

Food Analysis and Diagnostic Laboratory Sample Submission Guide TG 361



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CHAPTER 1: GENERAL INFORMATION

1.1 Purpose. This document provides guidance for collecting samples and animal specimens. When submitting samples to another DoD laboratory, consult that laboratory's submission guide or contact their personnel prior to shipping samples.

1.2 References.

- a. Departments of the Army, Navy, and Marine Corps. 2005. AR 40-657/NAVSUP 4355.4H/MCO P10110.31H, Veterinary/Medical Food Safety, Quality Assurance, and Laboratory Service.
- b. U.S. National Archives and Records Administration. Code of Federal Regulations. Title 49. Transportation.
- c. TC 310, Environmental Monitoring Using the Sponge-Stick Method.
- d. VHS TG 376, Installation Support Plan Program.

1.3 Laboratory Addresses and Capabilities.

Table 1.3.1 Laboratory Address and Capabilities: Food and Water.

LABORATORY INFORMATION	AREAS SERVICED & TESTS PROVIDED
For food and water samples: DoD Food Analysis and Diagnostic Laboratory Attn: <i>Food Receiving</i> 2899 Schofield Rd., Suite 2630 JBSA FT Sam Houston, TX 78234-7583 usarmy.jbsa.medcom-phc-w.mbx.phcw--fadl-food-protection@health.mil	– Worldwide – Full chemical, microbiological, and radiological (water) testing
DSN: 421-4210/4708 Com: 210-295-4210/4708 FAX: 210-295-4612 Sample receiving area: 210-295-4210/4708/4219	

Table 1.3.2 Laboratory Address and Capabilities: Diagnostics.

LABORATORY INFORMATION	AREAS SERVICED & TESTS PROVIDED
For diagnostic samples (FAVN, MWD, etc.): DoD Food Analysis and Diagnostic Laboratory Attn: <i>Diagnostic Receiving</i> 2899 Schofield Rd., Suite 2630 JBSA FT Sam Houston, TX 78234-7583 usarmy.jbsa.medcom-phc-w.list.phc-w-rabies-favnsa@health.mil	– Worldwide – See Table 8-1 for the list of routine diagnostic testing.
DSN: 421-4387/4010/4605 Com: 210-295-4387/4010/4605/4004 MWD: 210-221-3323 FAX: 210-295-4612 Sample receiving area: 210-295-4605 FAX: 210-635-1025	

NOTE: For U.S. Air Force Food Protection Team /Lab Information please e-mail foodprotection@us.af.mil

1.4 General Submission Guidance – Food and Diagnostic Samples.

- a. The samples submitted must be representative of the sample population tested. When submitting a food or water sample in conjunction with a customer complaint about a particular item lot, send only those samples from the lot indicated by the customer complaint that exhibit the same problem characteristics. If several lots of a particular item are affected, submit a representative number of samples from each of the lots. In addition, send “normal” samples from the same lot for comparison. If normal samples from affected lot are unavailable, submit samples from another lot as “normal” for comparison.
- b. Submit requests for laboratory testing of food and water on the Department of the Army (DA) Form 7539 (FEB 2005), “*Request for Veterinary Laboratory Testing & Food*

Sample Record.”

c. A complete product history and/or customer complaint history, as applicable, should be included in block 12 (Remarks) of the form for any samples submitted in support of customer complaints or investigations of possible foodborne illness. For food and water samples, include one copy of the form in each shipping container. Provide as much information to the laboratory as possible. Refer to Chapter 6 of this guide for the specific forms for submitting diagnostic blood/serum samples.

d. When shipping perishable items, include **one** additional sample (similar to item(s) shipped) labeled “PILOT” in each shipping container to be used for determining the receipt temperature. PILOT samples are not required for shipments of frozen or room-temperature products. Describe the PILOT sample in block 9 of the DA Form 7539. Do not list the PILOT as a separate sample on page 2.

e. Pack all samples carefully to prevent damage during transit. Place individual samples into separate zip lock style plastic bags to prevent spillage. Wrap serum and blood tubes with plastic bubble wrap, gauze pads, or other suitable protective material then place in a plastic bag. Do not place blood/serum tubes under or between frozen chemical ice packs for shipping; the tubes will break. Fill any empty space in the shipping container with padding (crumpled newspaper, bubble wrap, etc.) to minimize shifting of the contents during transit.

f. Ship perishable items in an insulated container with refrigerant. Maintain the correct temperature during transit by using sufficient refrigerant (Table 1.4).

Table 1.4. Recommended Refrigerant Ratios.

Outside Temperature	Hours in Transit	Pounds of Sample	Pounds of Dry Ice (frozen)	Pounds of Wet Ice (chill)
Below 10°Celsius (C) or 50°Fahrenheit (F)	48	1	1.3	2.0
	24	1	0.7	1.25
10°C–27°C or 50°F–80°F	48	1	1.0	3.0
	24	1	1.0	2.0
27°C–38°C or 80°F–100°F	48	1	2.5	4.0
	24	1	1.9	3.0
Above 38°C or 100°F	48	1	5.0	Do Not Ship
	24	1	2.5	4.0

g. Frozen gel-packs are the desired refrigerant when submitting chilled samples. If using wet ice (ice cubes, flakes, etc.), do not dump it into the shipping container. If wet ice is used, double bag in heavyweight, plastic bags to prevent sample contamination. **Do not** place samples in the same bag with the ice.

h. Label individual samples with a submitter sample number. Do not cover important information such as product codes, expiration dates, universal product codes (UPCs), etc. List all corresponding sample data on page 2 of the DA Form 7539.

h. Dry ice is required to keep frozen samples frozen during shipment. Take proper safety precautions when handling dry ice. Use appropriate gloves and do not inhale gas fumes produced by the dry ice, especially in an enclosed area. **Do not** use dry ice to ship chilled products. Place a dry ice label (provided by the carrier) on the outside of the shipping container.

i. When shipping heavy or bulky items such as large cans or gallon jars, pack the items carefully. Use extra packing material and, if necessary, ship the items in several boxes rather than in one heavy box. If the items are swollen, place them in plastic bags to contain any leakage.

NOTE: Ship perishable samples by express or overnight delivery. Do not ship chilled/frozen samples on Thursday for Friday delivery. **Notify the laboratory well in advance if samples must arrive on a Friday.** The laboratory does not receive samples on weekends.

j. For any sample submitted for other than routine testing, include a complete product history and/or customer complaint history in block 12 of the DA Form 7539. Use a continuation sheet for additional space and attach it to the form. Detailed information will enhance the laboratory's ability to accurately test submitted samples.

k. Notify laboratory personnel of all shipments via e-mail (see tables 1.3.1 and 1.3.2). Include carrier name and shipment tracking number, if known. Utilize the Lab Submissions & Sample Management database in Veterinary Services Information Management System (VSIMS) to complete and print the DA Form 7539. Overseas shipments may require a U.S. Department of Agriculture (USDA) import certificate(s) for specific products. Shipments without required certificates are delayed or returned by U.S. Customs and Border Protection (CBP). USDA import certificates are found at <https://www.army.mil/DODfadl#org-forms-and-documents> under "Forms and Documents". It is important to read the USDA permits as they contain specific restrictions regarding items that can and cannot be submitted.

l. All test request forms must include the name, e-mail, and phone number of a point of contact (POC) who is familiar with the sample submission. The laboratory will contact the POC for additional information prior to testing, if needed. If no specific testing is requested, the samples will be analyzed using the lab's current protocol for that specific food type. If the customer requires additional testing, they must coordinate with the FADL before shipping the samples.

NOTE: All samples will be destroyed upon completion of sample testing and issuance of final report to the submitter.

1.5 Origin Sampling Guidance.

Food Protection Audits. Auditors performing Food Protection Audits should notify laboratory personnel prior to scheduled audit. This provides advanced notice if special preparations are required for testing. A Chain of Custody (COC), DA form 4137 “Evidence/Property Custody Document” is required for all audit samples. (Refer to Chapter 4 of this guide). See additional guidance below.

a. **Initial Audits.** Sample only those items the producer is offering for sale to the U.S. Government.

b. **Special and Directed Routine Audits.**

1. Sampling should be limited to sample related to the purpose of the audit. e.g., failure of a previous audit, nonconforming lab results, etc.

2. Additional products requiring approval for Approved Source listing must be collected.

c. **Catering Operations.**

1. Place emphasis on items with direct handling during processing and preparation. For each product selected, submit one 8-oz. (or larger) sample. Do not submit raw products produced elsewhere.

2. If environmental testing is necessary, notify laboratory personnel prior to audit. For environmental testing procedures, refer to Reference 1.2c for additional guidance.

d. **Water.**

1. Table 1.5 is a guide for auditors submitting water samples in conjunction with food protection audits.

2. Submit bottled water in original unopened containers.

Table 1.5 Water Testing Guidelines for Food Protection Audits and FWRA's

WATER TYPE		REQUIRED TESTING FREQUENCY	
		RADIOLOGICAL	MICRO/CHEM
Source Water for Bottled Water Plants	CONUS	Every 4 years by producer using external USEPA-certified or equivalent lab ¹	Annual by producer using USEPA-certified or equivalent lab ²
	OCONUS	Annual by producer using external USEPA-certified or equivalent lab and during Initial Audits by the auditor ³	Annual by producer using USEPA-certified or equivalent lab
Finished Bottled Water	CONUS	Annual by producer using external USEPA-certified or equivalent lab	Initial, Special or Directed Audits by the auditor
	OCONUS	Annual by producer using external USEPA-certified or equivalent lab	Initial, Special or Directed Audits by the auditor
In-plant/Tap Water ⁴	CONUS	Annual by producer using external USEPA-certified or equivalent lab ^{2, 3}	Annual by producer using external USEPA-certified or equivalent lab ^{2, 3}
	OCONUS	Annual by producer using external USEPA-certified or equivalent lab ³	Annual by producer using USEPA-certified or equivalent lab ³
FWRA Source (tap) water, Non-carbonated Bottled Water, and Ice	CONUS/OCONUS	N/A	Collected by assessor for micro testing by DoD reference lab
Submission Amounts for Each Sample	Radiological	Chemical	Microbial
	2 liters	1 liter	1 liter
Special Notes: ¹ Source water testing is not required by the producer if results are available from the municipal water authority and meet National Primary Drinking Water Regulations (NPDWR). ² Must meet the NPDWR for community water systems. A copy of the annual water certificate from the water authority indicating compliance is sufficient documentation. ³ Water drawn from within the facility on an annual basis and tested by a USEPA-certified or equivalent lab. ⁴ This includes commercial establishments that utilize water as a primary component of their ingredients, or that produce as a final product "ice, water, bottled water, spring water, mineral water" or similar name, or where water is added to reconstitute a product completely or partially, or as an ingredient to be declared on the label by class name.			

e. **Food Water Risk Assessment (FWRA).** Assessors should notify laboratory personnel prior to assessment.

1. Sample Quantity.
2. Source (tap) water - 500 mL (Collect source water aseptically and submit it in sterile bottles).
3. Ice – 500mL (melted). Aseptically collect both the water used to produce the ice (if possible) and the final ice product. See Chapter 3 for aseptic sampling guidance. Submit the required amount in sterile bottles. When collecting ice, estimate the melted amount by anticipating that the ice will melt to half the volume of the original product.
 - (a) Bottled water. Submit the required amount in finished product containers.
 - (b) Documentation. In the remarks section of the DA form 7539 note microbiological testing is in conjunction with an FWRA. Include a printed copy of the DA Form 7539 in each shipping container.

1.6 The Comprehensive Active Surveillance Program (CASPr). This program builds on the legacy Destination Monitoring Program. The specific requirements of CASPr are provided as an attachment each quarter to all Public Health Command Regions. Assignments are communicated, tracked, and measured within the laboratory submission and sample management module located in the Veterinary Services Information Management System (VSIMS). See reference 1.2d.

CHAPTER 2 SUBMISSION GUIDANCE BY COMMODITY

2.1 Purpose. This chapter provides guidance for submitting specific sample types, by commodity. Sample amounts are based on routine testing protocols as listed in Appendix A. If additional tests are needed, contact the laboratory for specific sample requirements.

2.2 Shipping Instructions for CHILLED items.

- a. PILOT sample must be included in the shipping container. Label the PILOT sample “PILOT” and describe in block 9 of DA Form 7539.

NOTE: Do NOT use bottled water as a PILOT, water will not reflect an accurate temperature.

- b. Enclose each sample container in a sealed zip lock bag.
- c. Label each sample with a unique submitter sample number, this number must also be listed in block 13 of the DA form 7539. Do not cover important information (i.e. UPC, Lot#, use by date, etc.).
- d. See section 1.4, General Submission Guidance – Food and Diagnostic Samples, for additional sample submission instructions.

2.3 Shipping Instructions for FROZEN items.

- a. Enclose each sample container in a sealed zip lock bag.
- b. Label each sample with a unique submitter sample number. This number must also be listed in block 13 of the DA form 7539. Do not cover important information (i.e. UPC, Lot#, use by date, etc.).
- c. Ship frozen samples with dry ice only.
- d. A PILOT sample is not required for frozen shipments. The sample should be frozen upon arrival and will not be tested if it is thawed.
- e. See section 1-4, General Submission Guidance – Food and Diagnostic Samples, for additional sample submission instructions.

2.4 Dairy Products.

a. **Fresh Milk (whole, 2%, 1%, skim, flavored, ultra-pasteurized).**

1. Send two containers of at least 8 oz. (236.6 milliliters -mL) each from the same lot in their unopened original containers. If sampling from a container larger than ½ gallon, aseptically collect the sample(s) in sterile, screw-cap containers.
2. Temperature of the samples upon arrival must be between 0 °C and 4.4°C.

b. **Frozen Dairy (ice cream, frozen yogurt, sherbet, novelties).**

1. Send five containers from the same production lot. Send samples in their original unopened containers, no larger than ½ gallon.
2. When submitting ice cream novelties, include the external retail package. Ensure production lot number is the same for all containers.
3. Aseptically sample products in containers larger than ½ gallon.

c. **Cultured Dairy (buttermilk, yogurt, cottage cheese).**

1. Send two packages of at least 8 oz. (236.6 mL) each from the same lot in the unopened original containers. If sampling from a container larger than ½ gallon, aseptically collect the sample(s) in sterile, screw-cap containers.
2. Place containers of cultured dairy products upright in the shipping container. Use caution not to crush the samples by placing too much weight (ice or gel packs) on top of them.
3. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

d. **Cheese.**

1. Send at least 8 oz. (226.8 g) of the product.
2. Send samples of less than 1lb in their unopened original containers. Aseptically sample products in containers larger than 1lb.
3. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

2.5 Fresh Fruits and Vegetables (FF&V).

a. **Bagged Salad Processed FF&V.**

1. Send at least 8 oz. (226.8 g) of the product.

2. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

b. **Whole FF&V.**

Send at least 8 oz. (226.8 g) of the product.

2.6 Water.

- a. **Bottled Water.** Minimum quantities for finished products depend upon the type of testing required, as indicated below. Submit unopened original containers.

1. Microbiological: 1,000 mL (1 liter or 1L).
2. Chemical: Metals, Anions and Pesticides: 1,000 mL (1L).
3. Radiological: 2,000 mL (2L)

b. **Source Water (tap water, well water, etc.).**

1. Water samples from other sources (well, spring, etc.) submitted for trace metal or pesticide testing must be submitted in chemically cleaned bottles. Re-used bottles may contain high levels of soap, minerals, oils, etc., which can interfere with trace analysis. Upon request, the FADL can provide limited quantities of bottles; please provide several days' notice for such requests.

(a) Microbiological: 1,000 mL (1L).

(b) Chemical: Metals, Anions and Pesticides: 1,000 mL (1L).

(c) Radiological: 2,000 mL (2L)

2. See chapter 3 for aseptic sample collection information.

c. **Ice.**

1. Send at least two 1.5-pound bags of ice. Aseptically sample ice in bags larger than 3 pounds.
2. See chapter 3 for aseptic sample collection information.

NOTE: If sending ice from overseas, fill a sterile 1L bottle with ice and allow it to melt in transit. Contact the laboratory for more details.

2.7 Ready-to-Eat (RTE).

- a. **Sandwiches, Prepared Salads, Hummus, Tofu.**

1. Send at least 8 oz. (226.8 g) of the products in unopened original containers.
2. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

b. Kimchee.

1. Send two packages of at least 8 oz. (226.8 g) each from the same lot in unopened original containers.
2. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

c. Sushi.

1. Send three packages of at least 8 oz. (226.8 g) each from the same lot in unopened original containers.
2. Temperature of the samples upon arrival must be between 0 °C and 7.0 °C.

2.8 Miscellaneous.

a. Canned Items.

1. FADL does not routinely test canned products unless there is a concern based on a potential foodborne illness, a customer complaint, or an obvious exterior can defect needs to be evaluated in relation to food safety.
2. For submissions such as those resulting from customer complaints, send 6 cans or packages (3 normal and 3 abnormal). If the samples are smaller than 4 oz., ship 12 cans or packages (6 normal and 6 abnormal).
3. Sample specific instructions.

(a) A pilot sample is not required unless the product is normally stored chilled.

(b) Label the cans or packages as “normal” or “abnormal.”

b. Non-alcoholic Beverages and Juices.

1. Send at least 8 fl oz. of a sample received as the result of a customer complaint. Send any customer-returned portion in a sealed container.
2. Sample specific instructions:
 - (a) A PILOT sample is not required unless the product is normally stored chilled. PILOT sample must be included in the shipping container. Label

pilot sample "PILOT" and describe in block 9 of DA Form 7539.

- (b) If the sample is submitted as a chilled item, temperature of the samples upon arrival must be between 0°C and 7.0 °C.

c. Environmental Sampling.

1. See Reference 1.2c for environmental sample procedures.
2. Temperature of the samples upon arrival must be between 0°C and 7.0 °C.

CHAPTER 3: ASEPTIC SAMPLING

3.1. Purpose. This chapter provides guidance for aseptic sampling of bulk items. It is important to maintain sample integrity while obtaining an aseptic sub-sample of the commodity that requires laboratory analysis. Aseptic sampling is a technique used to prevent contamination by your sampling method. Aseptic sampling involves the use of sterile sampling implements and containers.

3.2 Procedures.

- a. Whenever possible, submit samples to the laboratory in the original unopened containers. If products are in bulk or in containers too large for submission to the laboratory, transfer representative portions to sterile containers under aseptic conditions.
- b. The following is a suggested list of items needed for aseptic sampling: alcohol pads, clean smock, gloves, sterile forceps, surgical knife, sterile whirl pack bags, sterile spoon, sanitizing wipes. Other items may be used if sterility is maintained. If it is necessary to handle the items being sampled directly, use sterile disposable type gloves (rubber, vinyl, plastic, etc. - surgeon's gloves work well).
- c. There can be no compromise in the use of sterile sampling equipment and the use of aseptic technique. Use containers that are clean, dry, leak-proof, wide-mouthed, sterile, and of a size suitable for samples of the product. Whenever possible, avoid glass containers, which may break and contaminate the food product. Take care not to overfill bags or permit puncture by wire closure. Identify each sample by writing the sample number on a label and placing that on the sample container. Whenever possible, obtain at least 100 g (8 oz.) for each sample unit.
- d. When opening sterile sampling containers, work rapidly. Open sterile sampling containers only to admit the sample and close it immediately. Do not touch the inside of the sterile container, lip, or lid.
- e. Do not collect samples in areas where atmospheric conditions may cause contamination of the sample, unless such contamination may be considered a part of the sample (swabs).
- f. See Appendix C of this document for additional detailed instructions.

CHAPTER 4: Animal Research Samples

4.1 Purpose. This chapter provides guidance for submitting animal research samples. Sample amounts are based on tests routinely requested by animal research facilities.

4.2 Procedures. If a specific test is needed or only some of the tests are necessary, please annotate in block 12 of the DA Form 7539. Contact the laboratory if you have any questions or concerns. Contact information is in Table 1.3.2.

a. Research Animal Water.

1. Water samples from sources such as a faucet, well or hose, submitted for trace metal or pesticide testing must be submitted in chemically cleaned bottles.
2. Re-used bottles may contain high levels of soap, minerals, oils, etc., which can interfere with trace analysis.
3. Bottle purchasing information is available from FADL upon request. Send individual bottles for Chemistry and Microbiology samples.

(a) Quantity for submission:

- (1) Microbiological: 500 milliliters (mL)
- (2) Chemical: Metals, Anions and Pesticides: 1,000 mL (1L)

(b) Sample specific instructions.

- (1) Enclose each sample container in a sealed zip lock bag.
- (2) Label each sample with a unique submitter sample number. This number must also be listed in block 13 of the DA form 7539.

b. Animal Feed.

1. Quantity for submission:

- (a) Microbiological: 1 lb.
- (b) Chemical: 1 lb.

2. Sample specific instructions.

- (a) Enclose each sample in a double-layered sealed zip lock bag. Submit microbiological and chemistry samples in separate sample bags.

(b) Label each sample with a unique submitter sample number. This number must also be listed in block 13 of the DA form 7539.

(c) Include a copy of manufacturer's nutrient label for each sample with the DA form 7539.

c. Animal Bedding.

1. Quantity for submission:

(a) Microbiological: 1 lb.

(b) Chemical: 1 lb.

2. Sample specific instructions:

(a) Enclose each sample in a double-layered sealed zip lock bag.

(b) Label each sample with a unique submitter sample number: this number should also be listed in block 13 of the DA form 7539.

(c) Include a copy of manufacturer's nutrient label for each sample with the shipment, if applicable.

d. Research Fish/Mollusks.

1. Quantity for submission:

(a) Microbiological: 1 lb.

(b) Chemical: 1 lb.

(c) Metals analysis: 1lb.

2. Sample specific instructions:

(a) Enclose each sample in a double-layered sealed zip lock bag.

(b) Label each sample with a unique submitter sample number. This number must also be listed in block 13 of the DA form 7539.

(c) If applicable, include a copy of manufacturer's nutrient label for each sample with the DA form 7539.

(d) Ship frozen samples with dry ice only.

CHAPTER 5: Foodborne Illness Suspect Samples

5.1 Purpose. A foodborne illness is an infection or intoxication caused by a bacterial, viral, parasitic, or chemical agent transmitted by a food. This definition primarily includes outbreaks (two or more cases from a common source), but data on single cases of enteric pathogens (*Salmonella* spp., *Campylobacter* spp., and *E. coli* O157:H7) are also included. This chapter provides guidance for submitting foodborne illness suspect samples. For suspected incidences of intentional contamination follow your local Standard Operating Procedure (SOP).

5.2 Procedures.

- a. Sample submission must be coordinated with the local command's Preventive Medicine unit. Contact laboratory personnel telephonically for guidance prior to shipping any suspected food poisoning/foodborne illness samples.
- b. Submit all requests for food poisoning/foodborne illness testing on a DA Form 7539, and include a completed DA Form 4137. See Appendix B of this document for form completion.
- c. Submit samples of implicated (consumed) food, if available. In addition, submit unopened food from the same lot. The clinical signs, symptoms, the incubation period, and other pertinent facts will determine the specific laboratory tests and order of testing.
- d. All samples submitted in conjunction with a foodborne illness may be included on a single DA form 7539; however, provide applicable producer or manufacturer information as a separate attachment and submit with the samples.

5.3 Information and Samples Required.

- a. Contact FADL personnel telephonically. If unavailable, email FADL food protection inbox. Provide as much information as possible for the following questions below:
 1. Total number of people who consumed the suspect meal(s) or food.
 2. Number of people who consumed the suspect meal(s) or food and became ill.
 3. Number of people who consumed the suspect meal(s) or food and did not become ill.

NOTE: Consider foods eaten up to 72 hours prior to the appearance of symptoms.

4. Predominant symptoms, such as nausea, vomiting, diarrhea, fever, chills, headache, and dizziness.

5. Incubation period, i.e., the time elapsed from ingestion to the appearance of symptoms.
 6. Duration of symptoms.
 7. Physician's diagnosis and any medical treatment given.
 8. Laboratory results of clinical specimen cultures, i.e., stool and/or vomit.
 9. Reports of any suspected food mishandling.
- b. Ship suspected sample(s) in separate sterile containers. Submit a minimum of 100g of each sample, or ship the entire specimen if less than 100 g.
- c. For operational rations such as Meals, Ready-to-Eat (MRE); Unitized Group Rations (UGR), etc., submit any leftover, suspected components and six unopened components of the same meal and sub-lot, if available.
- d. Pathogenic microbial action levels are located in Table 5.1, below.

Table 5.1. Pathogenic Microbial Action Levels for Ready-To-Eat Foods.

ORGANISM/TOXIN	ACTION LEVEL
<i>Bacillus cereus</i>	10,000 CFU/g or mL
<i>Bacillus cereus</i> Diarrheal or Emetic Toxin	Not Detected
<i>Campylobacter jejuni</i>	Not Detected
<i>Clostridium botulinum</i> (Spores or Vegetative Cells)	Not Detected
<i>Clostridium botulinum</i> Neurotoxin	Not Detected
<i>Clostridium perfringens</i>	<1,000 CFU/g or mL
Enterohemorrhagic <i>Escherichia coli</i> (EHEC) O157:H7	Not Detected
<i>Listeria monocytogenes</i>	Not Detected
<i>Salmonella</i> species	Not Detected
<i>Shigella</i> species	Not Detected
<i>Staphylococcus aureus</i>	10,000 CFU/g or mL
Staphylococcal Enterotoxin	Not Detected
<i>Vibrio cholera</i> (Serogroups O1 and Non-O1)	Not Detected
<i>Vibrio parahaemolyticus</i>	<30/g (MPN)
<i>Vibrio vulnificus</i>	Not Detected
<i>Yersinia enterocolitica</i>	Not Detected

CHAPTER 6: Sample Collection Chain of Custody

6.1 Purpose. This chapter establishes a procedure that provides accountability and documentation of sample integrity from the time of collection until delivery at the laboratory.

6.2 Procedures.

a The DA Form 4137, *Evidence/Property Custody Document*, is required to establish a chain of custody for food samples collected for the following reasons:

1. Suspected intentional contamination.
2. Criminal investigation.
3. Association with a food protection audit or FWRA.
4. Association with a foodborne illness investigation or foreign material determination.
5. Analysis in accordance with a contract that specifies that testing must be completed at the DoD FADL.

b A sample is considered in “custody” if one of three of the following apply. The sample is:

1. In one’s actual physical possession or within line of sight.
2. Kept in a secured area, restricted to authorized personnel only.
3. Inside a sealed, tamper-evident container.

c Follow procedures for sample handling during collection, storage, or transferring. An accurate written record used to trace the possession and handling of samples from the moment of collection through disposal is required. The procedures defined here represent a means to establish a reasonable probability that—

1. The chain of custody record is legally defensible if the necessity arises.
2. Collected sample is identified to ensure it is the same sample analyzed at the laboratory.
3. Sample is handled to ensure it is not altered, changed, or otherwise compromised from the time of its collection to its analysis at the laboratory.

6.3 Process for Sample Collection and Transfer to Laboratory.

a The sample collector is responsible for ensuring proper chain of custody requirements during

- b. Place all products, including intact cans or jars, in separate zip lock style plastic bags. The opening of each bag must be sealed with tamper-evidence tape. Put name, date and time of when samples were secured on the tape. Seal samples too large to fit in a tamper-evident bag (such as large jars/cans) with tamper-evident tape at the juncture of the lid and container. Place tamper-evident seal on containers e.g. bagged salads, sandwiches, milk cartons, etc. where the product container normally opens, so that any tampering with the container would be evident. Tamper-evident seals should tear or show evidence of tampering if removed from the container.
- c. Collect samples within sight of a representative from the facility i.e. dining facility manager, quality assurance manager of a commercial establishment, military police, etc.
- d. A completed DA Form 7539, must be included with the sample. **NOTE:** See Chapter 7 for form completion guidance. Appendix A has an example of a completed DA form 7539.
- e. When transferring “possession” of the sample container to the next party, the sample collector will sign and record the date of transfer in the Chain of Custody section of the DA Form 4137. Complete one form per sample shipping container. Send the original chain of custody form(s) to the laboratory with the sample container. The most current version of the DA Form 4137 can be located on the internet.
- f. Unless hand-carried or sent by registered mail, transportation containers must be shipped to the laboratory via common carrier, such as United Parcel Service™ (UPS™) or Federal Express™ (FedEx™). Common carriers should abide by U.S. Department of Transportation regulations governing the shipment of chain of custody samples. When the container or containers arrive at the laboratory, the chain of custody form (DA Form 4137) is relinquished to the laboratory. Upon receipt of a chain of custody sample, laboratory personnel will sign the “received by” portion of the DA Form 4137 and inspect samples for evidence of tampering during transit. Laboratory personnel annotate observed deficiencies or custody lapses on the DA Form 4137.

NOTE: The transportation carrier will not sign the DA form 4137. The tracking number will be used in lieu of a signature.

CHAPTER 7: Instructions for Completing DA Form 7539

7.1 Purpose. This chapter provides instructions for the proper completion of DA Form 7539.

7.2 Procedures. A separate DA Form 7539 must be completed for each different commercial source or U.S. Government facility that originally produced or subsequently processed the sample, e.g., each different manufacturer, packer, etc. **NOTE:** The primary means of completing a DA form 7539 is within VSIMS.

7.3 Block-by-block Instructions for Completing DA Form 7539. Completed example is located at Appendix A of this document.

- a. Block 1: Enter the complete name and address of the submitting unit.
- b. Block 2: Enter the name, rank, telephone number, and email address for a point of contact (POC). The POC will be the individual whom the laboratory can contact directly if additional information about the submitted samples is required.
- c. Block 3: Enter a control number following the guidance established by local policy. A control number will be assigned to each form, and a log of the forms will be maintained in order to ensure sample and form accountability.
- d. Block 4: Select the laboratory to which the samples are being submitted.
- e. Block 5: Provide a complete company name, address, and telephone number for the company that produced or further processed the sample. Use the guidance listed in paragraph 7.4.
 1. Use caution when providing addresses from product labels. In many cases, the address listed may be for a corporate office and not for the actual plant in which the product was processed. It is wise to check the product master container (shipping case) in order to compare the address on the case to the address on the package. If the addresses are different, ensure that the address for the processing plant, not the corporate office, is entered on the form.
 2. For items produced at establishments in the United States, provide the name, address (street, city, state, and zip code), and telephone number for the production plant of **origin**. Include any plant codes found on the product or packing case (Interstate Milk Shippers List (IMSL), U.S Department of Agriculture (USDA), etc.) in the next section of the block. If the supplier is listed in reference 1.2c, include the VC number assigned to that supplier. The VC number is beside the name of the establishment, which can be found at the top of each approved source document in Reference 1.2c. This number can also be found in block 1 of each Veterinary Audit Report.
 - (a) Example 1 - Potato salad is produced in bulk 5-lb containers by the ABC Salad Company and shipped to the Defense Commissary Agency (DeCA)

commissary. If the inspector opens the new 5-lb container and aseptically obtains a sample, the ABC Salad Company would be listed as the producer, and the processing plant's information would be entered.

- (b) Example 2 - If the potato salad sample is collected from a container that the DeCA delicatessen workers have already opened and used to repack for sale, the commissary would be listed as the producer/manufacturer because its personnel repacked the item.

3. For items produced at foreign establishments, provide the name of the country and processing plant address in which the sample was produced. If the name and address of the plant are not available, indicate so and then enter the name and address of the sample's importer, exporter, or distributor.

f. Block 6: Select the reason that the samples are being submitted for testing.

g. Block 7: Select the type of facility from which the sample was selected. When "other" is selected, a full explanation will be entered in block 12.

h. Block 8: Select the date and time that the sample was collected.

i. Block 9: Select the condition in which the sample was shipped. When a pilot sample is included (for chilled items only), enter a description of the pilot sample. Do not repeat the pilot information as a "sample" on page 2.

j. Block 10: This block is left blank.

k. Block 11: This block is left blank.

l. Block 12: Use this block to provide any relevant information that does not appear elsewhere on the form. Use block 12 to indicate any specialized or specific testing required on the samples. If additional space is required, use a separate sheet of paper. After the samples have actually been shipped, go into VSIMS and select "Yes" from the pull-down menu that appears immediately below the remarks section.

7.4 Completing page 2:

a. In VSIMS, select the "New Lab Sample" tab at the top of the page. Repeat for each additional sample.

b. Block 13: Enter relevant, complete information for each sample, which includes:

1. Submitter Sample Number. Beginning with number 1, enter the sample number in this area in accordance with the local SOP.

2. **Sample Description.** Enter the complete product description, to include its common name, type, and classification. Examples: “milk, chocolate, 2%,” “yogurt, low-fat, cherry,” “apple, red delicious,” or “ground beef, 85% lean.”
3. **Brand Name.** Enter the product’s specific brand name, as applicable. Example: Hormel™.
4. **UPC.** Enter the UPC found on the product label or produce shelf tag. This code is also known as the “bar code.” It is the label scanned or entered by the cashier at the register when the product is purchased.
5. **Product Code.** Enter any lot number, “use by” or expiration date, and other lot code information exactly as it appears on the product label/container.
6. **Sample Weight/Volume.** Enter the weight or volume of one item as it appears on the product label or package.
7. **Quantity Submitted.** Enter the number of individual items submitted as this one sample.
8. **Unit of Issue.** Enter the unit of issue or sale. The unit of issue is determined by how the item is charged upon being issued or sold, such as “pound,” “bag,” “jar,” “can,” or “box.” Example: Enter the sample weight of two 3.5-oz. sandwiches submitted as one sample as “3.5,” the quantity submitted as “2,” and the unit of issue as “each.”
9. **Total Cost:** This block is left blank.
10. **Disposition:** This block is left blank.

7.5 Remarks: It is important to use a separate DA Form 7539 for each origin plant or government production site. This ensures that result reports contain information that is unique to each specific source and that the laboratory can track all samples that may require medical hold actions, market withdrawals, or recalls. When submitting more than six samples from the same producer or manufacturer, use as many additional copies of page 2 as necessary.

CHAPTER 8: Diagnostic Specimen Submission Guidance

8.1 Purpose. This chapter provides guidance for submitting animal specimens for diagnostic testing, in accordance with the diagnostic test list for animal specimens (Table 8.1).

8.2 Specimens for Rabies Diagnosis (Animal).

a. Materials:

1. Use an insulated Styrofoam shipping container with a cardboard box exterior in excellent condition. Do not use boxes that are worn, torn, or water-stained.
2. Use plastic mailing tape; address labels; a UN3373 “Biological Substance, Category B” label; a DD Form 2620 “*Request for Laboratory Determination of Rabies*”; two heavy plastic bags (zip lock); gel packs; and packing material such as newspaper.

b. Collection:

1. The animal head or small carcass must be fresh and submitted immediately following euthanasia. If brain tissue is decomposed or rotten, the analysis may be inconclusive. **Please call to inform the FADL when a sample is being sent.**
2. Caged rodent pets (hamsters, gerbils, guinea pigs, mice) should not be submitted for rabies testing.
3. Packaging and Shipping Biological Substances, Category B.
 - (a) The guidance for packaging and shipping rabies specimens to the laboratory for diagnostic testing was developed to comply with regulations in Reference 1.2b. The correct shipping term is “Biological Substance, Category B.” The diamond-shaped “UN-3373” label must be affixed to the shipping box.
 - (b) Place the specimen in a primary heavy plastic bag, seal it; then place it in a second heavy plastic bag, and seal it.
 - (c) Pack the specimen in an insulated shipping container with sufficient packing material to fill the container, and with sufficient gel packs to maintain the specimen temperature between 2-8°C until it arrives at the laboratory. It is imperative that no liquid leaks from the shipping container during shipment. Dry ice is not to be used as a refrigerant, per warnings from the Commercial Airline Carriers Association.
 - (d) Ship by overnight or next day delivery via FedEx™, DHL™, or UPS™. Do not use the U.S. Postal Service (USPS) because it does not deliver

directly to the laboratory.

(e) Complete the submitter's section of DD Form 2620. Place the form in an envelope or plastic bag and affix it to the Styrofoam lid between the inner and outer containers.

(f) Animal heads submitted for the diagnosis of rabies infection are considered "Biological Substance, Category B" under Reference 1.2b for transportation purposes.

(g) Samples requiring temporary storage will be stored in a 2-8°C refrigerator. Do not freeze samples, as freezing can compromise the testing process. Contact the FADL for additional information.

8.3 Serum for Serological Testing.

- a. Submit serum samples with their appropriate test request form:
 1. FADL Form D-127, *MWD Banked Annual Serum Submission*
 2. FADL Form D-128MWD, *MWD Serology Test Request*
 3. FADL Form D-128IAD, *TSA Interagency Dogs Serology Request*
 4. FADL Form D-128LAFB, *DoDMWDVS Serology Test Request*
 5. FADL Form D-158, *Serological Request and Report Form (Human Serum)*
- b. Collect blood samples in a serum separation or red-top tube, and allow the blood to clot. Spin down the serum and transfer it to a polypropylene screw-cap vial or tube.
- c. Label each serum tube with the animal's identification data. Data on the tubes must correspond with the data on the laboratory test request form. Ensure the form includes the sender's complete return address, telephone number, and email address.
- d. For human sera samples, ensure patient information does not contain social security numbers. Use patient DoD ID numbers, laboratory accession number. Include sample draw date and initials of the staff who collected serum. **Contact the FADL prior to submission** for further instructions specific to the rapid fluorescent foci inhibition test (RFFIT).

8.4 Shipment.

- a. Collect serum from clotted blood in a non-additive tube (e.g. plain red top or serum separator). When possible, transfer clear serum off the clot into a new tube. Excessively hemolyzed samples are not acceptable for this test. A minimum of 2 mL serum is required.

Acceptable collection containers are glass or plastic tubes with no anticoagulant additives. Label all samples with Equine name and/or secondary name but must match form, microchip number (if applicable), and/or brand number (if applicable).

- b. Submit samples on the same day they were collected. Prolonged storage prior to submission may result in inconclusive analysis. If a delay is anticipated, store serum refrigerated for up to 10 days and/or frozen for up to 30 days. Samples should be submitted to the laboratory as soon as possible after collection. We are required to reject any samples older than 30 days, as they do not reflect current exposure status.
- c. Pack the serum tubes to prevent breakage. Wrap them in paper towels, bubble wrap, etc., and place them in a plastic, zip lock bag. Place the samples in an insulated shipping container with sufficient frozen gel pack refrigerant to keep them between 2-8°C during transit. Serum must be shipped in watertight primary and secondary containers. If the specimens are shipped for overnight or next-day delivery, the refrigerants or gel packs are not required. If using ice packs, place within sealable bags in case of leaking or rupture. Do not place ice pack in direct contact with cardboard outer container. Styrofoam-type inserts are recommended to minimize the chance of leakage when sending ice packs.
- d. Ship the samples by a carrier that will deliver them within 24-72 hours, e.g., FedEx™, UPS™, or DHL™. The USPS does not deliver to the laboratory.

8.5 Serum for World Organisation for Animal Health - Fluorescent Antibody Viral Neutralization (OIE-FAVN) Assay.

- a. Use FADL Form D-132A, *Request for OIE-FAVN Rabies Antibody Test*, to submit samples from privately-owned animals with DoD beneficiary status. A veterinarian's original signature [in blue ink](#) is required. All information must be entered on the request form. **Do not leave any blanks**. The quarantine stations will reject the application if it includes a stamped or electronically created signature.
- b. Submit approximately 1.0 to 1.5 mL of clear serum in an unbreakable tube or cryovial, and place it in a zip lock bag. **Excessively hemolyzed or lipemic samples will not be accepted**. Place the form and payment in separate zip lock bags to prevent water damage.
- c. Pack the serum tubes to prevent breakage. Wrap them in paper towels, bubble wrap, etc., and place them in a plastic zip lock bag. Place the samples in an insulated shipping container with a sufficient amount of frozen gel pack refrigerant to keep them between 2-8°C during transit. Sera must be shipped in watertight primary and secondary containers. If the specimens are shipped for overnight or next-day delivery, the refrigerants or gel packs are not required. The FADL is not open on weekends or federal holidays.
- d. Use a next-day delivery service such as FedEx™, UPS™, or DHL™. The USPS does not deliver to the laboratory. If shipping from overseas, use the fastest mailing service available. Including a copy of the Centers for Disease Control import permit will facilitate the shipment's clearance through U.S. Customs.

8.6 Equine Infectious Anemia (EIA).

- a. Only U.S. Government-owned horses and privately-owned horses maintained on military installations are eligible for testing.
- b. Submit the serum specimen with a completed USDA VS Form 10-11, *Equine Infectious Anemia Laboratory Test* (2003 or latest version). This form is available from area Veterinarian in Charge regional offices of the USDA Animal and Plant Health Inspection Service and can be located on the internet. When the testing has been completed, the laboratory will distribute the results to the appropriate recipients, including Part 4– Area Veterinarian in Charge (pink copy) and Part 5– State Veterinarian (yellow copy).

Information/data points required on the VS Form 10-11:

Form Serial Number (official use only):

- Laboratory Accession Number (laboratory use only).
- Date Blood Drawn.
- Test Requested by Veterinarian: ELISA vs. AGID. (FADL only runs ELISA)
- Reason for Testing: Interstate Movement, Within State Use/Annual Testing, Change of Ownership/Sale, International Import/Export, Illness/Clinical Suspect, Investigation/Exposure.
- Location Equine at Blood Draw (name, address, and phone number).
- County of Equine at Blood Draw.
- Owner (name, address, and phone number).
- Accredited Veterinarian:
 - Accredited Veterinarian Name, Address, and Phone Number.
 - Federal Category II Veterinary Accreditation number.
 - Original Signature or Submitting Veterinarian and the Statement (I certify I am a Category II Federally Accredited veterinarian, authorized in the State where the sample was obtained, by me, from the animal described below) from the collecting veterinarian.
 - Signature date. Note: Digital signatures are permitted when official EIA submissions are made through the electronic system.
- Tube Number (if used).
- Tag/Tattoo/Brand Number (if present).
- Name and/or secondary name (if named).
- Color.
- Horse Breed or Equine Species.
- Age (XX Y or XX M) or Date of Birth (MM/DD/YYYY).
- Gender/Sex (M-Male Intact, F-Female Intact, G-Gelding, FS-Female Spayed).
- Microchip, Breed or Registration Number(s) (if present).
- Written narrative description is REQUIRED. Include distinctive markings, unique and permanent forms of identification, when present: Brands, tattoos, scars, cowlicks, or whorls and blemishes; 17. Head, 18. Neck/body, 19. Left forelimb, 20. Right forelimb, 21. Left hind limb, 22. Right hind limb.

- Record all present unique and permanent forms of identification on the form, including, but not limited to brands, tattoos, scars, whorls, electronic identification/microchip number(s), and biometric identifiers/measurements.
 - Line drawings (silhouettes) are valuable and can help to accurately identify equines.
 - Digital photographs, sufficient to identify the individual, may be used; they should be of high quality, with sharp focus, adequate lighting, and proper perspective. They should include at least three views including frontal, left side, and right side. All three views must have all body parts of the animal visible, and no part of the body covered or obscured.
 - If any field is “none,” write “none”: do not leave fields blank.
- c. The DoD FADL participates in GlobalVetLink (GVL), which offers electronic EIA reporting services to veterinarians for a fee. The veterinary treatment facilities are encouraged to subscribe to GVL to expedite the testing process for Government- or privately-owned horses. The benefits of the service greatly outweigh the expense. All official EIA test forms, both paper and electronic, must contain identical information/data points as described above. The lab may process samples accompanied by incomplete forms; however, we will not release results until the form is properly completed.

Contact the lab for more details.

8.7 Wildlife Disease Epidemiological studies.

- a. Serological testing in support of wildlife disease epidemiological studies requires a current protocol signed by the Director, DoD Food Analysis and Diagnostic Laboratory.
- b. Contact the laboratory regarding the appropriate test request form.
- c. Routine wildlife disease epidemiological studies are performed as DoD FADL workload permits.

Table 8.1 Diagnostic Test List for Animal Specimens.

AGENT/DISEASE	METHOD	SPECIMEN	QTY.
Anaplasmosis (<i>Anaplasma phagocytophilum</i>)	IFA	Canine serum	1-1.5 ml
<i>Babesia canis</i>	IFA	Canine serum	1-1.5 ml
<i>Brucella canis</i>	Slide agglutination, IFA	Canine serum	1-1.5 ml
Chagas Disease (<i>Trypanosoma cruzi</i>)	IFA	Canine serum	1-1.5 ml
<i>Ehrlichia canis</i>	IFA	Canine serum	1-1.5 ml
Equine infectious anemia	FA-ELISA, AGID	Equine serum	1-1.5 ml
Heartworm (<i>Dirofiliara immitis</i>)	ELISA	Canine serum	1-1.5 ml
Leishmania (<i>Leishmania infantum</i>)	IFA	Canine serum	1-1.5 ml

Leptospirosis (<i>Leptospira interrogans</i>)	MAT (Microscopic Slide Agglutination Test – 7 serovars)	Canine serum	1-1.5 ml
Lyme Disease (<i>Borrelia burgdorferi</i>)	IFA	Canine serum	1-1.5 ml
Rabies antibody	RFFIT-Rapid Fluorescent Focus Inhibition Test FAVN – Fluorescent Antibody Viral Neutralization Test	Human serum Canine, Feline serum (Pet Travel)	1-1.5 ml
Rabies Virus Detection Rabies Virus Confirmation	Direct FA Mouse Neuroblastoma Cell Culture	Brain tissue 10% Brain suspension	Fresh
Rocky Mt. Spotted Fever Group, (<i>Rickettsia rickettsii</i>)	IFA	Canine serum	1-1.5 ml
<i>Toxoplasma gondii</i>	IFA	Canine, Feline serum	1-1.5 ml

GLOSSARY

a. Acronyms and Abbreviations

AR	Army Regulation
CASPr	Comprehensive Active Surveillance Program
CFR	Code of Federal Regulations
CFU	colony forming unit
COC	chain of custody
CONUS	continental United States
DA	Department of the Army
DeCA	Defense Commissary Agency
DHL	Dalsey, Hillblom, and Lynn
DoD	Department of Defense
EIA	Equine Infectious Anemia
ELISA	Enzyme-linked Immunosorbent Assay
FADL	Food Analysis and Diagnostic Laboratory
FAVN	Fluorescent Antibody Viral Neutralization [Test]
FedEx	Federal Express
FF&V	fresh fruits and vegetables
FWRA	Food and Water Risk Assessment
G	gram
IFA	immunofluorescence assay
JBSA	Joint Base San Antonio
lb	pound

mL	milliliter
MWD	Military Working Dog
N/A	not applicable
NPDWR	National Primary Drinking Water Regulations
OCONUS	outside the continental United States
oz.	ounce
POC	point of contact
RFFIT	Rapid Fluorescent Foci Inhibition Test
RTE	ready-to-eat
SOP	standing operating procedure
Spp	species
UPC	universal product code
UPS	United Parcel Service
USDA	U.S. Department of Agriculture
USEPA	U.S. Environmental Protection Agency
USPS	U.S. Postal Service
VC	Veterinary Corps
VSIMS	Veterinary Services Information Management System

b. Terms.

Approved Source

An establishment listed in Medical Command Circular 40–1, *Worldwide Directory of Sanitarily Approved Food Establishments for Armed Forces Procurement*, or an establishment which meets the criteria for exemption as defined by Circular 40–1.

Coliform

A heterogeneous group of microorganisms that can be found in both feces and the environment; its presence does not always indicate fecal contamination. The coliform group comprises aerobic, facultative anaerobic, Gram-negative, heat-sensitive, non-spore-forming rods able to

ferment lactose with the production of acid and gas. Typical coliforms include *Escherichia*, *Enterobacter*, and *Klebsiella*.

Frozen Desserts

Products that include ice cream, mellorine, sherbet, ice milk, ice cream mix, ice milk mix, milk shake mix, and other similar frozen desserts, including frozen novelties.

Milk Products (herein referred to as “Fresh Dairy Products”)

Items listed in Section I of the *Grade A Pasteurized Milk Ordinance, 2007 Revision* (see Appendix A), including cream, light cream, light whipping cream, heavy cream, heavy whipping cream, whipped cream, whipped light cream, sour cream, acidified sour cream, cultured sour cream, half-and-half, sour half-and-half, acidified sour half-and-half, cultured half-and-half, sour half-and-half, acidified sour half-and-half, cultured half-and-half, reconstituted or recombined milk and milk products, concentrated milk, concentrated milk products, skim milk, low-fat milk, frozen milk concentrated, eggnog, buttermilk, cultured buttermilk, cultured milk, cultured low-fat milk, cultured skim milk, yogurt, low-fat yogurt, nonfat yogurt, acidified milk, acidified low-fat milk, acidified skim milk, low-sodium milk, low-sodium low-fat milk, low-sodium skim milk, lactose-reduced milk, lactose-reduced low-fat milk, and lactose-reduced skim milk.

Perishable Food Items

Food items that, under normal conditions, must be chilled or frozen in order to prevent their spoilage/deterioration.

Primary Container

The immediate container in which the product is packaged and which serves to protect, preserve, and maintain the condition of the product. The primary container may be constructed of metal, glass, fiber, wood, textile, plastic, paper, or any other suitable type of material and may be supplemented by liners, overwraps, or other protective material.

Ready-to-Eat

A food product in a form that is edible without additional preparation, to include washing and cooking to achieve food safety. Such foods may; however, receive additional preparation for palatability or aesthetic, epicurean, gastronomic, or culinary purposes.

Representative Sample

Sample items drawn randomly from various locations throughout the load or lot.

Shipping (Master) Container

The external container that protects the primary container. It affords adequate protection against corrosion, deterioration, and physical damage during shipment, handling, and intermediate storage.

Appendix A: DA Form 7539 example (Audit/Product)

REQUEST FOR VETERINARY LABORATORY TESTING & FOOD SAMPLE RECORD <small>For use of this form, see AR 40-657; the proponent agency is OTSG.</small>									
1. FROM: VRA- Cavazos 80th Street and Engineer Dr, Fort Cavazos, TX 76544			2. POINT OF CONTACT: Name: <u>CPT Schnell Verfolgung</u> Phone: <u>254-287-2823</u> Station Identification Number: <div style="display: flex; justify-content: space-around; width: 100%;"> 1111-11 </div>				3. CONTROL NUMBER: <div style="border: 1px solid black; padding: 2px; text-align: center;">CAV-001</div>		
5. PRODUCER/MANUFACTURER (Name, Address and Phone): Shock-Vac'd Lunches 1 Rancier Rd Killeen, TX 76541			4. TO: <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%;"><input type="checkbox"/> VETCOM FADL</div> <div style="width: 50%;"><input type="checkbox"/> VLE</div> <div style="width: 50%;"><input type="checkbox"/> BAHRAIN</div> <div style="width: 50%;"><input type="checkbox"/> HAWAII</div> <div style="width: 50%;"><input type="checkbox"/> KOREA</div> </div>						
			ESTABLISHMENT # / PLANT CODE (IMSL, USDA, etc.) <div style="border: 1px solid black; padding: 2px; text-align: center;">48-0001</div> VC #						
6. REASON FOR SUBMISSION: <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <input type="checkbox"/> Suspected foodborne illness (contact laboratory prior to submission) <input type="checkbox"/> Suspected foreign material/object <input type="checkbox"/> Customer return/complaint (provide synopsis of incident/problem and local inspection results in the Remarks section below). <input type="checkbox"/> OTHER (Specify): _____ </div> <div style="width: 40%;"> <input type="checkbox"/> Destination monitoring program <input type="checkbox"/> Contract compliance <input type="checkbox"/> Proximate analysis </div> <div style="width: 20%; text-align: center;"> Sanitation Audits <input checked="" type="checkbox"/> Initial <input type="checkbox"/> Special <input type="checkbox"/> Directed routine <input type="checkbox"/> Routine </div> </div>									
7. SAMPLES SELECTED FROM: <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> DECA <input type="checkbox"/> Exchange <input checked="" type="checkbox"/> Commercial establishment <input type="checkbox"/> OTHER: _____ </div> <div style="width: 30%;"> <input type="checkbox"/> MWR <input type="checkbox"/> Exchange vendor <input type="checkbox"/> Prime vendor </div> <div style="width: 30%;"> <input type="checkbox"/> PLANT </div> </div>					8. DATE SAMPLE(S) SELECTED: 20240102 thru 9. SHIPMENT TEMPERATURE CONDITIONS: <input type="checkbox"/> Room temperature <input type="checkbox"/> Frozen <input checked="" type="checkbox"/> Chilled - Include 1 temperature pilot per shipping container Potato Salad, Produced 1 Jan 2024 15:02 1246769				
10. INSPECTOR'S SIGNATURE					11. ACCOUNTABLE OFFICER'S SIGNATURE				
12. REMARKS (use additional paper if necessary): Fedex Tracking 785214566, Shipped 2 January 2024 Please return shipping container to the address provided in block #1 Email: schnell.verfolgung@mail@health.mil									
FOR LABORATORY USE ONLY									
SHIPPING CARRIER TRACKING NUMBER:			LABORATORY REPORT NUMBER:				RECEIVED:		
RECEIPT TEMPERATURE: _____			SAMPLE(S) FOR ANALYSIS BY: <div style="display: flex; justify-content: space-around;"> <input type="checkbox"/> CHEMISTRY <input type="checkbox"/> MICROBIOLOGY </div>						

13. SAMPLE INFORMATION (Complete as much information as is available):			LAB REPORT #:
SAMPLE NUMBER 1		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER CAV-001-01	SAMPLE DESCRIPTION Pulled Pork with Rice	BRAND NAME Shock Vac'ed	
UNIVERSAL PRODUCT CODE (UPC) 3456789999	PRODUCT CODE Produced 1 Jan 2024 15:01 1246768	SAMPLE WEIGHT/VOLUME 4 oz	
QUANTITY SUBMITTED 2	UNIT OF ISSUE Each	TOTAL COST	DISPOSITION
SAMPLE NUMBER 2		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER CAV-001-02	SAMPLE DESCRIPTION Potato Salad	BRAND NAME Shock Vac'ed	
UNIVERSAL PRODUCT CODE (UPC) 3256789998	PRODUCT CODE Produced 1 Jan 2024 16:01 1226768	SAMPLE WEIGHT/VOLUME 8 oz	
QUANTITY SUBMITTED 1	UNIT OF ISSUE Each	TOTAL COST	DISPOSITION
SAMPLE NUMBER 3		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER CAV-001-03	SAMPLE DESCRIPTION Beef Brisket with baked beans	BRAND NAME Shock Vac'ed	
UNIVERSAL PRODUCT CODE (UPC) 3356789997	PRODUCT CODE Produced 2 Jan 2024 13:01 1246768	SAMPLE WEIGHT/VOLUME 2 oz	
QUANTITY SUBMITTED 4	UNIT OF ISSUE Each	TOTAL COST	DISPOSITION
SAMPLE NUMBER 4		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 5		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 6		FOR LABORATORY USE ONLY	
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION

FOR ADDITIONAL SAMPLES, USE ADDITIONAL COPIES OF PAGE 2.

Appendix B: Completed DA Form 4137 example

EVIDENCE/PROPERTY CUSTODY DOCUMENT		MPR/CID SEQUENCE NUMBER		
For use of this form see AR 195-5; the proponent agency is CID.		CRD REPORT/CID ROI NUMBER		
RECEIVING ACTIVITY VRA-Cavazos		LOCATION Fort Cavazos, TX 76544		
NAME, GRADE AND TITLE OF PERSON FROM WHOM RECEIVED <input type="checkbox"/> OWNER QA Manager: Mr. Sal M. Onella <input checked="" type="checkbox"/> OTHER:		ADDRESS (Include Zip Code) 80th and Engineer Dr. Fort Cavazos, TX 76544		
LOCATION FROM WHERE OBTAINED 1 Rancier Rd Killeen, TX 76541		REASON OBTAINED Initial Audit Samples	TIME/DATE OBTAINED 14:40/2 Jan 2024	
ITEM NO.	QUANTITY	DESCRIPTION OF ARTICLES (Include model, serial number, condition and unusual marks or scratches)		
1	2	Pulled Pork with Rice (CAV-001-01)		
2	1	Potato Salad (CAV-001-02)		
3	4	Beef Brisket with Baked Beans (CAV-001-03)		
CHAIN OF CUSTODY				
ITEM NO.	DATE	RELEASED BY	RECEIVED BY	PURPOSE OF CHANGE OF CUSTODY
01-03	2 Jan 2024	NAME, GRADE OR TITLE Sal M. Onella, QA Manager	NAME, GRADE OR TITLE CPT Schnell Verfolgung	Samples Collected
		SIGNATURE [Signature]	SIGNATURE [Signature]	
01-03	2 Jan 2024	NAME, GRADE OR TITLE CPT Schnell Verfolgung	NAME, GRADE OR TITLE FEDEX	Trk# 785214566; Samples sent to the FADL for Testing
		SIGNATURE [Signature]	SIGNATURE [Signature]	
01-03	3 Jan 2024	NAME, GRADE OR TITLE FEDEX	NAME, GRADE OR TITLE Lab Tech	Received at FADL for Testing
		SIGNATURE [Signature]	SIGNATURE [Signature]	
		NAME, GRADE OR TITLE	NAME, GRADE OR TITLE	
		SIGNATURE [Signature]	SIGNATURE [Signature]	
		NAME, GRADE OR TITLE	NAME, GRADE OR TITLE	
		SIGNATURE [Signature]	SIGNATURE [Signature]	

Appendix C: DA Form 7539 example (Spongesticks)

REQUEST FOR VETERINARY LABORATORY TESTING & FOOD SAMPLE RECORD <small>For use of this form, see AR 40-657; the proponent agency is OTSG.</small>			
1. FROM: VRA San Diego, Camp Pendleton Section Bldg 22103 Camp Pendleton CA 92055	2. POINT OF CONTACT: Name: <u>SGT Liz Teria</u> Phone: <u>210-223-0000</u> Station Identification Number: <div style="display: flex; justify-content: space-around; width: 100%;"> 1111-11 </div>	3. CONTROL NUMBER: <u>PB-24-999</u> 4. TO: <input type="checkbox"/> VETCOM FADL <div style="display: flex; justify-content: space-between;"> <input type="checkbox"/> VLE <input type="checkbox"/> SAHRAIN </div> <input type="checkbox"/> HAWAII <input type="checkbox"/> KOREA	
5. PRODUCER/MANUFACTURER (Name, Address and Phone): <div style="display: flex;"> <div style="flex: 1;"> <u>Pendleton Commissary</u> <u>20850 Vandergift Blvd</u> <u>North Camp Pendleton, CA 92055</u> </div> <div style="flex: 1; border-left: 1px solid black; padding-left: 10px;"> <u>ESTABLISHMENT # / PLANT CODE (IMSIL, USDA, etc.)</u> <u>VC #</u> </div> </div>			
6. REASON FOR SUBMISSION: <div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <input type="checkbox"/> Suspected foodborne illness (contact laboratory prior to submission) <input type="checkbox"/> Suspected foreign material/object <input type="checkbox"/> Customer return/complaint (provide synopsis of incident/problem and local inspection results in the Remarks section below). <input type="checkbox"/> OTHER (Specify): _____ </div> <div style="width: 35%;"> <input checked="" type="checkbox"/> Destination monitoring program <input type="checkbox"/> Contract compliance <input type="checkbox"/> Proximate analysis </div> <div style="width: 5%; text-align: center;"> <u>Sanitation Audits</u> <input type="checkbox"/> Initial <input type="checkbox"/> Special <input type="checkbox"/> Directed routine <input type="checkbox"/> Routine </div> </div>			
7. SAMPLES SELECTED FROM: <input checked="" type="checkbox"/> DECA <input type="checkbox"/> MWR <input type="checkbox"/> PLANT <input type="checkbox"/> Exchange <input type="checkbox"/> Exchange vendor <input type="checkbox"/> Prime vendor <input type="checkbox"/> Commercial establishment <input type="checkbox"/> OTHER: _____		8. DATE SAMPLE(S) SELECTED: <u>20240102</u> thru _____ 9. SHIPMENT TEMPERATURE CONDITIONS: <input type="checkbox"/> Room temperature <input type="checkbox"/> Frozen <input checked="" type="checkbox"/> Chilled - include 1 temperature pilot per shipping container <u>CheepBrand Yogurt</u>	
10. INSPECTOR'S SIGNATURE		11. ACCOUNTABLE OFFICER'S SIGNATURE	
12. REMARKS (use additional paper if necessary): <u>Fedex Tracking 785214566, Shipped 2 January 2024</u> <u>Please return shipping container to the address provided in block #1</u> <u>Email: schnell.verfolgung.mil@health.mil</u>			
FOR LABORATORY USE ONLY			
SHIPPING CARRIER TRACKING NUMBER: 	LABORATORY REPORT NUMBER: 	RECEIVED: 	
RECEIPT TEMPERATURE: _____	SAMPLE(S) FOR ANALYSIS BY: <input type="checkbox"/> CHEMISTRY <input type="checkbox"/> MICROBIOLOGY		

13. SAMPLE INFORMATION (Complete as much information as is available):			LAB REPORT #
SAMPLE NUMBER 1	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER PB-24-999-01	SAMPLE DESCRIPTION Listeria Zone 1- Deli Dept Sushi Cutting Board	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE Collected on 2 Jan 2024, time 06:55	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED 1	UNIT OF ISSUE EA	TOTAL COST	DISPOSITION
SAMPLE NUMBER 2	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER PB-24-999-02	SAMPLE DESCRIPTION Listeria Zone 2- Deli Dept - Sushi Table Leg	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE Collected on 2 Jan 2024 , time 06:56	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED 1	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 3	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER PB-24-999-03	SAMPLE DESCRIPTION Listeria Zone 3- Deli Dept Floor	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE Collected on 2 Jan 2024, time 06:57	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED 1	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 4	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 5	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION
SAMPLE NUMBER 6	FOR LABORATORY USE ONLY		
SUBMITTER SAMPLE NUMBER	SAMPLE DESCRIPTION	BRAND NAME	
UNIVERSAL PRODUCT CODE (UPC)	PRODUCT CODE	SAMPLE WEIGHT/VOLUME	
QUANTITY SUBMITTED	UNIT OF ISSUE	TOTAL COST	DISPOSITION
FOR ADDITIONAL SAMPLES, USE ADDITIONAL COPIES OF PAGE 2.			

Appendix D: Aseptic sampling

1. The following instructions must be used when aseptically sampling a bulk sample. A bulk food is an item considered larger than a retail item and would take excessive measures to submit to the laboratory. Examples are found in Chapter 2 - Submission Guidance by Commodity of this document.
2. Wash hands and use hand sanitizer prior to putting on gloves. Gloves should be changed if they become contaminated and between samples. A clean food inspection smock or single use plastic apron should be worn during aseptic sampling.



Bulk iceberg lettuce from the Dining Facility was selected as a CASPr submission.

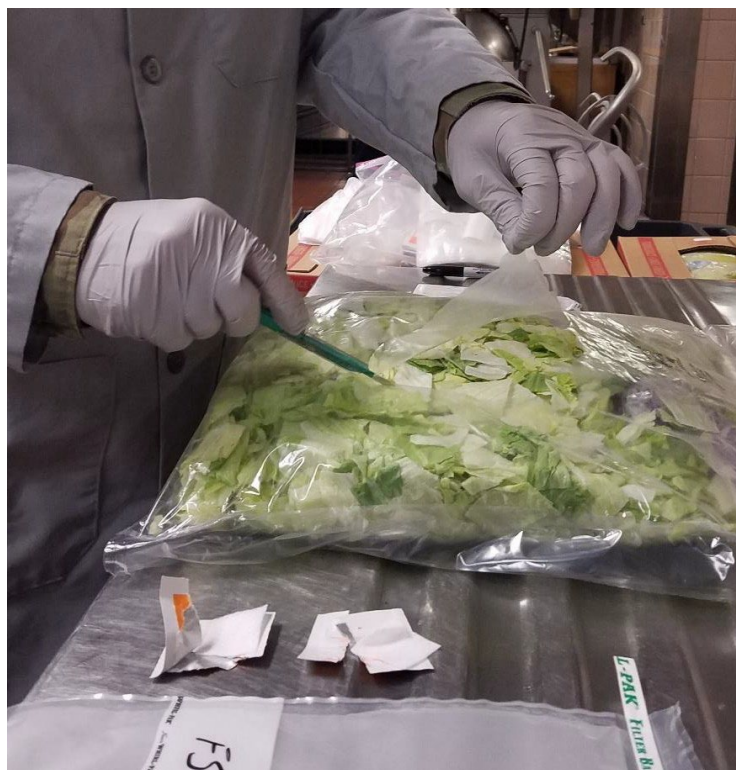
The sample bag must be labeled with the submitter's sample number which corresponds to the number in block 13 of DA form 7539.



Select an area of the package that can be easily decontaminated. This area must be large enough to remove sample. Taking an alcohol pad, start in the center of the selected area and wipe in a circular motion to just outside the area that will be cut open.



Using a sterile scalpel blade, cut a flap in the area of packaging that was decontaminated.



Pull the flap back without touching the product or contaminating the packaging.



Use safety when handling and disposing of the scalpel.

Once the sample has been opened, one person will open the sterile, individually wrapped spoons and the second person will hold the sterile WHIRLPAK™ bag. Open both of these items just prior to use.





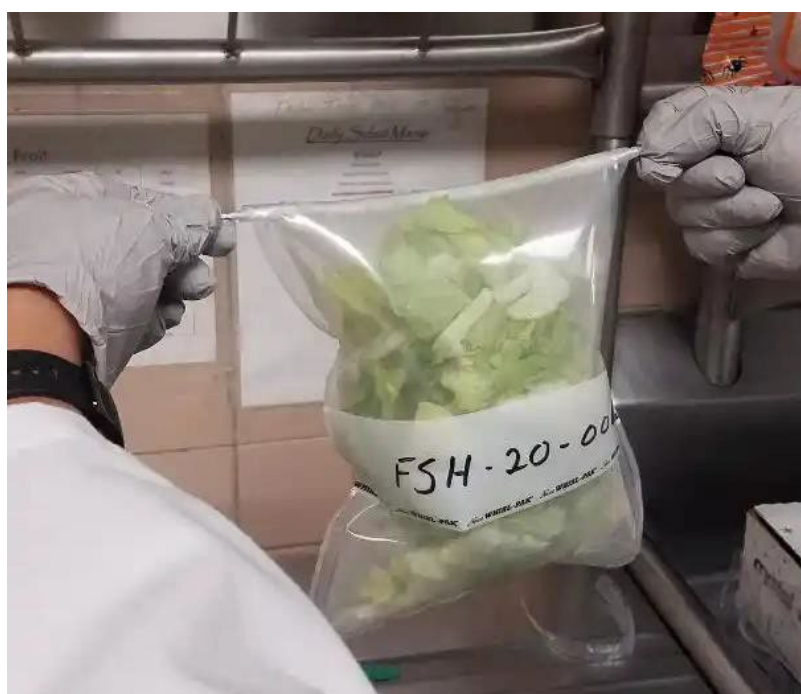
Fill the sterile WHIRLPAK™ bag with at least 8 ounces of sample making sure that only the sterile spoons come in contact with the product. If the spoons become contaminated while sampling dispose of them and get new ones.



NOTE: If any sterile item (i.e. WHIRLPAK™ bag, scalpel, spoons) comes in contact with something not sterile make sure to take action. For example; if you are transferring the product and the back of the sterile spoon touches the hand of the person holding the bag open then you will need to discard the contaminated spoon and open a new sterile spoon.

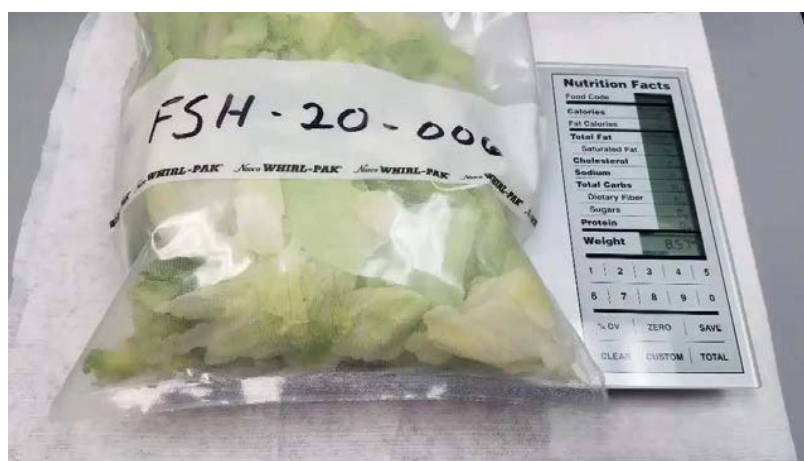


Fold the WHIRLPAK™ over once and whirl bag until product is reached.





Fold tabs over each side making sure there are no wires that could puncture the bag.



Make sure you submit at least 8 ounces (226.8 grams) of product.