxide has the potential to kill any virus present and interfere with cell-culture diagnostics.**

- c. For small animals (such as bats or rodents), ship the entire carcass.
- d. Dogs or cats that bite a human should be quarantined, if practical, for ten days. If signs suggestive of rabies develop, the quarantined animal should be euthanized and the head submitted for rabies testing

2. Specimen Shipment Guidelines- (Rabies)

- a. It is essential that you PHONE VLE when you know that you will be sending in a head for rabies diagnosis. Prior notification will enable us to trace shipments that are overdue, and also ensures that cases involving human exposure are given the highest priority.
- b. Contact VLE by telephone and provide the following information:
 - (1) Mode of shipment
 - (2) Date and time of shipment
 - (3) Place and estimated time of arrival
 - (4) TRANSPORTATION CONTROL NUMBER (TCN) for AMC flight shipments. The TCN allows AMC personnel to determine the specimen's location during shipment and helps VLE claim it quickly at destination.
- c. Specimens Shipped by AMC Flights (Rabies)
 - (1) Specimens shipped to VLE on AMC flights should be coded:

"999"

"Signature Service"

"Life or Death Impact"

Packages that are so marked with all three designations will not be bumped off at stopovers enroute. "Signature Service" provides personalized handling of the package with accountable receipts at both ends of shipment.

- (2) AMC flights to **RAMSTEIN AIR FORCE BASE** are preferred over Rhein Main. Our laboratory is located 8 km from Ramstein AFB and over 150 km from Rhein Main.
 - (3) To avoid possible rejection of the sample for shipment, refer to it as a "**Diagnostic Specimen**" when arranging for AMC shipment. **Do not put "Rabies" on the box** or imply that the sample is infectious. As of 1 SEP 1997, AMC will only transport infectious materials on dedicated flights, which is cost prohibitive for a rabies sample. The perceived distinction between a diagnostic specimen and infectious material could depend on the item's packaging and handling. Thus, be absolutely sure to follow all the instructions above!
 - (4) If more expedited methods for shipping a rabies specimen are unavailable, use of the DoD Postal Service is authorized. Contact your installation's official mail manager to arrange for express shipment if this method is used.
- d. Rabies Diagnostics Request Form
- Use DD Form 2620 / Request for and Report of Laboratory Examination for Rabies.** See Appendix H for a hard copy of the form, or contact VLE for an electronic version. Complete the entire form, and attach to a copy of the bite report form if available.

<p>IMPORTANT: Provide a telephone number that is staffed 24 hours every day for notification of laboratory results. If no such number is available, you must provide an after-duty-hours telephone number, such as the local emergency room handling the bite report or the home residence of the veterinary officer on the DD Form 2620.</p>
--

I. Serology Submissions - Instructions And Information

1. General

- a. Veterinary Laboratory Europe does not conduct serologic testing. You should send submissions of animal sera directly to the DoD Veterinary Laboratory at Fort Sam Houston, Texas.

- b. A shortened, outline version of serology submission recommendations published by VLE is included in Appendix I of this guide.

2. Military Working Dog (MWD) Serology

- a. MWD Serologic Testing Policies
 - (1) IAW the DoD Dog Center directive and policy memorandum dated 20 JUL 01 attached in Appendix J, dogs are no longer tested annually for Yearly *Babesia* sp. and *Ehrlichia* sp. exposure.
 - (2) Serum and whole blood still must be collected annually from every MWD and submitted to the VETCOM Laboratory at Fort Sam Houston, Texas (FSH) for banking / archival.
 - (3) Additionally, serum from deploying MWD's should be collected and submitted to the FSH Vet Lab before and after deployment outside the dog's country of permanent station. Record all submitted sera samples in the dog's health record.
- b. VETCOM Lab offers continued testing of sera from MWD's deployed to Bosnia.
 - (1) Collect serum prior to the dog's departure, and approximately one month after the dog returns.
 - (2) Make sure to specifically request *Babesia* serology and mention that the deployment is/was to Bosnia or Kosovo.
 - (3) The VETCOM Lab will likely also extend this service for deployments to other high-risk countries in the Balkans upon specific request.
- c. MWD Serology Sample Collection
 - (1) Aseptically collect enough blood in a large red top tube to yield 3-5 mLs of serum. Avoid lipemia and hemolysis.
 - (2) After clotting, transfer the serum to a screw-top polypropylene container, and label the container with the dog's name, tattoo number, and submitting station identification. DO NOT transfer the serum to another glass tube.

- (3) Freeze the serum until shipment.
- d. MWD Sera Submission Form
- (1) Use the most recent DoD Veterinary Laboratory Serological Test Request Forms, D-127 or D-126, both dated 9 FEB 01.
 - (a) Use D-127, Military Working Dog Banked Sample Form, for annual submissions of MWD serum or pre-deployment or post-deployment samples. See Appendix K for this form.
 - (b) Use D-126, Request For Military Working Dog Serological Testing For Clinical Samples, for clinical submissions for medical reasons. See Appendix L for this form.
 - (2) Complete the form's blocks labeled: From (your unit), POC, Phone, FAX, Dog's Name, Tattoo#, and Date Sample Drawn.
 - (3) Annotate on the top left corner of the form if the serum is an annual, pre-deployment, or post-deployment sample. Make any special requests as described above.
 - (4) Use a separate form for each kennel location. Multiple dogs from the same kennel location should be included on one form as long as the samples are all annuals, or all pre- or post-deployment specimens.
- e. MWD Serum Shipment
- (1) Ship via US Postal Service express mail by coordinating with your installation's official mail manager.
 - (2) Pack serum tubes to prevent breakage and leakage; wrap containers in paper towels, bubble wrap, etc. Place in an insulated shipping container with enough frozen gel pack refrigerant to keep the samples cold during transit.
 - (3) If express mail is not available, sera may be preserved for un-refrigerated shipment by adding one drop of Thimerosal tincture per ml of serum (USP, 1:1000, NSN 6505-00-

128-5705). If using this preservative method, indicate on the submission form that merthiolate was added.

- (4) Regardless of preservation method, sera must be shipped in watertight primary and secondary containers.

f. MWD Serum Batching at VLE

- (1) If you have MWD serum samples intended for **archival only**, you may send them to VLE as an alternative to mailing them directly to VETCOM Lab. We will batch-ship them approximately quarterly.
- (2) Be sure to follow all collection, labeling, and submission form requirements as indicated above. Do not send MWD diagnostic serologic samples to VLE that are submitted for clinical reasons. Shipment to VLE should only occur if shipment to the VETCOM Lab is not feasible. Please contact the VLE pathologist in advance.

J. Rabies Serology Test to Shorten Hawaiian Quarantine (FAVN Test)

1. Eligibility, Policy, and Requirements

- a. The state of Hawaii has an optional 30 day quarantine for cats & dogs entering the state. See Appendix M for the FAVN submission form and an example form. See Appendix N for guidelines from the VETCOM Lab for submission of animal sera. See Appendix O for guidelines from the state of Hawaii concerning the OIE-FAVN program.
- b. To be eligible, animals must meet several requirements, including:
 - (1) Rabies vaccination requirements (see paragraph 4 below).
 - (2) Submission of serum from a properly vaccinated animal for a test called the OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test); the test must be conducted not less than 90 days and not more than 12 months prior to arrival in Hawaii.
 - (3) Microchip identification of the pet.

- (4) The FAVN test is required pre- and post-arrival. Obtain full entry regulations from the Hawaiian Animal Quarantine Station. A helpful booklet and the most recent required forms and guidelines are available at the following website:
<http://www.hawaiiag.org/animalquarantine.htm>
- (5) Some additional information is available from the DoD FSH Laboratory under the LotusNotes Discussion Group.

2. VETCOM Lab OIE-FAVN Serology Submission Requirements

- a. VLE does not perform this test; send serum samples directly to the VETCOM Lab at Fort Sam Houston. See Appendix N for detailed VETCOM Lab submission guidelines.
- b. Submit at least 1 ml of clear, non-hemolyzed serum without preservatives in a labeled unbreakable cryovial or tube. Serum must be spun and separated from the clot.
- c. Tubes with serum containing red blood cells or clotted blood are unacceptable for FAVN testing.
- d. Include the microchip number on the label of each sample.
- e. Ship samples refrigerated, not frozen, **via next day delivery express mail or a private courier service**. Ensure the sample does not arrive on a weekend or holiday. Contact your installation official mail manager for official express mail procedures.
- f. Sera for the OIE-FAVN test must arrive at the VETCOM Lab no less than 90 days prior to the animal's arrival in Hawaii.
- g. For an acceptable FAVN test, a result of 0.5 I.U. of rabies antibodies or greater per milliliter of serum is required. To maximize the antibody titer, draw the sample three to four weeks after the most recent rabies vaccination.

3. Required Submission Documents

- a. Photocopy of the military member's PCS orders, request for orders (RFO), or their service's

PERSCOM equivalent must accompany all submissions.

- b. Attach the documents to a completed Request for FAVN Testing form (see Appendix M for blank and sample forms).
- c. The VETCOM Lab may provide an exception if time is critical and orders documents are not yet available; in this case, include a photocopy of the members military identification card with the OIE-FAVN serology submission form.

4. Rabies Vaccination and Health Certificate Requirements

- a. Rabies Vaccination Requirements
 - (1) To be eligible for reduced quarantine, cats and dogs must have received a minimum of two (2) rabies vaccinations not less than 6 months apart with an approved monovalent inactivated rabies vaccine.
 - (2) The first vaccination shall not be given at less than 3 months of age.
 - (3) The second or subsequent vaccination shall be given no less than 90 days and no more than 12 months before arrival in Hawaii.
- b. Health Certificate Requirements
 - (1) The name, serial or lot number, expiration date, and route of administration must appear on the health certificate.
 - (2) Information for the two most recent rabies vaccinations shall be recorded on the health certificate.
- c. Shipment of FAVN serology submissions
 - (1) In unusual or extraordinary circumstances, VLE can assist with mailing FAVN samples to the VETCOM Lab when needed.
 - (2) Due to LRMC's mailroom schedule and the need to prevent a weekend arrival at FSH, we will typically ship samples on Mondays or Tuesdays.
 - (3) Draw the samples that day or the day before and ensure that they are at VLE before 0800 on Tuesdays.

(4) Be sure to meet all VETCOM Lab requirements. Prepackage the samples in an insulated shipping container with multiple freezer packs.

- d. Advise your clients to begin this process as early as possible upon official notification of PCS to Hawaii.

K. Submission of Human Serum for Rabies Antibody Titer (RFFIT Test)

1. Serum Sample Submission

If serum sample submission is not available through your installation medical treatment facility, Veterinary Laboratory Europe can receive samples and send them to the VETCOM Lab at Fort Sam Houston, TX.

- a. Submit 2-3 mLs of clear, frozen serum with a request form, SF 557 Miscellaneous Form, see Appendix P.
- b. Ensure that complete patient and submitting station identification is included on the submission form.

2. Vaccination/Antibody Testing

- a. The CDC's 1999 Immunization Practices Advisory Committee (ACIP) guidelines for rabies vaccination and human serologic testing are presently available at:
<http://www.avma.org/pubhlth/rabprev.html>
- b. Military occupational health professionals servicing your area can help determine your proper rabies antibody testing frequency. For additional information see DOD 6055.5-M, Occupational Medical Surveillance Manual, May 1998. The following website may be helpful:
<http://www.denix.osd.mil/denix/Public/ES-Programs/Safety/Documents/6055.5/manual.html#c3>

APPENDIX A: Test Methods

Test Performed	Official Method
Salmonella Isolation/Identification	AOAC Official Method 996.08
Listeria Isolation/Identification	AOAC Official Method 999.06
Standard Plate Count Aerobic Plate Count Heterotrophic Plate Count	AOAC Official Method 966.23/Standard Method of Examination of Dairy Products 16 th Edition 1992/ Standard Method of Examination of Water and Waste Water 19 th Edition
Coliform Count	APHA Compendium of Methods 4 th Edition 2001 Chapter 8/Standard Methods of Examination of Dairy Products 16 th Edition 1992
E. Coli Plate Count	APHA Compendium of Methods 4 th Edition 2001 Chapter 8
Staphylococcus aureus plate count and ID	AOAC Official Method 975.55
Yeast and Mold Counts	BAM Methods/Standard Methods of Examination of Dairy Products 16 th Edition 1992
Staphaurex	AOAC Official Method 995.12
Pseudomonas/250 mL	/ Standard Method of Examination of Water and Waste Water 19 th Edition
Fecal Strep/250 mL	/ Standard Method of Examination of Water and Waste Water 19 th Edition
Sulfite Reducing Anaerobes/250 mL	/ Standard Method of Examination of Water and Waste Water 19 th Edition
Dye Leak	BAM Methods
Commercial Sterility	BAM Methods
Anaerobic Sterility	BAM Methods
Aerobic Sterility	BAM Methods
Protolytic Count	Standard Methods of Examination of Dairy Products 16 th Edition 1992
Spore Strip	Per manufacture's direction
Coliform Most Probable Number (MPN)	APHA Compendium of Methods 4 th Edition 2001 Chapter 8
Fecal Coliform MPN	APHA Compendium of Methods 4 th Edition 2001 Chapter 8
Phosphatase	Standard Methods of Examination of Dairy Products 16 th Edition 1992
Determination of pH Values	Standard Methods of Examination of Dairy Products 16 th Edition 1992

Total Solids/Solids Not-fat and Moisture in Dairies	AOAC 925.23
Titratable Acidity in Dairy	Standard Methods of Examination of Dairy Products 16 th Edition 1992
Anions in Water by Ion Chromatography	EPA 300.1

APPENDIX A1 Non-Routine Testing List

Tests	Method	Type of Sample	Special Instructions
A cididity	titration	sour cream, buttermilk, yogurt, cream, beverage base vinegar, etc	0-4.4°C
Acid producer count	culture	food	0-4.4°C
Acidic flat sour spore	culture	tomato products, evaporated milk	
Added water	cryoscope	whole milk	
Additives (cereal, soy)		ground meat	chilled
Additives (any other)		food	chilled
Aerobic culture high acid	culture	can food	
Aerobic culture low acid	culture	can food	
Aerobic plate count, mesophilic	culture	food	0- 4.4°C
Aerobic plate count, thermophilic	culture	food	
Ammonia		water, food	0-4.4°C
Anaerobic culture high acid	culture	can food	
Anaerobic culture low acid	culture	can food	
Anaerobic plate count, mesophilic	culture	meat, UHT milk	
Anaerobic plate count, thermophilic	culture	food	
Antibiotic (milk method)	HPLC/GC	milk, meat, eggs	
Antibiotics (penicillins)	<i>Bacillus stearo-thermophilus</i>	milk	0-4.4°C
Antioxidants	HPLC	food	
Ash	muffle furnace	food	
B <i>acillus cereus</i> count	culture	cereal, rice, food with cornstarch	chilled
Biogenic amines	HPLC/GC	food, fish, meat	chilled
<i>Campylobacter jejuni</i> isolation & identification	culture	poultry, milk, water	
C hlorine, available	thiosulfate, titration	dairy	
Can/package exam		canned foods	3 normal/3 defective
<i>Clostridium botulinum</i> , isolation & identification	culture	can food	chilled
<i>Clostridium perfringens</i> count	culture	meat, poultry	chilled, do not freeze
Coliform count	culture	dairy	0-4.4°C
Coliform MPN	culture	salad, sandwich, ground meat	chilled or frozen

Tests	Method	Type of Sample	Special Instructions
Cytology		prepared smears	stained & unstained slides
D irect micro exam	DMC	food	
E. coli count/MPN	culture	salad, sandwich, meals, ground meat, dehydrated food, cheese	
<i>E. coli</i> 0157	culture	beef	chilled or frozen
<i>Enterococcus</i> count	culture	cheese, ham	chilled
F at, butterfat	Acid hydrolysis	cheese	0-4.4°C
Fat, butterfat	Roese-Gottlieb/IR	dairy	0-4.4°C
Fat, crude	Soxhlet	meat, food	chilled or frozen
Fecal coliform MPN	culture	nondairy	
Foreign material		food	
Free fatty acid	GC or titration	food	
G ram stain	stain	culture	
H eadspace	GC	food	chilled
Headspace gas	qualitative	canned food	
Heavy metal screen (Sb, As, Se, Ag)	Reinsch test & AAS	food	
Histamine, Histidine	TLC, HPLC	food	chilled
Histopathology		tissue	formalin/fixed
I ncubation test	35 & 55°C	canned food	
Iron	AAS	canned food	
Iron		dipstick	can food
K eeping quality test	7°C	fresh dairy, (best sell by date)	duplicates, 0-4.4°C
Kreis, rancidity	calorimetric	fatty food	chilled or frozen
L eak test dye	Zyglo	MRE/Cans	
Leak test dye	Rhodamine B dye	UHT package	
<i>Listeria monocytogenes</i> culture	culture	food	chilled
M etals	AAS	food, bottled water	
Al, As, Cd, Cr, Cu			
Fe, Mg, Mn, Ni, Pb,			
Se, Zn, Sb, K, Na			
Milk solids nonfat	calculation	dairy	0-4.4°C

Tests	Method	Type of Sample	Special Instructions
Moisture	convection oven	food, cottage cheese, butter	
Moisture	vacuum	cottage cheese, butter, cheese, margarine, dried milk	chilled
Mycotoxins - patulin, penicillic acid, rubratoxin	TLC/HPLC/ELISA	rice, apple juice, corn, dried beans	
Net volume	volumetric	liquid	
Net weight	gravimetric	food	
Nitrate	Colorimetric, IC	cured meat, food, water	chilled
Nitrite	Ion Chromatography	cured meat, food, water	chilled
Nonfat dry milk	colormetric		meat
Organoleptic	odor, taste, appearance		food
Organism ID	culture		
Palatability	sensory panel		food
Percent fill	measure	can food	
Peroxide value	titration	fatty food	chilled or frozen
Pesticide	GC	food, water	
pH	electrometric	food	
Phosphatase	Scharer	dairy	0-4.4°C
Phosphorus	spectro-photometry	food	
Preservatives	HPLC	food	
Pressure, container	press gauge	can	
Proteolytic count (dairy, meat, poultry, fish)	culture	skim & cultured butter	chilled
Psychrotrophic plate ct	culture at 7°C for 10 days	refrigerated dairy &	0-4.4°C
Rabies diagnosis	FA and MNA	brain	chilled
Rabies diagnosis	cell culture	brain	chilled
Rancidity	FFA, Kreis, PV	lipid food	chilled or frozen
Salmonella isolation & identification	culture/ELISA	egg products, meat, dry milk, candy	chilled or frozen
Salt (NaCl)	silver nitrate		cured meat, butter
Scorched particles			powdered milk
Shigella isolation & identification, water feces	culture	raw fruit/vegetables	chilled or frozen
Sieve test		food	
Solubility	solvents	foreign material	

Tests	Method	Type of Sample	Special Instructions
Solubility index		powdered milk	
Standard Plate Count 32°C for 48h		dairy	0-4.4°C
<i>Staphylococcus aureus</i> count	culture	meat, poultry, ham, fermented meat, cheese, custards, cream-filled pastries, dry milk	chilled
<i>Staphylococcus enterotoxin</i>	ELISA		
Thermoduric count	culture	dairy	
Tin	AAS	can food	
Tin	dipstick	can food	
Total dissolved solids	refractometer	juice	
Total solids	convention oven	dairy, bread	
Vacuum, container	vacuum gauge	can	
Vitamins	HPLC, spectro- photometer	food	
Water activity	meter	food	
Yeast & mold count	culture	food	
<i>Yersinia enterocolitica</i> isolation and identification	culture	meat, fish, vegetables, water	chilled

Legend:

AAS - atomic absorption spectrophotometry
 ELISA - enzyme linked immunosorbent assay
 FA - fluorescent antibody
 FFA - free fatty acid
 GC - gas chromatography
 GCMS - gas chromatography mass spectrometry
 HPLC - high performance liquid chromatography
 IC - Ion Chromatography
 IR - infra-red spectrophotometry
 MNA - murine neuroblastoma cell culture
 MPN - most probable number
 PV - peroxide value
 TLC - thin layer chromatography

APPENDIX A2 Routine/Government Testing List*

<u>Type of Product</u>	<u>Tests performed</u>
Fluid pasteurized dairy products** white	SPC, coliform count keeping quality phosphatase %fat, % SNF
chocolate, flavored	SPC, coliform count keeping quality phosphatase % fat, %TS
Cream, heavy, whipping, light, Half & half	%fat, phosphatase
Sour Cream	%fat, % titratable acidity phosphatase yeast and mold count
Buttermilk	%fat, %SNF phosphatase
Cottage Cheese	%fat, pH, moisture phosphatase yeast and mold count
Eggnog	%fat, %SNF, % acidity
Raw Milk	Freezing point DMC Pesticides Antibiotics
Yogurt Plain	%fat, %SNF, % acidity Phosphatase coliform count
Flavored	Phosphatase, %acidity coliform count

APPENDIX A2 Cont'd Routine/Government Testing List*

Sour Cream	%fat, % titratable acidity phosphatase yeast and mold count
Buttermilk	%fat, %SNF phosphatase
Cottage Cheese	%fat, pH, moisture phosphatase yeast and mold count
Eggnog	%fat, %SNF, % acidity
Raw Milk	Freezing point DMC Pesticides Antibiotics
Yogurt Plain	%fat, %SNF, % acidity Phosphatase coliform count
Flavored	Phosphatase, %acidity coliform count
UHT Products	white%fat, %SNF, pH SPC, coliform count chocolate%fat, %TS SPC, coliform count whole flavored%fat, %TS SPC, coliform count cream%fat, SPC coliform count
Water***	<i>P. aeruginosa</i> APC, sulfite reducing anaerobes Coliforms, Fecal strep
Ground beef, beef trimmings, pork, poultry	APC, fecal coliform

APPENDIX A2 Cont'd Routine/Government Testing List*

*Only these tests will be performed when Government Testing (GT) is annotated on MEDCOM FORM 676-R

**If % fat and total solids are not proportionate, added water testing (freezing point determination) will be performed.

***Testing of bottled water for initial inspection purposes will also include pesticides, anion, cations, and heavy metal determination.

APPENDIX C Foodborne Illness Outbreak Investigation Data

(complete front and back page and submit with each batch of specimens shipped)

1. Date and time of onset of symptoms for first case: _____

2. Location/activity/unit associated with the outbreak: _____
_____.

3. Medical treatment facility where patients were evaluated: _____
_____.

4. Veterinary or Preventive Medicine Service: _____
_____.

POC: _____ Phone Number: _____

5. Place, date, time of food preparation: _____

6. Method of serving and holding food: _____
_____.

7. Storage place and temperature of food: _____
_____.

8. Incubation period: Average: _____ n*: _____

Maximum: _____ Minimum: _____

9. Duration of illness: Average: _____ n*: _____

Maximum: _____ Minimum: _____

10. No. with symptoms: n*: _____ Cramps: _____

Nausea: _____ Fever: _____

Vomiting: _____ Diarrhea w/blood: _____

Other: _____ Diarrhea no blood: _____

(*n is the number of people who gave an answer used in the calculation of the average value or who had at least one symptom.)

APPENDIX C (cont.)

11. Laboratory results from locally examined specimens:

<u>Type of specimen</u>	<u>Examined for</u>	<u>Result</u>	<u>Date</u>
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

12. Food specific attack chart (need not accompany initial batch of specimens).

Number of persons who ate specified food _____ Number of persons who did not eat specified food _____

<u>Food</u>	<u>% Ill</u>	<u>%Not Ill</u>	<u>Total</u>
-------------	--------------	-----------------	--------------

13. Food items incriminated: _____

14. _____

15. Other pertinent information: _____

16. Name of the veterinary/preventive medicine official approving shipment:

17. _____ . Date approved: _____

APPENDIX D Request for Testing, MEDCOM FORM 676-R

REQUEST FOR VETERINARY LABORATORY TESTING For use of this form see MEDCOM Reg 40-28			
1. TO		2. FROM	
3. POINT OF CONTACT		4. MANUFACTURER/VENDOR	
PHONE:		PHONE:	
SIGNATURE:		PLANT CODE:	
5. TYPE OF ITEM(S) SUBMITTED		6. REASON FOR SUBMITTAL	
		<input type="checkbox"/> INSPECTION <input type="checkbox"/> ROUTINE <input type="checkbox"/> SPECIAL <input type="checkbox"/> CUSTOMER COMPLAINT <input type="checkbox"/> QAV <input type="checkbox"/> VERIFICATION <input type="checkbox"/> COC <input type="checkbox"/> OTHER (Specify): _____	
7. DATE SELECTED			
8. QUANTITY SUBMITTED	9. QUANTITY REPRESENTED	10. LOT NUMBER	11. SPECIFICATION(S) AND AMENDMENT(S)
12. SAMPLE LIST (Continue on page 2 if necessary)			
FOR LAB USE ONLY LABORATORY SAMPLE NUMBER	SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	PRODUCTION DATE DATE OF PACK CODE DATE
NOTES (Continue on page 2)			
13. TEMPERATURE PILOT SAMPLE INCLUDED? <input type="checkbox"/> YES - TYPE _____ <input type="checkbox"/> NOT REQUIRED			
14. REPORT DISPOSITION		15. SHIPPING CONTAINER DISPOSITION	
<input type="checkbox"/> RETURN TO ADDRESS IN BLOCK 2 ONLY <input type="checkbox"/> SEND TO OTHER <input type="checkbox"/> SEND TO ADDITIONAL		<input type="checkbox"/> RETURN TO ADDRESS IN BLOCK 2 <input type="checkbox"/> DO NOT RETURN <input type="checkbox"/> SEND TO OTHER	
FOR LABORATORY USE ONLY			
16. DATE RECEIVED	17. RECEIPT TEMP	18. DATE CONTAINER RETURNED	19. LAB REPORT NUMBER

APPENDIX E1 STANDARD FORM 515, Blank Form

515-113

EXCEPTION TO SF 515
APPROVED BY NARS SEP 26, 1982

MEDICAL RECORD	TISSUE EXAMINATION	
SPECIMEN SUBMITTED BY		DATE OBTAINED
SPECIMEN		
BRIEF CLINICAL HISTORY (Include duration of lesion and rapidity of growth, if a neoplasm)		
PREOPERATIVE DIAGNOSIS		
OPERATIVE FINDINGS		
POSTOPERATIVE DIAGNOSIS	SIGNATURE AND TITLE	
PATHOLOGICAL REPORT		
NAME OF LABORATORY	ACCESSION NO(S)	
(Gross description, histologic examination and diagnoses)		

(Continue on reverse side)

SIGNATURE OF PATHOLOGIST					DATE
AGE	SEX	RACE	REGISTER NO.	WARD NO.	IDENTIFICATION NO.

PATIENT'S IDENTIFICATION *(For typed or written entries give: Name-last, first, middle; grade; rank; rate; hospital or medical facility)*

**TISSUE EXAMINATION
Medical Record**

STANDARD FORM 515 (REV. 7-91) (EF-V2) (PerFORM PRO)
Prescribed by GSA and ICMR, FIRMR (41 CFR) 201-9.202-1

APPENDIX E2 STANDARD FORM 515, Sample Form

515-113	EXCEPTION TO SF 515 APPROVED BY NARS SEP 26, 1982	
MEDICAL RECORD	TISSUE EXAMINATION	
SPECIMEN SUBMITTED BY	DATE OBTAINED	

SPECIMEN
Martha Jones, Baumholder VTF, 64th Med Det (VS), FAX 485-7555 05/30/99
 BRIEF CLINICAL HISTORY (Include duration of lesion and rapidity of growth, if a neoplasm)

Growth removed from the left caudal mammary gland region.

~~Dog had a benign mixed mammary tumor in the right caudal gland 4-5 years ago - was spayed at that time.~~
 PREOPERATIVE DIAGNOSIS This growth developed in the last 2-3 months, was freely moveable in the subcutis, nonpainful on palpation, and is approximately 3x3x2 cm in size.
 OPERATIVE FINDINGS

Mammary tumor POSTOPERATIVE DIAGNOSIS	SIGNATURE AND TITLE
Growth contained 5 mLs of thin yellow purulent material in a central cystic area.	

PATHOLOGICAL REPORT	
NAME OF LABORATORY	ACCESSION NO(S)
Mammary adenoma or carcinoma <small>(Gross description, histologic examination and diagnoses)</small>	

SAMPLE FORM

(Continue on reverse side)

SIGNATURE OF PATHOLOGIST	DATE
--------------------------	------

AGE	SEX	RACE	REGISTER NO.	WARD NO.	IDENTIFICATION NO.
-----	-----	------	--------------	----------	--------------------

PATIENT'S IDENTIFICATION (For typed or written entries give: Name-last, first, middle; grade; rank; rate; hospital or medical facility)

TISSUE EXAMINATION
Medical Record

STANDARD FORM 515 (REV. 7-91) (EF-V2) (PerFORM PRO)
 Prescribed by GSA and ICMR, FIRM (41 CFR) 201-9.202-1

"Roco" Williams
 12 year-old, spayed female, German Shepherd Dog

APPENDIX F Veterinary Necropsy Report Checklist and Guidelines, DD FORM 1626

VETERINARY NECROPSY REPORT CHECKLIST AND GUIDELINES					
(DD Form 1626 may be used independently of TB Med 283. Instructions for completing this form begin on page 9.)					
SECTION I - ADMINISTRATIVE DATA					
PART A - CONTRIBUTOR'S DATA					
1. CONTRIBUTOR/PROSECTOR			2. DATE OF REPORT (YYYYMMDD)		
3. NAME AND ADDRESS OF REPORTING UNIT			4. GEOGRAPHIC LOCATION (Country)		
5. TELEPHONE NUMBER		6. FAX NUMBER		7. E-MAIL	
PART B - ANIMAL IDENTIFICATION AND RELATED DATA					
8. ANIMAL I.D. (Name and Tattoo Number)		9. SPECIES		10. BREED	
11. DATE OF BIRTH (YYYYMMDD)	12. AGE	13. SEX	14. NEUTERED <input type="checkbox"/> YES <input type="checkbox"/> NO	15. WEIGHT	16. COLOR
17. EUTHANIZED (Specify method and agent used.) <input type="checkbox"/> YES <input type="checkbox"/> NO					
18. CAUSE OF DEATH (Medical reason for death or decision to euthanize.)					
19. NAME AND ADDRESS OF UNIT ACCOUNTABLE FOR ANIMAL					
20. CONTRIBUTOR'S NECROPSY NUMBER		21. DATE OF DEATH (YYYYMMDD)		22. TIME BETWEEN DEATH AND NECROPSY	
23. PRIORITY REQUIRED <input type="checkbox"/> ROUTINE <input type="checkbox"/> RUSH		24. MATERIALS FORWARDED			
SECTION II - CLINICAL AND PATHOLOGICAL DATA					
25. CLINICAL ABSTRACT (Continue in Block 32 or on a separate sheet if necessary and attach copy of DD Form 1743, Death Certificate of a Military Dog; DD Form 1834, Military Working Dog Service Record (Assignment History); and DD Form 2619, Master Problem List.)					

SECTION II - CLINICAL AND PATHOLOGICAL DATA *(Continued)*

26. CLINICAL DIAGNOSES *(Relevant to the death of the animal.)*

27. GROSS NECROPSY DIAGNOSES

28. GROSS PHOTOGRAPHS *(Tissues and lesions photographed.)*

29. MICROBIOLOGICAL CULTURE RESULTS *(Specify site.)*

30. CLINICAL PATHOLOGY TEST RESULTS *(Relevant to the death of the animal, include a copy.)*

31. RADIOGRAPHS AND INTERPRETATIONS *(Relevant to the death of the animal, include a copy.)*

32. REMARKS *(List any additional information that supplements this report. This block can be used for a continuation of another information block.)*

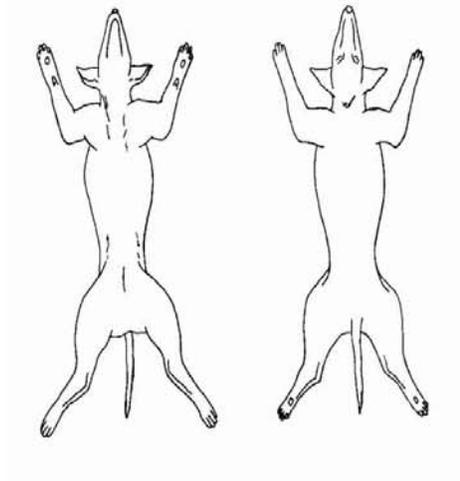
33. SIGNATURE OF CONTRIBUTOR/PROSECTOR

SECTION III - GROSS FINDINGS

(If more space is needed, identify the tissue and continue on a blank sheet.)

GENERAL (Condition of cadaver, haircoat, body orifices, scars, superficial lesions/tumors, etc.)

WEIGHT



Ventral

Dorsal

EYES AND EARS

PRIMARY INCISION (Subcutaneous fat, musculature, superficial lymph nodes, etc.)

BONE MARROW (Color, consistency, submit two unstained cytology smears.)

ENDOCRINE GLANDS (Pituitary, thyroid, parathyroids, adrenals.)

Thyroid/Parathyroid (gm) L R

Adrenal (gm) L R

Pituitary

SECTION III - GROSS FINDINGS *(Continued)*

BODY CAVITIES (If fluid is present in the abdomen and/or thorax, describe the color, clarity and amount.)

URINARY SYSTEM (Kidneys, ureters, urinary bladder, urethra.)

Kidney (gm) L R

GENITAL SYSTEM (Testes, epididymides, spermatic cords, prostate gland, penis, ovaries, oviducts, uterus, cervix, vagina, vulva.)

ILIAC LYMPH NODES AND ABDOMINAL AORTA

HEART (Pericardium, epicardium, myocardium, endocardium, valves, coronary vessels, etc.)

Weight (gm)

RV (mm)

LV (mm)

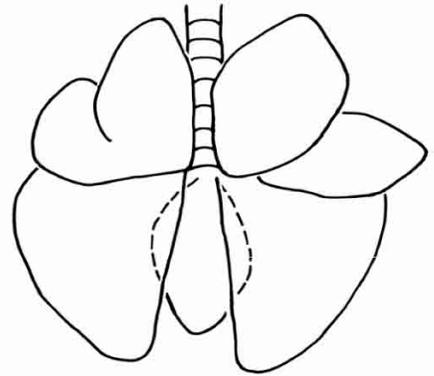
IV Septum (mm)

VASCULATURE (Arteries, veins, and lymphatics.)

SECTION III - GROSS FINDINGS (Continued)

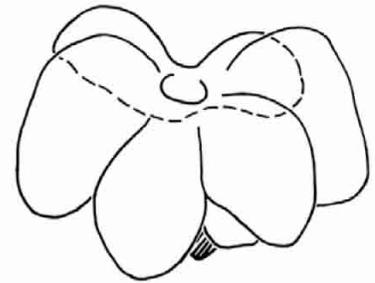
RESPIRATORY SYSTEM (Larynx, trachea, bronchi, lymph nodes, etc.)

LUNG (gm) R L



LIVER (Size, color, consistency, gallbladder, bile ducts, etc.)

Weight (gm)



PANCREAS

Weight (gm)

SPLEEN

Weight (gm)

GASTROINTESTINAL TRACT (Mouth, teeth, tongue, salivary glands, esophagus, stomach, duodenum, jejunum, ileum, cecum, colon, rectum, anus and lymph nodes.)

SECTION III - GROSS FINDINGS <i>(Continued)</i>
BONES AND JOINTS, NONVERTEBRAL (Hip, stifle, shoulder, elbow, other.)
BRAIN (Cerebrum, cerebellum, brainstem.)
NASAL CAVITY AND SINUSES
VERTEBRAL COLUMN
SPINAL CORD
PERIPHERAL NERVES

SECTION IV - TISSUE CHECKLIST

Use this checklist to record all tissues collected for submission. In the "Other" section, list any additional tissues collected that are not on the checklist. Tissues are listed in order of descriptive protocol. See TB MED 283 for an alphabetical list.

34. MILITARY WORKING DOG (MWD) NAME

35. MWD TATTOO

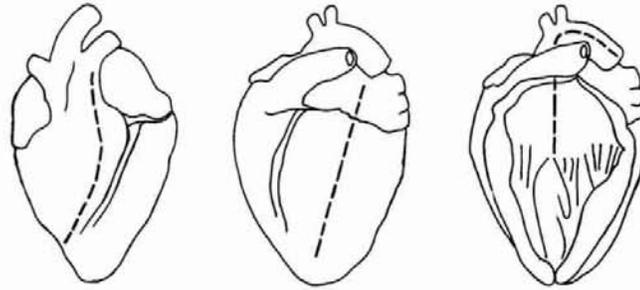
36. ITEM

<input type="checkbox"/>	EYES (LEFT/RIGHT)	<input type="checkbox"/>	SPLEEN
<input type="checkbox"/>	LACRIMAL GLAND	<input type="checkbox"/>	MESENTERIC LYMPH NODE(S) *
<input type="checkbox"/>	AXILLARY LYMPH NODE(S) (LEFT/RIGHT) *	<input type="checkbox"/>	STOMACH
<input type="checkbox"/>	HAIR SKIN (SPECIFY SITE IN REMARKS)	<input type="checkbox"/>	DUODENUM
<input type="checkbox"/>	MAMMARY TISSUE (IF APPLICABLE)	<input type="checkbox"/>	JEJUNUM
<input type="checkbox"/>	SKELETAL MUSCLE	<input type="checkbox"/>	ILEUM
<input type="checkbox"/>	BONE MARROW	<input type="checkbox"/>	ILEOCECOCOLIC JUNCTION
<input type="checkbox"/>	THYROID AND PARATHYROID GLANDS *	<input type="checkbox"/>	CECUM
<input type="checkbox"/>	MANDIBULAR SALIVARY GLANDS	<input type="checkbox"/>	COLON
<input type="checkbox"/>	ADRENAL GLANDS (LEFT/RIGHT)	<input type="checkbox"/>	RECTUM
<input type="checkbox"/>	THYMUS/THYMIC REMNANTS *	<input type="checkbox"/>	ANUS/PERIANAL AREA/ANAL SAC
<input type="checkbox"/>	BONE (RIB, STERNEBRA; SPECIFY OTHER SITE)	<input type="checkbox"/>	EAR CANAL
<input type="checkbox"/>	TONSILS (LEFT/RIGHT) *	<input type="checkbox"/>	BRAIN (INTACT)
<input type="checkbox"/>	TONGUE	<input type="checkbox"/>	PITUITARY GLAND *
<input type="checkbox"/>	ESOPHAGUS	<input type="checkbox"/>	SPINAL CORD (INTACT)
<input type="checkbox"/>	MEDIAL RETROPHARYNGEAL LYMPH NODE(S) *	<input type="checkbox"/>	PERIPHERAL NERVE (SPECIFY)
<input type="checkbox"/>	DIAPHRAGM	<input type="checkbox"/>	OTHER (SPECIFY)
<input type="checkbox"/>	KIDNEYS (LEFT/RIGHT)		
<input type="checkbox"/>	URETERS		
<input type="checkbox"/>	URINARY BLADDER		
<input type="checkbox"/>	URETHRA		
<input type="checkbox"/>	PROSTATE GLAND		
<input type="checkbox"/>	TESTES/EPIDIDYMIDES (LEFT/RIGHT)		
<input type="checkbox"/>	UTERUS; CERVIX; VAGINA		
<input type="checkbox"/>	OVARIES (LEFT/RIGHT)		
<input type="checkbox"/>	ILIAC LYMPH NODE(S) (LEFT/RIGHT) *		
<input type="checkbox"/>	AORTA, ABDOMINAL (SPECIFY OTHER SITE)		
<input type="checkbox"/>	HEART (ENTIRE ORGAN, OPENED)		
<input type="checkbox"/>	TRACHEA/LARYNX		
<input type="checkbox"/>	TRACHEOBRONCHIAL LYMPH NODE(S) (L/R) *		
<input type="checkbox"/>	LUNG		
<input type="checkbox"/>	PANCREAS		
<input type="checkbox"/>	LIVER		
<input type="checkbox"/>	GALLBLADDER		

REMARKS:

* Identify these tissues by placing in labeled, large-size tissue cassettes (or other containers) prior to fixation and shipment.

DISSECTION AIDS

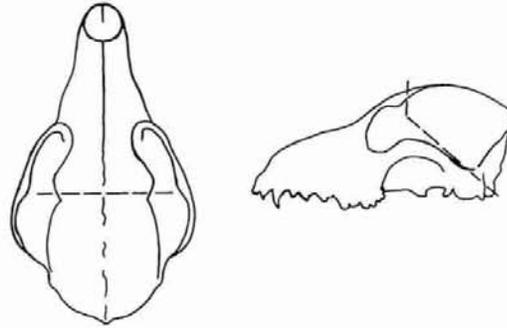


Right Ventricle

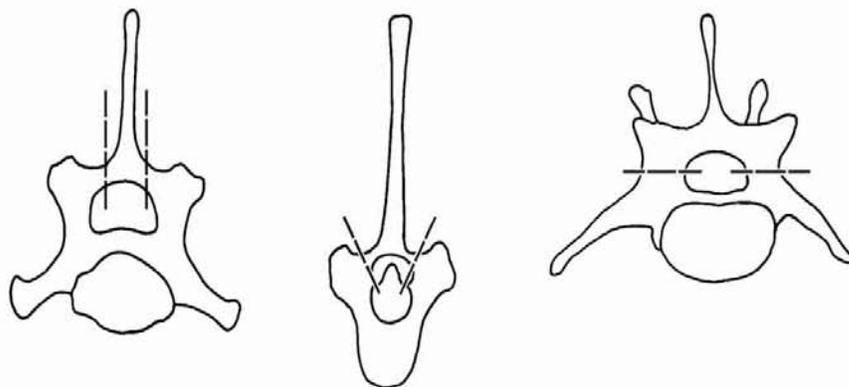
Left Ventricle

Aortic Outflow

DISSECTION OF THE HEART



REMOVAL OF THE BRAIN



Cervical

Thoracic

Lumbar

REMOVAL OF THE SPINAL CORD

INSTRUCTIONS FOR COMPLETING DD FORM 1626

PURPOSE: DD Form 1626 is used to record necropsy results of military working dogs, but may be used for other animals.

GENERAL: This form may be printed or photocopied without the instruction pages to minimize the length. DD Form 1626 is available on the Army Electronic Library CD-Rom (EM 0001) and on the DoD web site at <http://web1.whs.osd.mil/icdhome/icdhome.htm>.

SECTION I - ADMINISTRATIVE DATA

1. Blocks 1 through 7: **Name and Address of the Reporting Veterinary Unit.** Enter the rank, full name and title of the contributing Veterinary Corps officer and the military unit to which assigned. Station address, telephone and fax numbers, and e-mail address are all important information.
2. Blocks 8 through 16: **Animal Identification.**
3. Block 17: **Euthanized (Yes or No).** Specify the brand name or the active agent of the euthanasia product, the amount given, and the site of intravenous administration.
4. Block 18: **Cause of Death.** Concisely state the medical reason(s) leading to the death of the animal. In the case of euthanasia, state why the animal was euthanized.
5. Block 19: **Name and Address of Unit Accountable for Animal.** Enter the military unit that is accountable for the MWD. Include the complete military unit designation and station address. (If the form is used for a privately owned pet, the owner's information should be indicated in this block.)
6. Block 24: **Materials Forwarded.** List categories such as tissues, culture results and radiographs, gross photographs, etc.

SECTION II - CLINICAL AND PATHOLOGICAL DATA

7. Block 25: **Clinical Abstract.** The clinical abstract should address the recent pertinent information regarding this case, and previous significant medical history. Include illnesses, recent treatments, laboratory and radiologic findings, surgeries, wounds, fractures, immunizations, working environment and recent TDY assignments. Attach a copy of DD Form 1743, *Death Certificate of a Military Dog*; DD Form 1834, *Military Working Dog Service Record (Assignment History)*; and DD Form 2619, *Master Problem List*.
8. Block 26: **Clinical Diagnoses.** Concisely list significant clinical conditions relating to the death of this animal.
9. Block 27: **Gross Necropsy Diagnoses.** List all necropsy diagnoses (interpretations).
10. Block 30: **Clinical Pathology Tests and Results.** List tests and include a copy of the results.

SECTION III - GROSS FINDINGS**NECROPSY PROTOCOL** (*Abstract of TB MED 283, Chapter 3*)**INTRODUCTION** (Para. 3-1)

- a. Describe all abnormalities in detail. Use each block/diagram in this section for a systematic examination and report. Enter "NGLR" (no gross lesions recognized) or an equivalent notation as appropriate.
- b. Use physiologic saline to rinse tissues during the necropsy. Tissue specimens are sensitive to hydrostatic and osmotic pressures. Rinsing with tap water will cause morphologic artifacts.
- c. Organ weight data is optional. Collect when practicable.
- d. Use the tissue checklist on Page 7.

EXTERNAL EXAM (Para. 3-2)

Carefully examine all external structures and surfaces and record the following: weight, nutritional condition, state of rigidity, extent of post-mortem decomposition, and the condition of the haircoat, skin, mucous membranes, eyes and body orifices. Describe tattoos, scars, wounds, cutaneous tumors, bony malformations, discharges, etc.

EYES (Para. 3-3)

The eyes should be collected early in the necropsy. Clamp the eyelids together with tissue forceps (Allis recommended). Use a scalpel to incise the eyelids around the orbit. With curved scissors, dissect the eyes from the orbits by cutting extraocular muscles, connective tissue attachments and optic nerve. Examine and collect lacrimal gland tissue. Check for eyelid and retrobulbar lesions. Eyelids should remain attached to the left eye for identification; however, remove skeletal muscle from the surface of the sclera to facilitate fixation. Also, 0.2 - 0.5 ml of formalin may be injected directly into the vitreous chamber.

INSTRUCTIONS FOR COMPLETING DD FORM 1626 (Continued)**SECTION III - GROSS FINDINGS (Continued)****VENTRAL MIDLINE INCISION (Para. 3-4)**

- a. With the carcass in dorsal recumbency, make a ventral midline incision that extends from the mandibular symphysis to the pubis. Dorsally reflect the skin from the abdomen, thorax and cervical region to expose underlying tissues and regional lymph nodes. Examine the amount and color of the subcutaneous adipose tissue.
- b. Transect the muscles between the scapula and thorax and the soft tissues surrounding the hip joint to allow the pelvic and thoracic limbs to lay flat and maintain the carcass in a steady position.
- c. Locate and examine the brachial plexus in the axillary space. Locate, examine and collect the applicable regional lymph nodes.
- d. Carefully examine the subcutis and skeletal muscle. Examine and collect a representative specimen of skeletal muscle.

BONE MARROW (Para. 3-6)

Femur, rib, sternum and vertebra are readily accessible sites for collection of histologic and cytologic red bone marrow specimens. The submitted specimen must contain red marrow. Collect early in the necropsy. (See para. 2-9c)

THYROID AND PARATHYROID GLANDS (Para. 3-7)

Careful removal of the muscles ventral to the trachea will expose the thyroid and parathyroid glands. Examine, and collect the thyroid and parathyroid glands.

SALIVARY GLANDS AND LYMPH NODES (Para. 3-8)

Locate and examine the mandibular, parotid and sublingual salivary glands and mandibular lymph nodes. Collect a specimen of mandibular salivary gland and, if indicated, a mandibular lymph node.

BODY CAVITIES (Para. 3-9)

Methodically examine all viscera *in situ* and observe for correct anatomic size and position. Record any abnormal characteristics of fluids present in either the abdomen or thorax.

- a. Abdomen (Para. 3-9a). To completely expose the abdominal viscera, make a ventral midline incision through the abdominal wall from the xyphoid process to the pubis. From the anterior end of this incision, cut laterally along the posterior margin of the last ribs. From the posterior end of the incision, cut laterally just anterior to the pubis.
- b. Adrenal Glands (Para. 3-9a). Locate, examine, and collect both adrenal glands.
- c. Thorax (Para. 3-9b). Verify negative intrathoracic pressure by observing and carefully listening for the influx of air resulting from a small stab incision made through the tendinous portion of the diaphragm. Using bone cutters, remove the ventral one-third of the rib cage. Examine the mediastinum, pericardium and diaphragm. Examine the parietal and visceral pleura. Examine the ribs and intercostal muscles. Examine and collect the thymus or thymic remnants, if present, in the cranial mediastinum.
- d. Thoracic Viscera Removal. Examine the thoracic viscera *in situ*, then remove *en masse*. The resultant "block" of thoracic viscera should include tongue, larynx, trachea, esophagus, heart, aorta and lungs. Place on a large cutting board for further dissection (See para. 3-13).

DIAPHRAGM (Para. 3-9c)

Examine and collect a representative specimen of diaphragm.

PELVIC CANAL (Para. 3-9d)

Locate the obturator foramina on the pelvis. Place the tip of bone cutting shears into one foramen and cut the pubis (caudal) and ischium (cranial). Repeat this on the opposite side. By blunt and sharp dissection, remove the freed section of bone to expose the pelvic canal.

UROGENITAL TRACT (Para. 3-9e)

- a. Examine the perineum. Incise the skin and subcutaneous tissues around the external genitalia.
- b. Free both kidneys from their attachment sites. Bluntly, dissect the ureters and excise at the urinary bladder. On both kidneys, incise and reflect the renal capsule to the hilus and examine the ureter and renal vasculature. Section the kidneys to the renal pelvis, cutting the left kidney longitudinally and the right kidney transversely (for later identification). Extend the renal pelvic incisions into each ureter. Serially section the kidneys and collect representative specimens from both (no more than 0.5 cm thick) that include the renal papilla. Collect a representative section of ureter.
- c. Remove remaining urogenital organs. Record ovariohysterectomy or orchiectomy, as applicable, on the DD Form 1626.

INSTRUCTIONS FOR COMPLETING DD FORM 1626 (Continued)**SECTION III - GROSS FINDINGS (Continued)****UROGENITAL TRACT (Continued)**

d. Examine the urinary bladder, urethra and prostate gland (as applicable). Open the bladder and urethra along their ventral aspects to the os penis (male) or external urethral meatus (female). Closely examine the urethra and trigone of the urinary bladder. Collect representative specimens of urinary bladder, urethra and prostate gland (as applicable).

e. Examine the male genitalia. Collect, label and submit both testes and epididymides in entirety with a segment of each spermatic cord. For proper fixation bisect the testes.

f. Examine the female genitalia. Use scissors to open the vulva, vestibule, vagina, cervix and uterus to the oviducts. Collect representative specimens of these structures and the ovaries.

DIGESTIVE TRACT REMOVAL (Para. 3-9f)

Examine the anus and rectum. Incise the skin and subcutaneous tissues around the anus and remove the abdominal viscera en masse. Place on a large cutting board for further dissection (See para. 3-17).

ILIAC LYMPH NODES AND ABDOMINAL AORTA (Para. 3-11)

Examine iliac lymph nodes and abdominal aorta. Collect representative specimens.

HEART, GREAT VESSELS AND PERICARDIAL SAC (Para. 3-12)

Incise the pericardial sac. Check for abnormal fluid accumulation. Reflect the pericardium over the base of the heart. Examine the base of the heart for neoplastic disease. Examine the great vessels and atria. Examine the epicardial surface and coronary arteries. Carefully dissect the heart (see fig. 3-1 or page 8 of this form) and examine all endocardial surfaces. Collect and submit the entire heart.

RESPIRATORY SYSTEM (Para. 3-13)

a. Trachea. Examine and open the trachea from the larynx to the level of the primary bronchi. Collect representative specimens.

c. Lungs. Palpate the peripheral and hilar areas of all lung lobes. Isolate and infuse the airways and alveolar spaces of the right cranial lung lobe with formalin (see para. 3-13b). Dissect the remaining lung lobes by opening all major bronchi. Collect representative specimens.

LIVER AND PANCREAS (Para. 3-14)

Examine and collect a representative specimen of pancreas with an attached segment of mesentery and duodenum. Verify the patency of the bile duct by applying pressure to the gallbladder, while observing for bile expulsion at the major duodenal papilla. Open and examine the gallbladder. Open the large hepatic arteries and veins (visceral surface) and examine. Serially section the liver and collect representative specimens (no more than 0.5 cm thick) of liver and gallbladder.

SPLEEN (Para. 3-15)

Examine, serially section and collect one or more representative specimens (no more than 0.5 cm thick).

MESENTERY (Para. 3-16)

Examine the omentum, mesentery and the root of the mesentery. Examine and collect representative mesenteric lymph nodes.

GASTROINTESTINAL TRACT (Para. 3-17)

a. Oral Cavity. Examine the oral cavity, teeth, pharynx and larynx. Locate, examine and collect each tonsil. Sharp dissection through the soft tissue between the tongue and mandible, across the soft palate and through the hyoid apparatus will free the tongue and oropharynx. Locate, examine and collect the medial retropharyngeal lymph nodes.

b. Salivary Glands and Lymph Nodes. Locate and examine the mandibular, parotid and sublingual salivary glands, and regional lymph nodes. Collect representative specimens of mandibular salivary glands and regional lymph nodes, if indicated. Separately label tissues that have a similar appearance, for later identification.

c. Esophagus (Para. 3-9c). Open, examine and collect a representative specimen of esophagus. The distal esophagus may be ligated with suitable material prior to transection to prevent spillage of gastric contents.

d. Stomach and Intestines. Open, examine and rinse the mucosal surfaces of the distal esophagus, stomach and duodenum with physiologic saline. Do not rinse with tap water. Collect designated specimens. Open, examine and collect representative specimens from the remaining small and large intestine. Alternately, specimens of intestine may be collected by resecting unopened (8-10 cm) segments, gently flushing the lumen with physiologic saline, ligating each end, and then gently distending the segment with formalin using a syringe and needle.

INSTRUCTIONS FOR COMPLETING DD FORM 1626 (Continued)**SECTION III - GROSS FINDINGS (Continued)****BONES AND JOINTS, NONVERTEBRAL (Para. 3-5 and 3-18)**

Carefully open the hip, stifle, shoulder and elbow joints (and others as indicated) and examine for abnormal synovial fluid, ruptured, stretched or frayed ligaments, erosion and ulceration of articular cartilage, thickened joint capsules, osteophyte formation and proliferative or thickened synovium. Describe all abnormalities. Collect representative specimens for histopathologic examination, as indicated.

BRAIN (Para. 3-19)

- a. Remove the head.
- b. Make a dorsal midline incision from the nose to the foramen magnum.
- c. Reflect the skin ventrally. Transect and collect a specimen of the ear canal. Remove the temporal muscles from the cranium.
- d. Use a bone saw to make three cuts through the skull. Do not cut into the brain. The first cut is made transversely at the anterior limit of the cranial cavity, slightly posterior to the zygomatic process. Rotate the cranium to one side and connect the end of the transverse cut with the foramen magnum. Repeat on the opposite side (See figure 3-2 or page 8 of this form).
- e. Use a Virchow's skull breaker, bone chisel or similar instrument in the first (transverse) incision, to pry off the calvarium. Examine the internal surface of the calvarium.
- f. If necessary, remove the osseous tentorium cerebelli with rongeurs. Transect the olfactory lobes. Elevate the rostrum and carefully transect the cranial nerves and pituitary stalk, freeing the brain.
- g. Immerse the brain in formalin (see para. 2-10). Bisect the brain only if tissue is required for immediate laboratory testing, such as for rabies.

PITUITARY GLAND (Para. 3-20)

Incise the dura mater surrounding the sella turcica to free the pituitary gland. Remove it carefully and place in a labeled tissue cassette.

NASAL CAVITY AND SINUSES (Para. 3-21)

Make a complete transverse cut across the frontal and maxillary bones rostral to the orbits. Examine the exposed nasal cavity and sinuses. Alternatively, a wedge of bone may be removed to expose these spaces. If indicated, submit a representative specimen.

VERTEBRAL COLUMN (Para. 3-10)

Examine the ventral surface of the vertebral column and record abnormalities.

SPINAL CORD (Para. 3-22, and Fig. 3-3 or page 8 of this form)

- a. Remove the skin remaining on the carcass and examine dorsal subcutis and musculature.
- b. Remove the epaxial muscles.
- c. Removing the thoracic vertebral arches first allows visualization of the correct placement of the saw blade for the subsequent removal of cervical and lumbar arches. Do not cut into the spinal cord.
- d. Thoracic vertebrae. Transect the spinous processes of the thoracic vertebrae with a bone saw. Cut through the vertebral arches adjacent to the remnants of the spinous processes at approximately a 45-degree angle. Make a transverse cut anterior to T-1 and posterior to T-13. Remove the thoracic arches to expose the spinal cord.
- e. Lumbar vertebrae. Cut through the vertebral arches immediately dorsal to the transverse processes at a 90-degree angle from vertical (perpendicular to the spinous processes). Make a transverse cut at the lumbosacral junction. Remove the lumbar arches to expose the spinal cord.
- f. Cervical vertebrae. Cut through the vertebral arches midway between the spinous processes and the transverse processes at a 0-degree angle (parallel to the spinous processes). Remove the cervical arches to expose the spinal cord.
- g. Sacral vertebrae. Opening the sacrum is usually not necessary. If lesions are suspected in the cauda equina, cutting between the intermediate and lateral sacral crests can expose the sacral vertebral canal.
- h. Grasp the dura mater with tissue forceps, cut the nerve roots and remove the spinal cord from the canal. Examine the dura mater and spinal nerve roots.
- i. To facilitate examination and fixation, carefully cut and reflect the dura mater along the dorsal midline for the full length of the spinal cord.
- j. Examine the vertebral column for herniated disc material, osteophyte formation and other lesions.
- k. Place a suture through the dura mater (or use some other form of identification) to mark suspect areas of the spinal cord requiring the attention of the histopathologist.
- l. Immerse the spinal cord and the attached dura mater in formalin.

PERIPHERAL NERVES (Para. 3-23). Examine and collect radial and sciatic nerve. Staple both ends of the collected specimens to a section of tongue depressor labeled with the tissue identification.

APPENDIX G Veterinary Consultation Request, DD FORM 2834

VETERINARY CONSULTATION REQUEST ARMED FORCES INSTITUTE OF PATHOLOGY <i>(Read Privacy Act Statement and Instructions on back before completing form. Sign and date on back.)</i>					1. TISSUE IN DOCTOR'S OFFICE (X) <i>(AFIP use only)</i>	
2. OWNER'S LAST NAME		3. ANIMAL NAME/TATTOO NUMBER		4. PREVIOUS AFIP CASE NUMBER ON ANIMAL <i>(If applicable)</i>		
5. COMMON NAME <i>(Dog, Bird, Rat, etc.)</i>		6. DATE OF BIRTH <i>(YYYYMMDD)</i>		7. AGE		8. SEX
						9. NEUTERED (X) <input type="checkbox"/> YES <input type="checkbox"/> NO
10. BREED/TYPE/STRAIN <i>(Beagle, Canary, F-344, etc.)</i>				11. GENUS AND SPECIES <i>(Scientific name)</i>		
12. MATERIALS FORWARDED <i>(X or complete as applicable)</i>				13. CONTRIBUTOR'S CASE IDENTIFICATION		
<input type="checkbox"/> CLINICAL INFORMATION <i>(Required)</i>				a. SURGICAL PATHOLOGY ACCESSION NUMBER(S)		
<input type="checkbox"/> SURGICAL PATHOLOGY REPORT <i>(Required)</i>						
<input type="checkbox"/> AUTOPSY REPORT <i>(Required)</i>				b. AUTOPSY/NECROPSY ACCESSION NUMBER		
<input type="checkbox"/> PHOTOS, CLINICAL/GROSS						
<input type="checkbox"/> X-RAYS				c. EUTHANIZED (X)		
<input type="checkbox"/> SLIDES <i>(Qty)</i> <i>(Required)</i>						
<input type="checkbox"/> BLOCKS <i>(Qty)</i>				<input type="checkbox"/> YES <input type="checkbox"/> NO		
<input type="checkbox"/> WET TISSUE						
<input type="checkbox"/> OTHER						
14. PRIORITY REQUESTED (X)						
<input type="checkbox"/> ROUTINE		<input type="checkbox"/> RUSH		<input type="checkbox"/> NO LETTER <i>(AFIP use only)</i>		
15. CLINICAL HISTORY <i>(Location and size of lesion, signs, duration, physical and laboratory findings.)</i>						
16. CONTRIBUTOR'S WORKING DIAGNOSIS <i>(Include legible copy of surgical pathology or autopsy report, if applicable.)</i>						
17. COMMENTS AND REQUESTS						
18. CONTRIBUTOR						
a. NAME <i>(Last, First, Middle Initial)</i>				b. COMPLETE MAILING ADDRESS		
c. TELEPHONE NUMBER <i>(Incl. area code)</i>		d. FAX NUMBER <i>(Incl. area code)</i>				
e. E-MAIL ADDRESS						

APPENDIX H Request for and Report of Laboratory Examination for Rabies DD FORM 2620

REQUEST FOR AND REPORT OF LABORATORY EXAMINATION FOR RABIES				
PRIVACY ACT STATEMENT				
AUTHORITY: Title 10, United States Code, Sections 3013, 5013, and 8013.				
PRINCIPAL PURPOSE(S): To provide for documentation of the results of laboratory examinations of a deceased animal for rabies.				
ROUTINE USE(S): The results of the examinations are used to determine the proper medical management of patients potentially exposed to rabies because of a bite/scratch inflicted by the animal described and belonging to the owner named. The information may also be used to: aid in preventive health and communicable disease control programs; report medical conditions required by law to Federal, state, and local agencies; compile statistical data; conduct research; teach; assist in law enforcement, to include investigations and litigation; and evaluate the care provided.				
DISCLOSURE: Voluntary; but if information is not provided, all pertinent and relevant information regarding the medical history of the animal cannot be evaluated. Comprehensive medical care to the individual potentially exposed to rabies may not be possible, but care will not be denied.				
1. TO	2.a. FROM	b. TELEPHONE NUMBERS (Incl. Area Code)		
		(1) DUTY DSN	(2) AFTER HOURS DSN	
		COMMERCIAL	COMMERCIAL	
SECTION I - REQUEST FOR TEST				
PART A - IDENTIFICATION				
3. OWNER OF ANIMAL (Last Name, First, Middle Initial)		4. ANIMAL		
		a. SPECIES	b. PET OR STRAY	c. AGE
PART B - SYMPTOMATOLOGY (Past 3 to 5 days) (X all blocks that apply)				
5. COULD ANIMAL CLOSE MOUTH? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES		6. SALIVATING? <input type="checkbox"/> THIN/WATERY <input type="checkbox"/> THICK/ROPY <input type="checkbox"/> NO <input type="checkbox"/> YES		7. ABLE TO DRINK WATER? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES
8. LOSS OF APPETITE? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES		9. EATING UNUSUAL THINGS? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES		10. DIFFICULTY IN SWALLOWING? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES
11. NERVOUS OR UNUSUAL BEHAVIOR? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES		12. PARALYSIS OF ANY KIND? <input type="checkbox"/> UNKNOWN <input type="checkbox"/> NO <input type="checkbox"/> YES		13. DATE FIRST NOTICED SICK
14. DATE OF DEATH		15. MANNER OF DEATH <input type="checkbox"/> DIED <input type="checkbox"/> EUTHANIZE		
PART C - HISTORY				
16. HAD ANIMAL BEEN VACCINATED AGAINST RABIES? a. (X one) <input type="checkbox"/> NO <input type="checkbox"/> YES		b. DATE		c. TYPE OF VACCINE
PART D - HUMAN EXPOSURES				
17. NAME (Last, First, Middle Initial) a.		ADDRESS (Street, City, State, Zip Code) b.		TELEPHONE NUMBER (Include Area Code) c.
				BITTEN? (Yes/No) d.
				SALIVA? (Yes/No) e.
18. CLINICAL DIAGNOSIS, NECROPSY FINDINGS, AND REMARKS				
19. VETERINARIAN a. TYPED NAME (Last, First, Middle Initial)		b. GRADE	c. TITLE	d. SIGNATURE
				e. DATE
SECTION II - LABORATORY REPORT OF RABIES EXAMINATION				
20. DATE SPECIMEN RECEIVED		21. CONDITION		22. LAB ACCESSION NUMBER
23. FLUORESCENT ANTIBODY RESULTS		24. RESULTS TELEPHONED a. TO	b. DATE	c. HOUR
				d. BY
25. CELL CULTURE RESULTS			26. FINAL LABORATORY DIAGNOSIS	
27. SUBMITTED BY a. TYPED NAME (Last, First, Middle Initial)		b. GRADE	c. TITLE	d. SIGNATURE
				e. DATE

DD Form 2620, JUN 92

APPENDIX I Serology Submission Recommendations From Vet**Lab Europe****A. Previous Problems**

1. Use of serum separator tubes: Regardless of the test, blood needs to be centrifuged and the serum decanted into a new container (red-top tube or cryovial).

2. Use of the incorrect form: Attached are the forms for military working dog (MWD) serology submissions and the Hawaii FAVN (rabies antibody) tests, and can also be found in the VLE Sample Submission Guide.

3. Improperly refrigerated blood or serum: Keep all MWD samples frozen and all Hawaii FAVN samples chilled. Do not put samples into distribution or through the military postal system (MPS) for delivery to Veterinary Laboratory Europe (VLE), as this could delay delivery to VLE and invalidate the samples. Use insulated styrofoam containers with ample freezer packs. Contact VLE if you need such shipping items, and we will send them to you if available. Tape all lids, pad all tubes, and include all identifying information on the shipping label and individual sample containers.

B. Military Working Dogs

1. Dogs are no longer tested annually for *Babesia* sp. and *Ehrlichia* sp. exposure. However, serum and whole blood must be collected annually from every MWD and submitted to VETCOM Laboratory at Fort Sam Houston, Texas (FSH) for banking. See attached policy memorandum dated 20 JUL 01.

2. MWD serum and blood can be express mailed directly to the VETCOM Lab at FSH. If you have difficulty in sending samples to FSH, samples can be sent by medical courier to VLE. We will batch any samples received and send them to FSH quarterly. See the specific requirements and forms attached.

C. Hawaii Rabies Serology (FAVN Testing):

1. The latest information, microchip request forms, etc., are available for download from the Hawaiian Animal Quarantine Station at: http://www.hawaiiag.org/hdoa/ai_aqs_info.htm. An excerpt from the VETCOM Lab's submission guide and their test request form are attached. Please become familiar with this program, including submission procedures and requirements. Many clients have had to inform the local animal care facility about the availability of the program; ideally, information should flow from the clinic staff to the client. Performed correctly, rabies FAVN testing can save the client a considerable amount of money, and the animal and family the anguish of separation in prolonged quarantine.

2. While the VETCOM Lab at FSH is flexible, the state of Hawaii is somewhat strict. The FSH laboratory **can perform** the FAVN rabies test without a copy of the owner's PCS orders if not available at the time testing needs to be performed; simply enclose a copy of the owner's military identification card with the sample. Send the sample to FSH if the owner suspects PCS to Hawaii, even if PCS orders are not yet available.

D. Australia Rabies Serology

FAVN testing is also applicable for animals moving to Australia. Use the Fort Sam Hawaii form, but print Australia at the top of the form. For additional information on importing animals see: <http://www.affa.gov.au/content/publications.cfm>, click on the + sign in front of Import, then click on + sign in front of Importing Animals into Australia, then click on the AQIS Standard for dog and cat post arrival document. Another web site is <http://www.affa.gov.au/content/output.cfm>

APPENDEX J MEMORANDUM On Tickborne Illness Testing

**DEPARTMENT OF DEFENSE
VETERINARY SERVICE ACTIVITY
5109 LEESBURG PIKE
FALLS CHURCH VA 22041.3258**

REPLY TO
ATTENTION OF

DODVSA July 20, 2001

MEMORANDUM FOR: SEE DISTRIBUTION

SUBJECT: Military Working Dog (MWD) Tickborne Illness Testing and Hematology Sample Banking

1. From March through May 2000, the DOD Military Working Dog Veterinary Service (DODMWDVS) and the U.S. Army Veterinary Command (VETCOM) Food Analysis and Diagnostic Laboratory (FADL) conducted a tickborne illness survey on serum collected from MWDs worldwide. Samples from 961 MWDs showed a point prevalence rate of approximately 3% for *Ehrlichia canis* and <1% for *Babesia canis*. These rates represent a new low for tick borne disease among MWDs. This is likely due, at least in part, to improved tick control.
2. Effective immediately, the VETCOM FADL will begin banking, rather than testing, annual surveillance samples from MWDs. For each assigned MWD, the VCO will collect 1 ml of whole blood (for Polymerase chain reaction testing) and 1 ml of serum. Samples will be submitted to the VETCOM FADL using the MWD Banked Sample Form, VET LAB Sample Form D-127 (Encl1). Annual samples may be obtained at the same time that blood is drawn for annual CBC/blood chemistry analysis (during the "Red" Semiannual Physical Examination) or multiple submissions may be made at one time for all MWDs at a particular location. Annual samples will be Stored at the VETCOM FADL for future testing, as necessary .
3. Routine pre- and post-deployment serum samples will no longer be collected or submitted to the VETCOM FADL. However, it is likely that, in the event of a large scale OCONUS deployment of MWDs, pre and post samples will be required in addition to annual samples.
4. As always, the VETCOM FADL will test samples submitted from clinically ill MWDs with suspected tickborne diseases. Samples (both serum and whole blood) will be submitted using the Request for MWD Serological Testing for Clinical Samples Form, VET LAB Sample Form D-126 (Encl 2). An MWD's most recent annual sample will be retrieved and used by the lab as a baseline for comparison to the "paired" sample submitted for a clinical case. The VETCOM FADL will also continue to test samples from newly procured MWDs.
5. Submission forms are available from the Lotus Notes Document Library. POC for questions regarding this correspondence is Director, DODMWD Veterinary Services, 210-671-3991, DSN 473.

Encls. 2

JOHN S. FOURNIER
Colonel, VC Director,
DOD Veterinary Service Activity/
Chief, U.S. Army Veterinary Corps

APPENDIX K Military Working Dog Banked Sample Form, D-127

MILITARY WORKING DOG BANKED SAMPLE FORM				
These samples will not be tested therefore, a test result will not follow. They will be stored for future testing if needed.				
1. TO: VETCOM Food Analysis & Diagnostic Laboratory ATTN: MCVS-LAB 2472 Schofield Rd, Bldg. 2632 Fort Sam Houston, TX 78234-6232			FOR LAB USE ONLY DATE & TIME RECEIVED	
2. FROM: (complete street address) Station Number: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>			3. POC: 	
			4. PHONE: 	
			5. FAX: (Commercial Number)	
No.	LAB ACCESSION NUMBER	6. DOG'S NAME	7. TATTOO #	8. DATE SAMPLE DRAWN
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
FOR LAB USE ONLY			COMMENTS: 	
SHIPPER TRACKING NUMBER				

APPENDIX L Request for Military Working Dog Serological Testing for Clinical Samples

REQUEST FOR MILITARY WORKING DOG SEROLOGICAL TESTING FOR CLINICAL SAMPLES		
1. TO: Commander Veterinary Laboratory Europe, Diagnostics Gebäude 3810, Rm 122B 66849 Landstuhl, Kirchberg Germany	FOR LAB USE ONLY DATE & TIME RECEIVED	
2. FROM: (complete street address) Station Number: <input style="width: 20px; height: 20px;" type="text"/>	3. POC: 4. PHONE: 5. FAX: (Commercial Number)	
6. DOG'S NAME:	7. TATTOO #	8. DATE SAMPLE DRAWN
9. PERTINENT HISTORY (including abnormal CBC results): <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div> <div style="border: 1px solid black; height: 20px; margin-bottom: 5px;"></div>		
EVERYTHING BELOW THIS LINE FOR LAB USE ONLY		
ACCESSION NUMBER	SHIPPER TRACKING NUMBER	
SAMPLE CONDITION:		
TESTS RUN	RESULTS	DATE COMPLETED
Comments:		
Signature, Name, Title of Laboratory Officer		Date

APPENDIX M1 Request for FAVN-OIE Testing

REQUEST FOR FAVN-OIE TESTING

(For All Department of Defense Personnel, Retiree, Civil Service and Active Duty Members)

- HAWAII GUAM
- AUSTRALIA BRITAIN
- NEW ZEALAND OTHER _____

Date and Time

LAB #

MAIL TO :

FOOD ANALYSIS & DIAGNOSTIC LABORATORY 2472
 SCHOFIELD RD, BLDG 2632
 FORT SAM HOUSTON, TX 78234-6232

Phone : (210) 295-4604; DSN: 421-4604; Fax: (210) 270-2559
 Website: <http://domino1.hcssa.amedd.army.mil/vetweb/default.htm>

Name of Member/Owner: _____ Rank: _____
 (First Name, Middle Initial, Last Name)

Street Address: _____ Phone: _____

City: _____ State: _____ Zip: _____

Name of Animal: _____ Home Again AVID Microchip # _____

Dog Cat Breed: _____ Age: _____ Sex: _____

Color and unique markings: _____ Approx. Depart Date: _____

Name of Veterinarian: _____ Phone: _____ Fax: _____

Submitting Clinic: _____

Street Address: _____

City: _____ State: _____ Zip: _____

Signature of Veterinarian: _____ Date: _____

Results of Test :

(TYPED OR NEATLY PRINTED)

THIS FORM MUST BE COMPLETELY FILLED OUT.
 USE ONE FORM PER ANIMAL AND MUST BE SIGNED
 BY A VETERINARIAN AT ALL TIMES.

APPENDIX M2 Request for FAVN-OIE Testing, Sample Form

REQUEST FOR FAVN-OIE TESTING

(For All Department of Defense Personnel, Retiree, Civil Service and Active Duty Members)

- HAWAII
- AUSTRALIA
- NEW ZEALAND
- GUAM
- BRITAIN
- OTHER _____

Date and Time

LAB #

MAIL TO :

FOOD ANALYSIS & DIAGNOSTIC LABORATORY 2472
 SCHOFIELD RD, BLDG 2632
 FORT SAM HOUSTON, TX 78234-6232

Phone : (210) 295-4604; DSN: 421-4604; Fax: (210) 270-2559
 Website: <http://domino1.hcssa.amedd.army.mil/vetweb/default.htm>

Name of Member/Owner: ROBERT S. BROWN Rank: LTC
 (First Name, Middle Initial, Last Name)

Street Address: 8010 RAINBOW CANYON ROAD Phone: (770)749-1234

City: WINCHESTER State: VA Zip: 22604-1200

Name of Animal: BANDIT Again D-Microchip #032-316-641

Dog Cat Breed: DALMATION Age: 4 years Sex: MALE

Color and unique markings: BLACK SPOTTED Approx. Depart Date: FEB 2001

Name of Veterinarian: DR. ANDREW S. BRADLEY Phone: (770)340-3423 Fax: (770)340-3424

Submitting Clinic: APPLE VALLEY ANIMAL HOSPITAL

Street Address: 1204-B CEDAR CREEK LANE

City: WINCHESTER State: VA Zip: 22604-1200

Signature of Veterinarian: SIGNED Date: 25 NOV 2000

Results of Test :

(TYPED OR NEATLY PRINTED)

THIS FORM MUST BE COMPLETELY FILLED OUT.
 USE ONE FORM PER ANIMAL AND MUST BE SIGNED
 BY A VETERINARIAN AT ALL TIMES.

APPENDIX N Laboratory Requirements for OIE-FAVN Test for Importation of Dogs and Cats



DEPARTMENT OF THE ARMY
 UNITED STATES ARMY VETERINARY COMMAND
 FOOD ANALYSIS AND DIAGNOSTIC LABORATORY
 2472 SCHOFIELD ROAD, BLDG 2632
 FORT SAM HOUSTON, TEXAS 78234-6232

LABORATORY REQUIREMENTS FOR OIE-FAVN TEST FOR IMPORTATION OF DOGS AND CATS

In order to expeditiously process and test serum from dogs or cats bound to Quarantine Facilities for them to **qualify for the 30-day quarantine**, our Diagnostic Laboratory requires the following protocol submission of samples:

1. The submitting veterinarian should submit a **minimum of one-milliliter (1.0 ml) of serum without preservatives; spun and separated from the clot**, preferably in a labeled unbreakable cryovial or tube. ***Tubes containing red blood cells or clotted blood are not acceptable for testing.***
2. Also, the submitting veterinarian must complete the enclosed **OIE-FAVN form request**. A photocopy of the member's military orders or alert notification for movement to Hawaii must also be submitted with the specimens and request form. Only samples from animals belonging to Department of Defense personnel with orders or alert notification to Hawaii will be provided this service, presently at **no charge**.
3. The owner's responsibility is to send **refrigerated, not frozen**, specimens, request form(s), and orders to the laboratory via a next day delivery service. It is the owner's responsibility to pay for shipment of the specimens if that submitting veterinarian does not provide that service. The Food Analysis and Diagnostic Laboratory will not accept COD charges. Samples should be individually wrapped to prevent breakage and ***should not*** be sent to the laboratory to arrive on a **Weekend or Federal Holiday**. The submitting clinic or designated staff should assist Pet Owners in preparing the specimens for shipment. Each sample must be properly labeled, the form filled out, and signed by a veterinarian.
4. Enclosed is the official request form to be used. **One form for each animal** to be tested should be filled out completely (typed or neatly printed), signed by the attending veterinarian, and sent along with the specimens from that animal. If microchips are from the State of Hawaii, please use the their bar code labels provided with the microchip. A microchip bar code label may also be affixed to the request form where the microchip number is requested (see enclosed sample form). Also, a short version of the Guidelines from the State of Hawaii is included for your assistance.
5. Please send the specimens and request form via a next day delivery service, **NOT BY REGULAR AIRMAIL**. Send the above information and specimens to:

FOOD ANALYSIS AND DIAGNOSTIC LABORATORY
ATTN: MCVS-LAB
2472 SCHOFIELD ROAD, BLDG 2632
FORT SAM HOUSTON, TX 78234-6232

APPENDIX N (cont.)

6. For those personnel from Overseas every effort should be made utilizing the **fastest Airmail service** available.

Send all requests with specimens to the above address and use plenty of frozen gel packs to keep the specimen in a chilled condition. **Pet owners are not required to hand-carry OIE-FAVN lab results.** The Quarantine facility will have results ready upon arrival, not earlier.

We mail the original request to the Quarantine Facilities and a copy to the Vet Clinic/Hospital as soon as testing is completed. **We do not give results over the phone.** For further information call commercial:(210)295-4604;DSN:421-4604;or visit our website <http://domino1.hcssa.amedd.army.mil/vetweb/default.htm>

Note: *To allow ample time for an immune response to vaccination to develop, serum for testing,*

should be collected 2 to 3 weeks after vaccination, not at the time of vaccination.

SPECIFIC PRE-ARRIVAL REQUIREMENTS TO QUALIFY FOR 30-DAY QUARANTINE

In addition to the general requirements, the following requirements are used to determine qualification for 30-day quarantine period:

30- DAY PRE-ARRIVAL REQUIREMENTS

1. **A minimum of two (2) rabies vaccinations not less than 6 months apart with an approved monovalent inactive rabies vaccine.**
 - a. The first vaccination shall not be given to animals less than 3 months of age;
 - b. The second or subsequent vaccination shall be given no less than 90 days and no more than 12 months before arrival in Hawaii;
 - c. The name, serial or lot number, expiration date and route of administration must appear on the **health certificate**; and
 - d. Information for the two most recent rabies vaccinations shall be recorded on the health certificate.

2. **OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test)**

A rabies blood test (requiring **1 to 3 ml. of serum**) to determine if dogs and cats have responded adequately to rabies vaccination is required prior to arrival to qualify for 30-day quarantine.

- a. The OIE-FAVN test must be conducted not less than 90 days and not more than 12 months **prior to arrival in Hawaii**. A result of 0.5 IU or greater is required. **The day of the sample arrival to the testing laboratory is the beginning date for the 90-day countdown.**
- b. To be considered valid, the test results must include the number of the implanted microchip and a complete description of the animal (age, sex, breed, color or color pattern, any visible unique identifying characteristics, etc).

30- DAY POST-ARRIVAL REQUIREMENTS

OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test)

To qualify for 30-day quarantine, a post-arrival rabies blood test (OIE-FAVN) is required. A result of 0.5 IU per milliliter of rabies antibodies or greater is required.

Blood is not collected until payment of the 30-day quarantine qualification fee is made. Owners are required to submit a **signed consent form** allowing the State to sedate their pets, if necessary, to collect a blood sample. Blood collection from some dogs and cats can be very difficult without sedation. If no such signed consent is received, blood may not be obtained from your pet. Private veterinarians will be allowed to collect blood for OIE-FAVN testing only at the quarantine station by appointment. Payment for services provided by private veterinarians is the responsibility of the owners.

APPENDIX N (cont.)

LABORATORIES WHERE THE OIE-FAVN TEST IS AVAILABLE ONLY:

For Military Members: Food Analysis & Diagnostic Laboratory, ATTN: MCVS-LAB, 2472 Schofield Road, Bldg 2632, Fort Sam Houston, TX 78234. Pet owners are not required to
APPENDIX M (cont.)

hand-carry OIE-FAVN lab results. The Quarantine facility will have results ready upon arrival, not earlier. We mail the original request to the Quarantine Facilities and copy to the Vet Clinic/Hospital as soon as testing is completed. We do not give results over the phone. If you have additional questions please send a message :

EMAIL : Gonzalo_Rodriguez@LN.amedd.army.mil

WEBSITE : <http://domino1.hcssa.amedd.army.mil/vetweb/default.htm>

Also, you could call (210) 295-4604 or contact the nearest Military Veterinary Facility.

For Civilian Personnel: Kansas State University, Veterinary Clinical Sciences Building, 1800 Denison Avenue, Manhattan, KS 66506-5600. If you have additional questions, please call (785) 532-4455 or visit their home page <http://www.vet.ksu.edu/depts/rabies/hawaii.htm>

Note : When Microchip is requested from Hawaii the Animal Quarantine Station will mail an Information Brochure that contains important information about the procedures, policies, rules, operation and fees. It is strongly advised to read that brochure.

APPENDIX O Guidelines From the State of Hawaii

Hawaii is a rabies free state. Hawaii's quarantine law is designed to protect residents and pets from potentially serious health problems associated with the presence and spread of rabies. Success of the quarantine program is dependent on maintaining isolation of your pet from other animals for the required quarantine period. Experienced and knowledgeable people at the Animal Quarantine Station are available by letter or telephone to assist with any additional information.

IT'S THE LAW

Importation of dogs, cats and other carnivores into Hawaii is governed by Chapter 4-29 of the State of Hawaii, Department of Agriculture Administrative Rules. This law says that these animals are required to complete a 120-day confinement in the State Animal Quarantine Station. If specific pre-arrival and post-arrival requirements are met, animals may qualify for a 30-day quarantine. The animal quarantine program began in 1912 with a quarantine period of 120 days. A 30-day quarantine alternate program was approved in 1997.

I. General Pre-Arrival Requirements

The following requirements shall be met for all dogs and cats entering quarantine:

1. **HEALTH CERTIFICATE** – A health certificate issued by an accredited veterinarian within 14 days prior to arrival is required. (Check with the specific airline regarding their health certificate time requirements).
2. **ELECTRONIC MICROCHIP** - All dogs and cats entering Hawaii are required to have an implanted electronic microchip obtained from the State of Hawaii, the AVID and the Home again chips. For 30-day quarantine qualifiers, it is the owner's responsibility to have the microchip implanted by a veterinarian and ensure the microchip number is recorded on the serum sample submitted for the rabies testing. Microchip order forms may be ordered from :
 State of Hawaii Department of Agriculture
 Division of Animal Industry
 Animal Quarantine Branch
 99-951 Halawa Valley Street
 Aiea, HI 96701-3246
 Phone : (808) 483-7151 - Fax : (808) 483-7161
3. **VACCINATIONS** – All dogs and cats entering Hawaii are required to be vaccinated for common infectious agents.

Rabies Vaccination – All dogs and cats 90 days of age or older at the time of entry must be vaccinated against rabies with an approved inactivated rabies vaccine (listed in the most recent Compendium of Animal Rabies Control prepared by the National Association of State Public Health Veterinarians) within 12 months prior to arrival.

The vaccination status for rabies is important in assigning a length of a quarantine period:

- a. For 120-day quarantine: rabies vaccination within the previous 12 months with an approved monovalent inactivated rabies vaccine.
- b. For 30-day quarantine: see following section on Specific Requirements to Qualify for 30-day Quarantine.

Dog Vaccinations – Dogs 90 days of age or older at the time of arrival shall be vaccinated not less than 10 days and not more than 180 days prior to arrival against: Canine distemper virus; Canine infectious hepatitis virus or canine adenovirus-2; Canine parvovirus Canine parainfluenza virus; Canine coronavirus; and Bordetella bronchiseptica (kennel cough).

Heartworm Testing – Dogs six months of age or older at the time of arrival shall be tested for heartworms not more than 14 days prior to shipment to determine if monthly heartworm preventive medication can be safely administered. While in Hawaii, all dogs should remain on heartworm prevention.

APPENDIX O (cont.)

Cat Vaccinations – Cats 90 days of age or older at the time of arrival shall be vaccinated not less than ten days and not more than 180 days prior to arrival for: Feline panleukopenia virus (feline viral enteritis); Feline viral rhinotracheitis (feline herpesvirus-1); Feline calicivirus; and Chlamydia psittaci (pneumonitis).

SPECIFIC PRE-ARRIVAL REQUIREMENTS TO QUALIFY FOR 30-DAY QUARANTINE

In addition to the general requirements, the following requirements are used to determine qualification for 30-day quarantine period:

30- DAY PRE-ARRIVAL REQUIREMENTS**1. A minimum of two (2) rabies vaccinations not less than 6 months apart with an approved monovalent inactive rabies vaccine.**

- e. The first vaccination shall not be given to animals less than 3 months of age;
- f. The second or subsequent vaccination shall be given no less than 90 days and no more than 12 months before arrival in Hawaii;
- g. The name, serial or lot number, expiration date and route of administration must appear on the **health certificate**; and
- h. Information for the two most recent rabies vaccinations shall be recorded on the health certificate.

2. OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test)

A rabies blood test (requiring **1 to 3 ml. of serum**) to determine if dogs and cats have responded adequately to rabies vaccination is required prior to arrival to qualify for 30-day quarantine.

- c. The OIE-FAVN test must be conducted not less than 90 days and not more than 12 months **prior to arrival in Hawaii**. A result of 0.5 IU or greater is required. **The day of the sample arrival to the testing laboratory is the beginning date for the 90-day countdown.**
- d. To be considered valid, the test results must include the number of the implanted microchip and a complete description of the animal (age, sex, breed, color or color pattern, any visible unique identifying characteristics, etc).

30- DAY POST-ARRIVAL REQUIREMENTS**OIE-Fluorescent Antibody Virus Neutralization Test (OIE-FAVN test)**

To qualify for 30-day quarantine, a post-arrival rabies blood test (OIE-FAVN) is required. A result of 0.5 IU per milliliter of rabies antibodies or greater is required.

Blood is not collected until payment of the 30-day quarantine qualification fee is made. Owners are required to submit a **signed consent form** allowing the State to sedate their pets, if necessary, to collect a blood sample. Blood collection from some dogs and cats can be very difficult without sedation. If no such signed consent is received, blood may not be obtained from your pet. Private veterinarians will be allowed to collect blood for OIE-FAVN testing only at the quarantine station by appointment. Payment for services provided by private veterinarians is the responsibility of the owners.

LABORATORIES WHERE THE OIE-FAVN TEST IS AVAILABLE ONLY:

For Military Members: Food Analysis & Diagnostic Laboratory, ATTN: MCVS-LAB, 2472 Schofield Road, Bldg 2632, Fort Sam Houston, TX 78234. Pet owners are not required to hand-carry OIE-FAVN lab results. The Quarantine facility will have results ready upon arrival, not earlier. We mail the original request to the Quarantine Facilities and copy to the Vet Clinic/Hospital as soon as testing is completed. We do not give results over the phone. If you have additional questions please send a message :

EMAIL : Gonzalo_Rodriguez@LN.amedd.army.mil

WEBSITE : <http://domino1.hcssa.amedd.army.mil/vetweb/default.htm>

APPENDIX O (cont.)

Also, you could call (210) 295-4604 or contact the nearest Military Veterinary Facility.

For Civilian Personnel: Kansas State University, Veterinary Clinical Sciences Building, 1800 Denison Avenue, Manhattan, KS 66506-5600. If you have additional questions, please call (785) 532-4455 or visit their home page <http://www.vet.ksu.edu/depts/rabies/hawaii.htm>

Note : When Microchip is requested from Hawaii the Animal Quarantine Station will mail an Information Brochure that contains important information about the procedures, policies, rules, operation and fees. It is strongly advised to read that brochure.

APPENDIX P Test and Result Form for Human Rabies

Antibody Titer

STANDARD FORM 557, Miscellaneous Lab Request (FSH SEROLOGY)

CPT THE R. HARLAND 18th Med Det (V3) OHR 410 APO AE 09192		SPECIMEN LAB IPT NO MISC URGENCY: <input type="checkbox"/> URGENTLY <input type="checkbox"/> STAT <input checked="" type="checkbox"/> ROUTINE <input type="checkbox"/> STAT TODAY <input type="checkbox"/> STAT <input type="checkbox"/> STAT PATIENT STATUS: <input type="checkbox"/> AD <input type="checkbox"/> AMB <input type="checkbox"/> ADR <input type="checkbox"/> AOR <input type="checkbox"/> INP <input type="checkbox"/> NCP <input type="checkbox"/> NCA SPECIMEN SOURCE: <input type="checkbox"/> PATIENT <input type="checkbox"/> SURGICAL	
PATIENT IDENTIFICATION—TREATING FACILITY—WARD NO—DATE REQUESTING PHYSICIAN'S SIGNATURE: <i>Tom R. Harland</i> THE R. HARLAND, CPT VC		RECEIVED: _____ LAB ID NO: _____	
REWARDS Pre-exposure serum sample			
REASON FOR REQUEST DATE: 21 Sep 94 TIME: 10:00 AM REQUESTED BY:	TEST Rabies antibody TITER	MISCELLANEOUS If needed, please fill in the appropriate boxes. (Do not check more than 20 boxes)	

SPECIMEN LAB IPT NO	
MISC URGENCY: <input type="checkbox"/> URGENTLY <input type="checkbox"/> STAT <input type="checkbox"/> ROUTINE <input type="checkbox"/> STAT TODAY <input type="checkbox"/> STAT <input type="checkbox"/> STAT PATIENT STATUS: <input type="checkbox"/> AD <input type="checkbox"/> AMB <input type="checkbox"/> ADR <input type="checkbox"/> AOR <input type="checkbox"/> INP <input type="checkbox"/> NCP <input type="checkbox"/> NCA SPECIMEN SOURCE: <input type="checkbox"/> PATIENT <input type="checkbox"/> SURGICAL	
PATIENT IDENTIFICATION—TREATING FACILITY—WARD NO—DATE REQUESTING PHYSICIAN'S SIGNATURE: _____ RECEIVED BY: _____ DATE: _____ LAB ID NO: _____	
REWARDS	
REASON FOR REQUEST DATE: _____ TIME: _____ REQUESTED BY: _____	TEST Rabies antibody TITER
MISCELLANEOUS If needed, please fill in the appropriate boxes. (Do not check more than 20 boxes)	