

# ***Salmonella* Analysis**

Collecting Raw Meat and Poultry Product Samples

**FOOD SAFETY AND INSPECTION SERVICE**

**Issued October 1997**

## Overview

This is a self-instructional guide to aid in collecting samples for *Salmonella* analysis, as set forth in §310.25(b) and §381.94(b) of the meat and poultry regulations. As new species and products are added to the regulations, updated pages will be sent to add to this guide.

It is recommended that this guide be put into a 3-ring binder and kept handy in the government office.

The guidebook is arranged into nine sections by topics. It is best to look through the guide to become familiar with its contents. First, sampling supplies are listed, then how to select a sample, aseptically sample, prepare for sample selection, collect a sample, store a sample, and finally ship a sample.

# **SALMONELLA ANALYSIS**

## **Collecting Raw Meat and Poultry Product Samples**

- 1—Introduction**
- 2—Supplies**
  - a. From Headquarters
  - b. From Technical Service Laboratories
  - c. From Local Procurement
- 3—Sample Selections**
  - a. Selecting a Cattle Half-Carcass
  - b. Selecting a Swine Carcass
  - c. Selecting a Poultry Carcass (Chicken or Turkey)
  - d. Selecting Raw Ground Product
- 4—Aseptic Sampling Techniques**
  - a. Putting on the Gloves
  - b. Sponging Technique
- 5—Preparation for Sample Collection**
  - a. Prior to Collecting Samples
  - b. One or More Days Prior to Sample Collection
- 6—Sample Collection**
  - a. Cattle
  - b. Swine
  - c. Chicken
  - d. Turkey
  - e. Ground Product
- 7—Samples Not Collected**
- 8—Sample Storage Prior to Shipment**
- 9—Sample Shipment**

## **ATTACHMENTS**

- 1—FSIS Form 10,210-7; Sample Bar Code Sticker; and Lab Address Label**
- 2—Reserved**
- 3—Sampling Steps Checklists**
- 4—Carcass Sample Sites**

## INTRODUCTION

This sampling guide has been prepared to support the Pathogen Reduction/HACCP Regulation. Aseptic sample collection will be carried out by inspection personnel and will include:

---

A nondestructive whole bird rinse for chickens, the same procedure that was used in the laboratory for the Nationwide Microbiological Baseline Data Collection Program for this species.

A nondestructive sponging technique for raw beef, swine, and turkey carcass surfaces.

A 25-gram sample collected for testing raw ground meat/poultry.

---

Unless the District Office instructs otherwise, one sample will be collected on each day the plant produces the product indicated on the sample request form, FSIS Form 10,210-7 (see Attachment 1), and sent by overnight delivery service to the designated laboratory on a daily basis.

If the plant no longer produces the indicated product, complete one FSIS Form 10,210-7 as described in Section Seven and mail it and the entire set of sample forms by regular mail to the laboratory, using the preaddressed laboratory mailing label.

Currently only beef, swine, chicken, and turkey are being sampled. Other species will be included as appropriate.

## Target Audience

This guide is written for the **sample collector**, whether that person is the IIC or a designee.

## SUPPLIES

### a. From Headquarters

Inspectors-in-charge (IICs) at designated establishments will receive the following supplies from Headquarters:

Sample request forms (FSIS Forms 10,210-7) in perforated sheets of 4, with each form individually numbered. The forms will designate the type of product to be sampled. See Attachment 1.

Bar code stickers to use on each sample bag container or container that identifies the type of sample. See Attachment 1.

Pre-addressed laboratory mailing labels to be used in the event samples are not collected. See Attachment 1. The procedures are described in Section Seven.

If part of the supplies from Headquarters are missing, contact the Food Hazard Surveillance Division at (202) 501-7515.

### b. From Technical Service Laboratories (TSL)

All sampling supplies and shipping containers will be provided by FSIS Technical Service Laboratories. These shipping containers are to be used only for the *Salmonella* sampling program. Inside each container will be the supplies needed for collecting specific product samples. The containers will carry color-coded labels as shown on the chart on the next page.

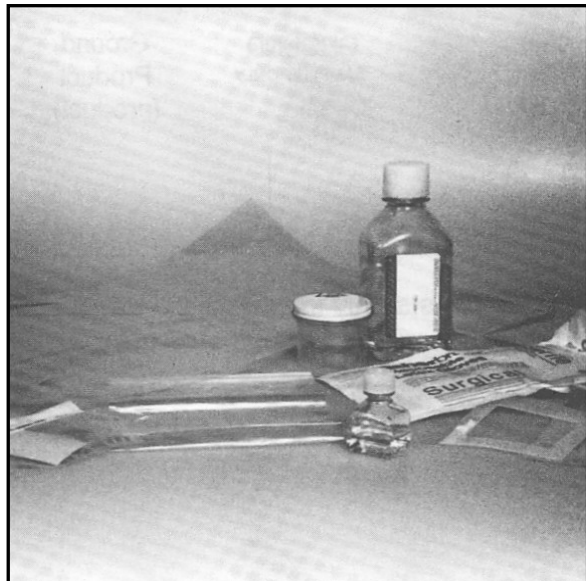
If any supplies are missing from the container, contact the designated laboratory or your district office.

The TSL will also send preaddressed FedEx Billable Stamp Receipts for sample overnight delivery to the designated laboratory. See Section Nine.

### c. From Local Procurement

Sanitizing solution—See page 5-2 for instructions on preparing solution.

Tote—See page 5-3.



<b>Label Color</b>	<b>Designation</b>	<b>Type of Sample</b>	<b>Supplies in Shipper</b>
Neon Orange	SPONGE SAMPLES ONLY	Livestock (sponge)	Sterile Gloves Corrugated pad (depending upon shipping container type) Gel pack(s) Sponge in sterile Whirl-Pak® bag Container with 10 ml of Buffered Peptone Water (BPW) Sterile square sampling template in bag
Neon Green	POULTRY WASH SAMPLES ONLY	Chicken (rinse)	Sterile Gloves Corrugated pad (depending upon shipping container type) Gel Pack(s) Container with 400 ml of Buffered Peptone Water (BPW) Sterile screw-capped jar Large sterile bag Small resealable bag
	SPONGE SAMPLES ONLY	Turkey (sponge)	Sterile Gloves Corrugated pad (depending upon shipping container type) Gel pack(s) Sponge in sterile Whirl-Pak® bag Container with 10 ml of Buffered Peptone Water (BPW) Sterile rectangular sampling template in bag
Neon Pink	GROUND SAMPLES ONLY	Ground Product (product)	Sterile Gloves Corrugated pad (depending upon shipping container type) Gel pack(s) Sterile Whirl-Pak® bag with sterile plastic sheet and sterile clear, rigid plastic ring template

This chart lists only the supplies sent by the TSL. A complete list of supplies needed for collecting samples can be found in the Materials section of each specific sample collection procedure.

## SAMPLE SELECTIONS

Samples are to be taken **randomly** on each day the designated product is produced, until the supply of FSIS Form 10,210-7 is exhausted or the District Office instructs otherwise.

There are different methods of randomly selecting the specific carcass or product for sampling but all require the use of random numbers. Methods could include using random number tables, drawing cards, using computer-generated or calculator-generated random numbers, etc. If other programs requiring random sampling are underway at the establishment, simply use one of the methods already in use by inspection personnel.

The carcass or ground product for sampling must be selected at random from all eligible carcasses or ground products. If there are multiple shifts, rails, coolers, chillers, or grinders, randomly select one for sample collection. Each one should have an equal chance of being selected at each sampling interval.

If a carcass sponge (cattle, swine, or turkey) or chicken rinse sample cannot be shipped the same calendar day it would be collected, randomly select the carcass for sampling and hold it, refrigerated. Perform the sponge sampling or chicken rinse procedure the next business day that overnight shipping can occur.

Ground product samples can be held refrigerated until the sample can be shipped by overnight courier.

If more than one shift is operating at the plant, the sample can be taken on **any** shift if the following requirements are met.

### a. Selecting a Cattle Half-Carcass

The half-carcasses eligible for sampling should be selected from those chilled for 12 hours or more after slaughter. Both the "leading" and "trailing" sides of a carcass should have an equal chance of being selected. Carcasses to be hot-boned may be sampled after the final wash.

Hide-on calves are not split. The sample unit for these calves is one carcass.

**Selecting the cooler site.** Select a safe and accessible site in the cooler for collecting samples from a beef half-carcass. This site may be located at the transfer chain, grading chain, a rail, or other safe, uncrowded location in the cooler.

**Selecting the time.** Determine the times that carcasses chilled for 12 hours or more will be on hand. Then randomly select a time from within that time frame for collecting the samples. Record the time and date of sample collection on the FSIS Form 10,210-7.

**Selecting the half-carcass.** At the random time you selected, go to the sampling location. Do not choose the carcass that is at the predetermined location. Instead, count back or ahead 5 sample units and choose the sixth unit to sample. (The reason for counting back or ahead 5 half-carcasses is to avoid any possible bias during selection.) Normally it should not be necessary to have the establishment move many half-carcasses to access a random one to sample.

## b. Selecting a Swine Carcass

The carcasses eligible for sampling should be selected from those chilled for 12 hours or more after slaughter. Every carcass should have an equal chance of being selected. Carcasses to be hot-boned may be sampled after the final wash.

**Selecting the cooler site.** Select a safe and accessible site in the cooler for collecting samples from a swine carcass. This site may be located at the transfer chain, a rail, or other safe, uncrowded location in the cooler.

**Selecting the time.** Determine the times that carcasses chilled for 12 hours or more will be on hand. Then randomly select a time from within that time frame for collecting the samples. Record the time and date of sample collection on the FSIS Form 10,210-7.

**Selecting the carcass.** At the random time you selected, go to the predetermined sampling location. Do not choose the carcass that is at the predetermined location. Instead, count back or ahead 5 sample units and choose the sixth unit to sample. (The reason for counting back or ahead 5 carcasses is to avoid any possible bias during selection.) Normally it should not be necessary to have the establishment move many carcasses to access a random one to sample.

Carcasses that are routinely partially skinned may be used.

## c. Selecting a Poultry Carcass (Chicken or Turkey)

Poultry carcasses will be selected at random after chilling, at the end of the drip line or at the last readily accessible point prior to packing/cut-up. A *whole* carcass is required—one that has not been trimmed. For safety reasons, do not remove a bird from moving shackles. Wait for the bird to drop and then collect it. Carcasses to be hot-boned may be sampled after the final wash.

**Selecting the chiller.** If more than one chiller system is in operation at the time of sample collection, randomly select the chill tank from which to take the sample. Then determine a safe, appropriate point from which to collect the sample unit. For hot-boned carcasses, randomly determine the line.

**Selecting the time.** Determine the times that chilled carcasses will be on hand. Then randomly select a time from within that time frame for collecting the samples. Record the time and date of sample collection on the FSIS Form 10,210-7.

**Selecting the carcass.** At the random time you selected, go to the predetermined point for sample collection. Count back or ahead 5 carcasses and select the next carcass for sampling. (The reason for counting back or ahead 5 carcasses is to avoid any possible bias during selection.) *Exception:* If the sixth carcass is not a whole bird (untrimmed, with or without neck), count back or ahead an additional 5 carcasses for sample selection. Repeat until a whole carcass is available.



**d. Selecting Raw Ground Product**

Raw ground product samples (beef, pork sausage, chicken, or turkey) will be randomly collected after the final grinding process, before any addition of spices or seasonings (if possible), and prior to final packaging. For safety reasons, such as with closed systems, it may be necessary to collect the raw ground samples after final packaging but prior to chilling or freezing.

If more than one shift is operating at the plant, the sample can be taken on any shift if the requirements below are met.

**Selecting the grinder.** If more than one ground product line is in operation at the time of sample collection, randomly select the ground product line from which to take the sample.

**Selecting the time.** Determine the times that raw ground product will be produced. Then randomly select a time from within that time frame for collecting the sample. Record the time and date of sample collection on the FSIS Form 10,210-7.

## ASEPTIC SAMPLING TECHNIQUES

Extraneous organisms from the environment, hands, clothing, sample containers, sampling devices, etc., may lead to erroneous analytical results. Stringent requirements for microbiological analysis are necessary; therefore, use of aseptic sampling techniques and clean, sanitized equipment are of utmost importance.

An area should be designated for preparing and gathering sampling supplies, etc. A stainless steel, wheeled cart would be useful when carrying out the actual sample collection procedure. A small tote or caddy carried to the location of sampling could be used for transporting supplies and supporting sample bags to which you are adding sterile solutions.

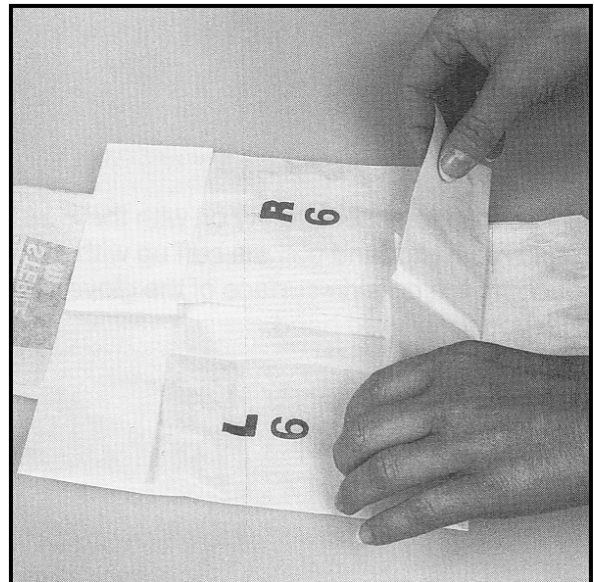
Sterile gloves must be worn while collecting samples. The only items that should contact the external surface of the sterile glove on your sampling hand are the sample being collected, the sterile sampling utensil (specimen sponge or sterile plastic ring), and occasionally the template. Remember that the outside surfaces of the sample container are not sterile.

### a. Putting on the Gloves

First, wash and sanitize your hands to the mid-forearm. Dry your hands using disposable paper towels.

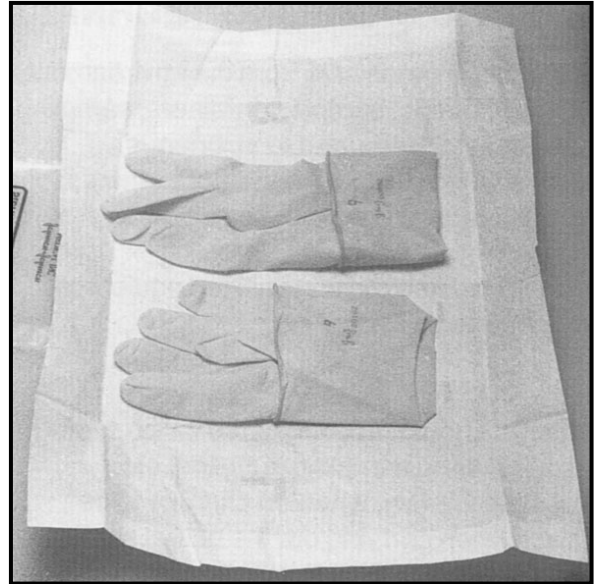
Follow this procedure for putting on sterile gloves.

1. Position the glove package so that the letters L and R are facing you (L=left, R=right).

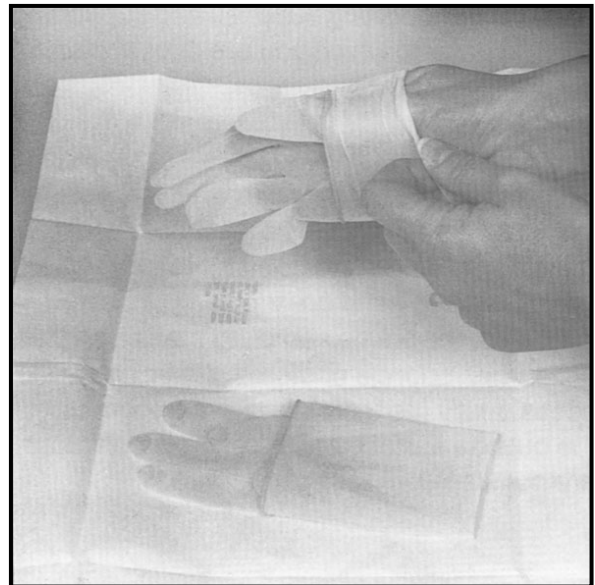


## Section Four

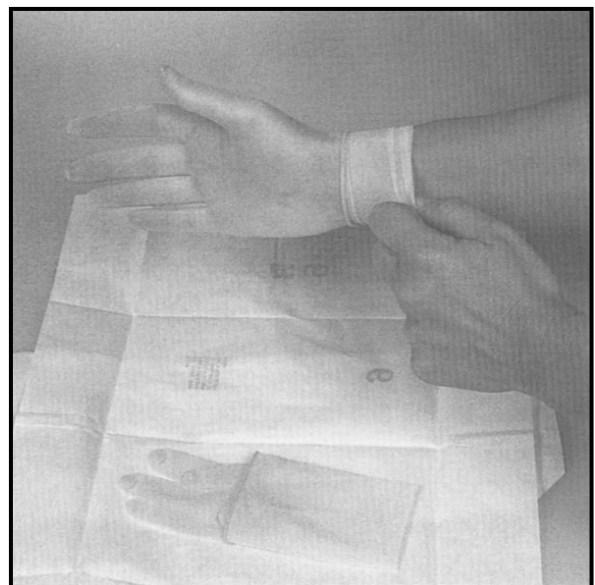
2. When you first open the package, the gloves are folded, forming a cuff on the sleeve, and lying palm up. Leave the gloves in the package until you start to put them on.



3. Hold one glove open by the inside cuff area. Insert your hand into the glove, palm-side up, and remove the glove from the package.

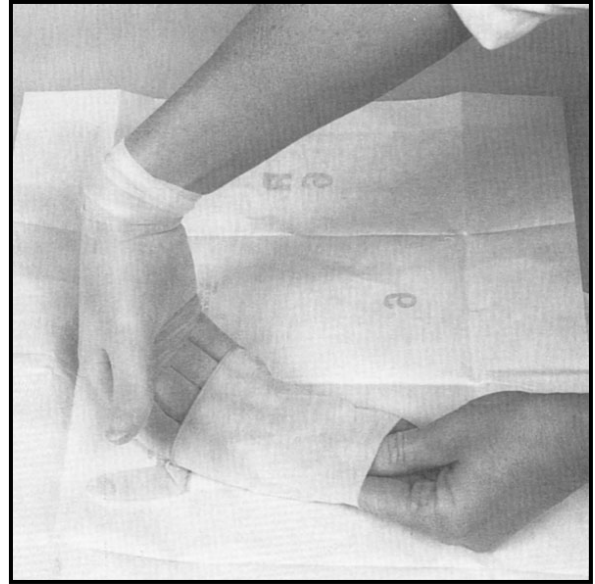


4. Pull the glove completely on with the ungloved hand, and pull the cuff up without touching the outside surface of the glove with your ungloved hand.

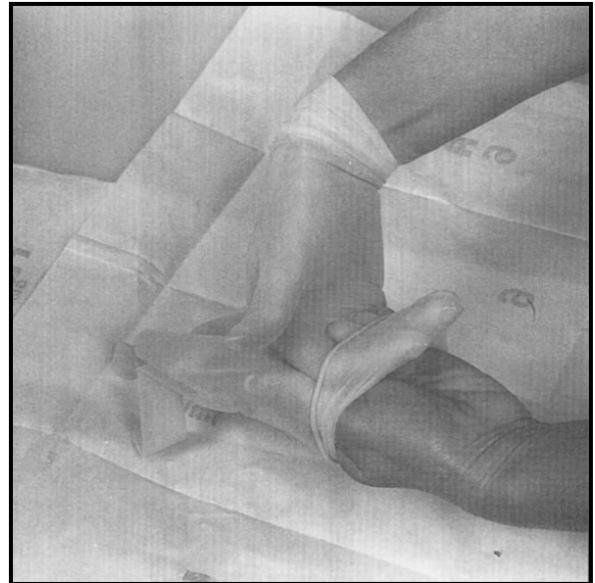


5. Repeat this performance with the other glove, **with one key exception**. Do not handle the second glove by the inside cuff.

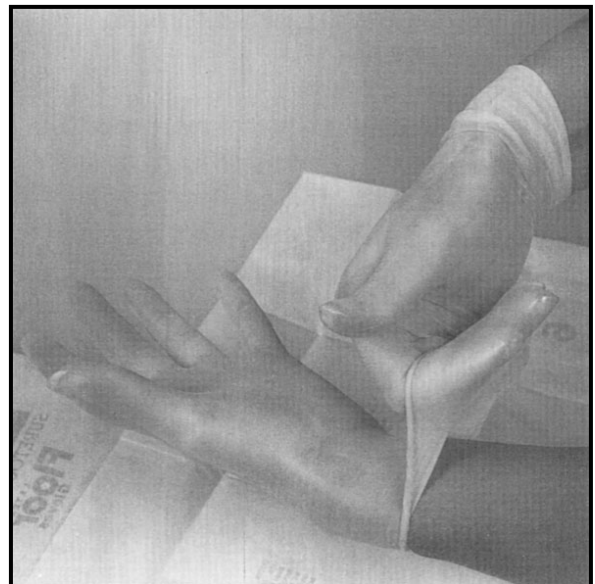
If you do, the outside of the first sterile glove may contact your hand and wrist as you pull the second glove on. Even though you washed and sanitized your hands, they are not sterile. The correct way is to place your ungloved hand, palm up, into the second glove.



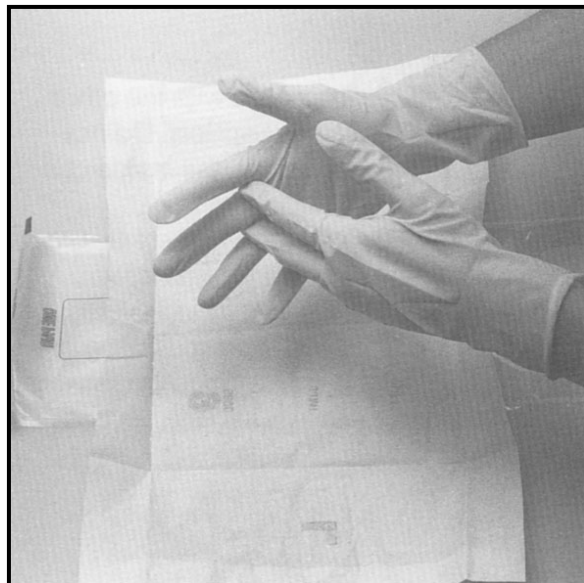
6. Insert the fingers of your gloved hand into the fold of the second cuff and ease the second cuff on.



7. Handle the second glove from the outside to adjust the cuff on your wrist.



8. Once both gloves are on, you can touch the outside of a glove with the other gloved hand to adjust the fit.



If at any time you are concerned that a glove may have become contaminated, discard it and repeat this procedure for putting on sterile gloves.

#### **b. Sponging Technique**

To ensure uniformity nationwide, it is extremely important for each sample collector to closely follow the standard sampling procedure. The manner in which you sponge the carcass sample sites is critical and must be consistent. Throughout the entire sponging, never contaminate the sponge. This means that only the appropriate surface of the sponge is in contact with your sterile glove, the sample site, and the interior of the sterile sample bag.

The proper procedure is to firmly grasp the sponge so that only one side is in contact with the carcass for the entire sponging of a sample site. For beef, use the same side of the sponge for both the flank and brisket, and the other side for the rump. For swine, use the same side of the sponge for both the belly and ham, and the other side for the jowl. For turkey, which has only two sample sites, use one side per site.

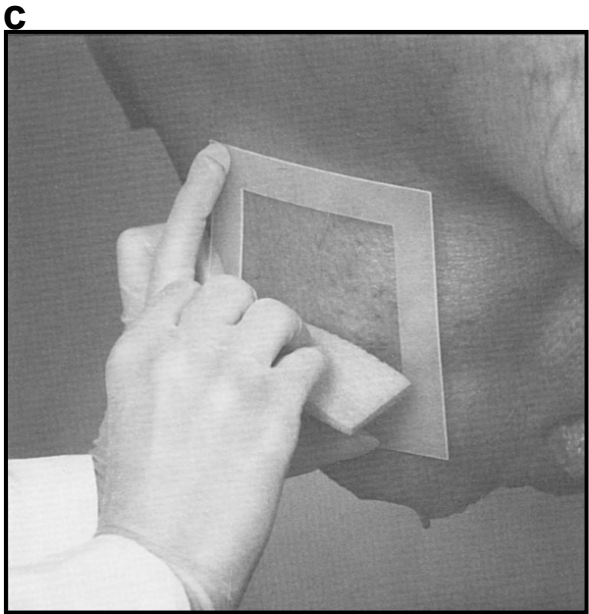
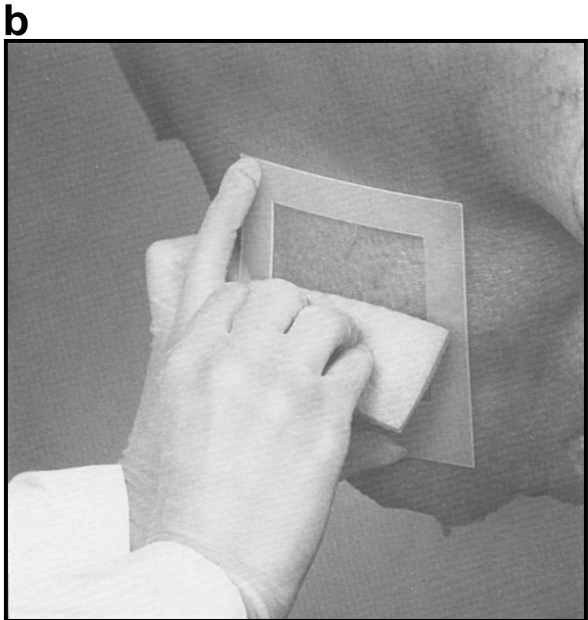
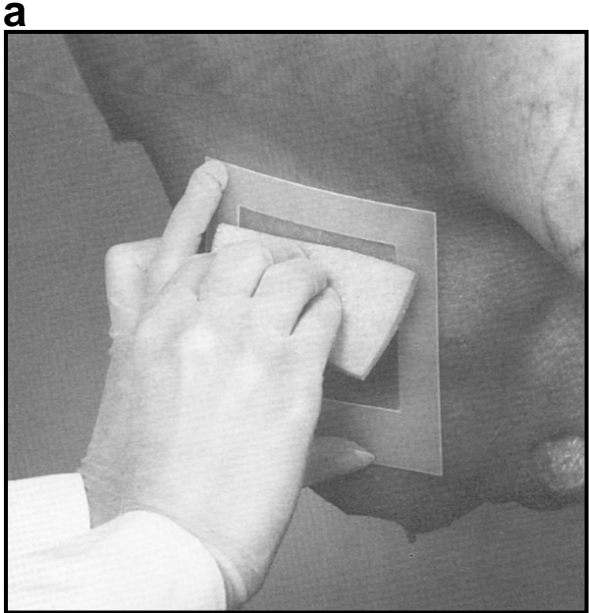
Wipe the sponge across the sample surface (the area within the template). Do this 10 times in the vertical direction and then 10 times in the horizontal direction. Remember to only have one surface of the sponge in contact with the carcass for each sample site.

Use an even pressure when sponging: too hard and the sponge may crumble; too soft and you may not pick up the amount of microorganisms that would give a true profile of the carcass bacteria in that location. Consider the correct pressure to be the same as that needed to remove dried blood from the carcass surface.

There are two ways to move the sponge across the sample surface for each direction.

**Method One**

- 1. Firmly hold the sponge and wipe it across the surface in one direction. For vertical, wipe the sponge down. For horizontal, wipe it from left to right.

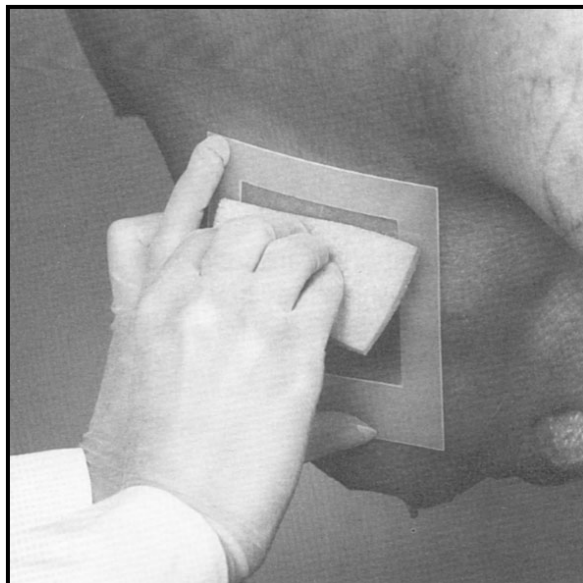


Section Four

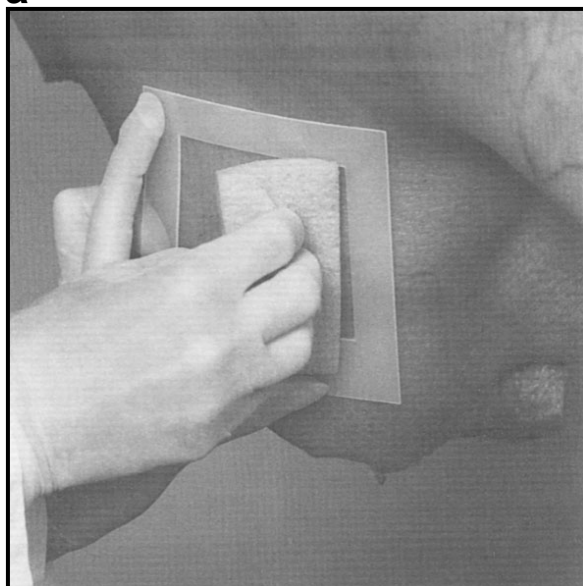
2. Then lift the sponge and place it in the same beginning position and repeat wiping across the sample site.

3. Repeat until you have done this 10 times.

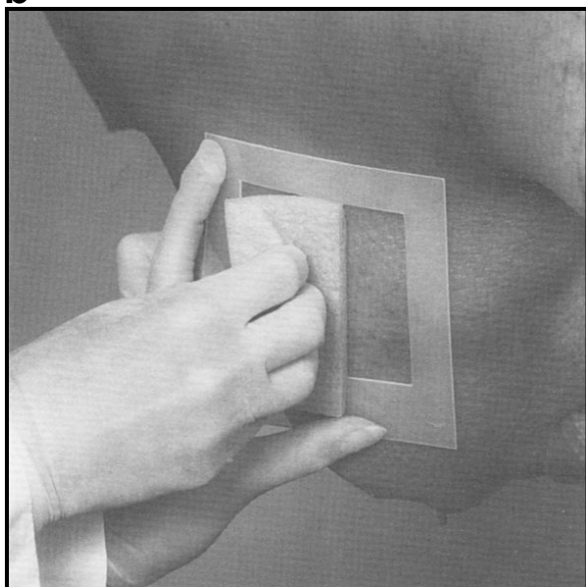
4. Then change to the other direction (horizontal or vertical) and follow these same steps, using the same side of the sponge.



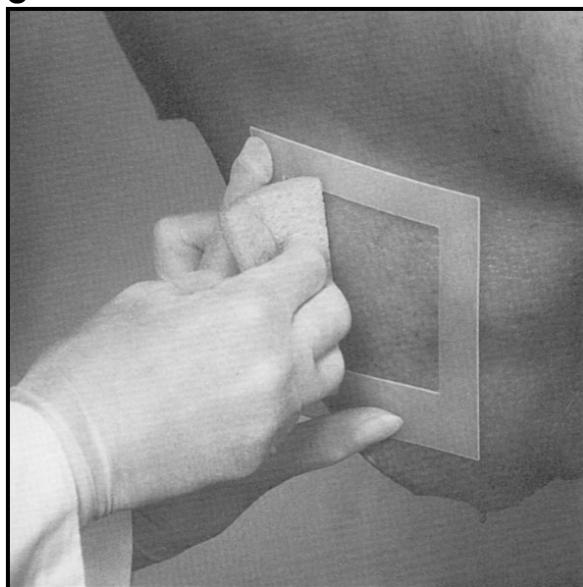
**a**



**b**

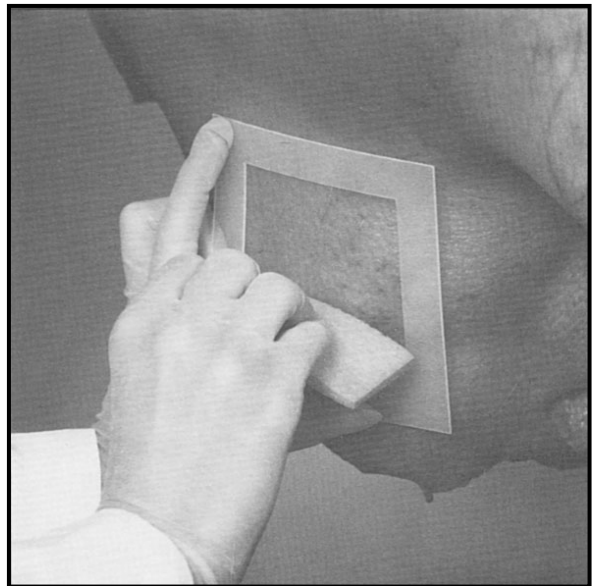
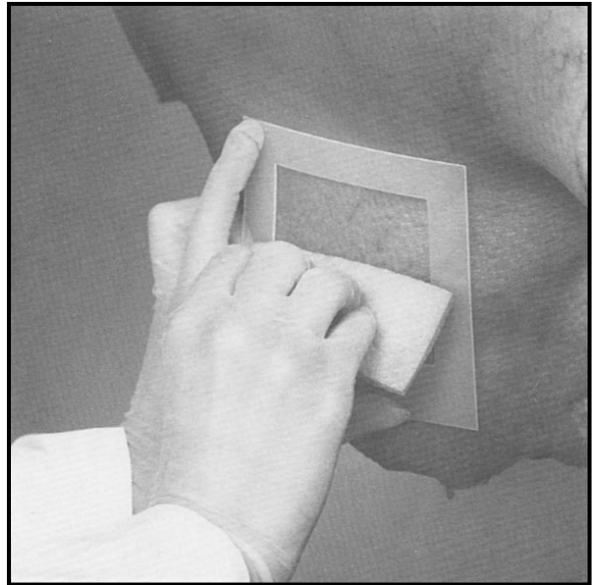
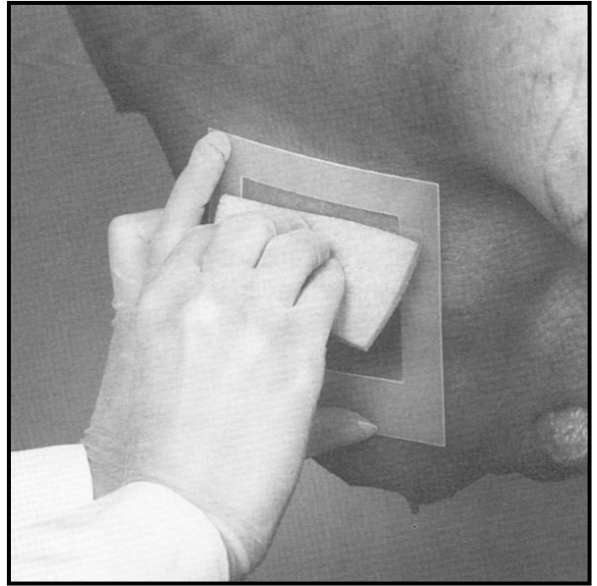


**c**



**Method Two**

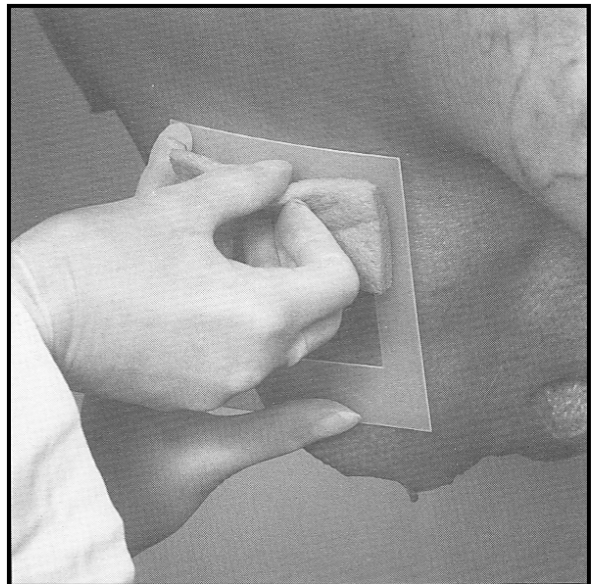
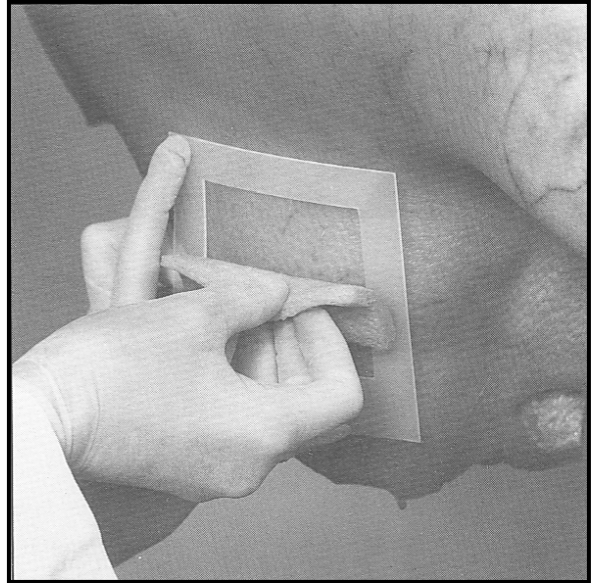
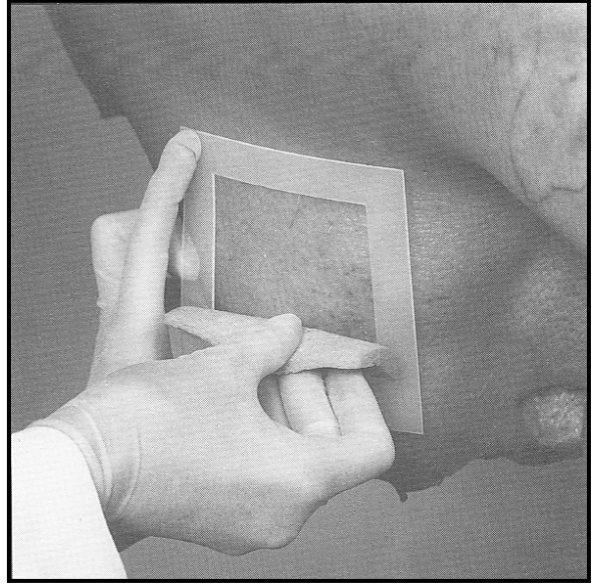
1. Firmly hold the sponge and wipe it over the surface in one direction. For vertical, wipe the sponge down, and for horizontal, wipe it from left to right.



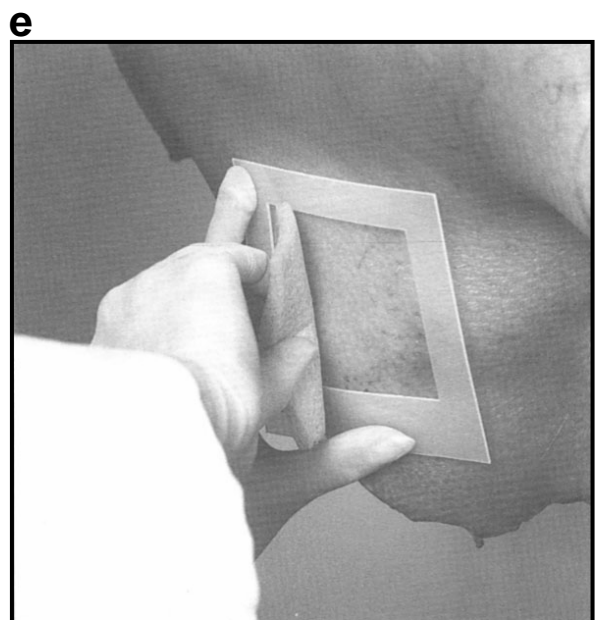
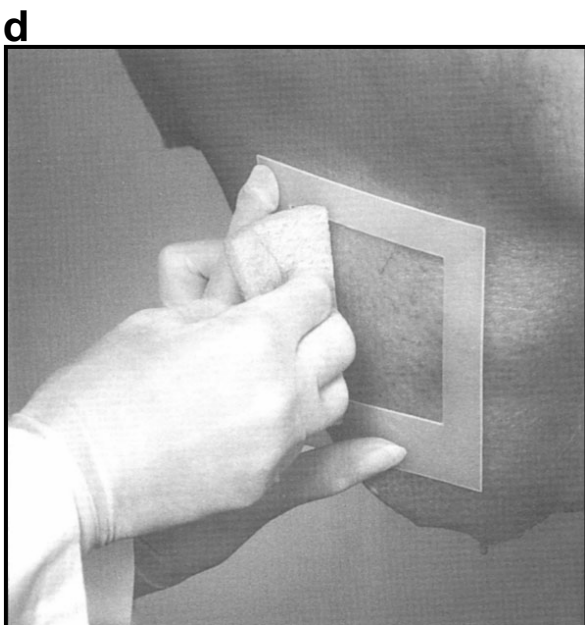
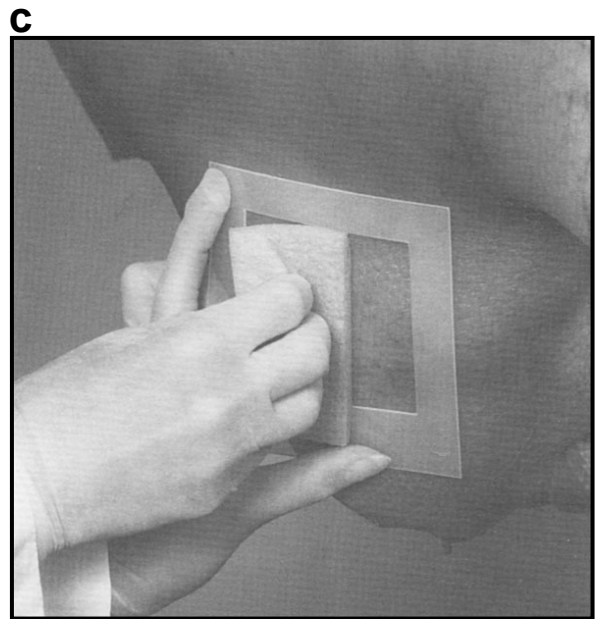
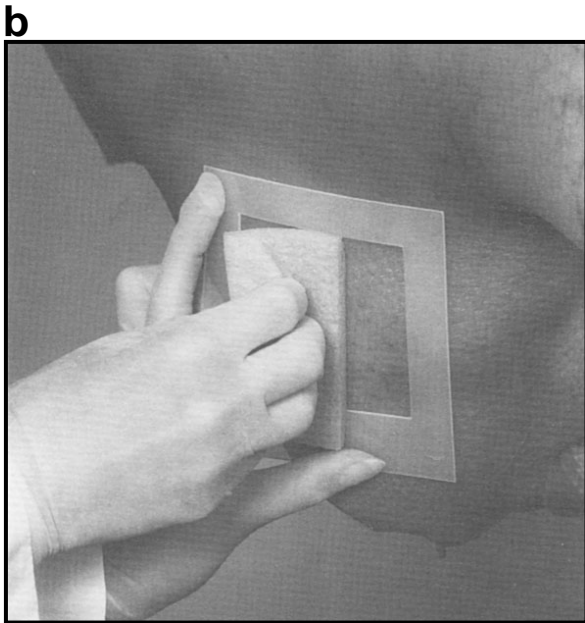
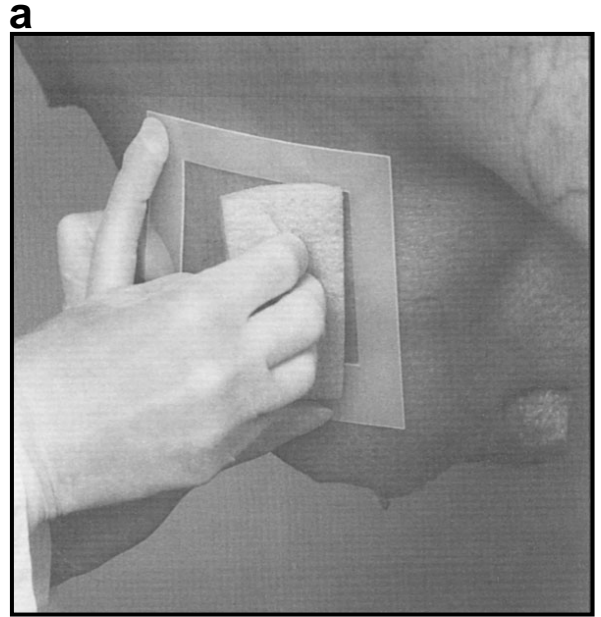


## Section Four

2. When you reach the end of the wipe, lift the sponge and turn your wrist so that your hand and the sponge are facing back in the direction from which they just wiped. This allows the same surface of the sponge to contact the sample site.



3. Now wipe the sponge across the surface going the other way. (If you were sponging in the vertical direction, the first wipe would be from top to bottom and the second would be from bottom to top. For horizontal, you would have wiped first from right to left, and second from left to right.)



4. Repeat this until you have wiped the surface 10 times. (For vertical, you would have wiped down and up 5 times each. For horizontal, you would have wiped left to right and right to left 5 times each.)

5. Now change to the next direction (horizontal or vertical) and follow these same steps.

**Do not switch ways of sponging while at the same sample site.** Remember that it is extremely important to conduct this and all sampling in a uniform manner to ensure valid sample results.

## PREPARATION FOR SAMPLE COLLECTION

### a. Prior to Collecting Samples

—You, the sample collector, should review the sampling steps appropriate to the product and go over the checklist of tasks to be performed. See Attachment 3.

—You should also review random sample selection procedures and other information that may aid in sample collection.

### b. One or More Days Prior to Sample Collection

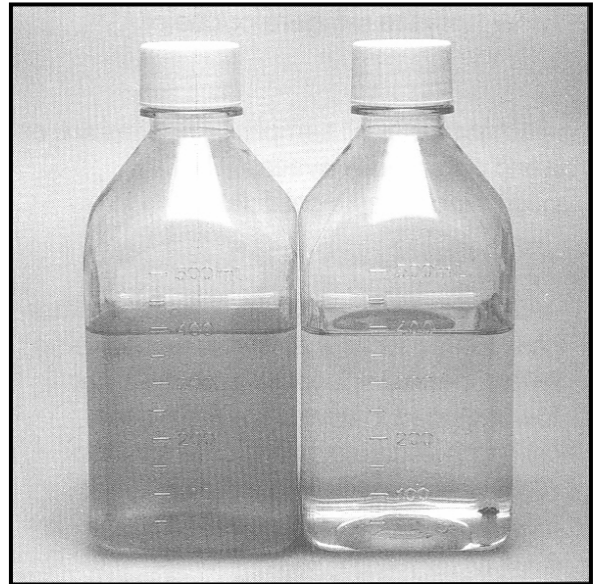
—Open a shipping container and check to ensure that all the supplies needed for sample collection are inside. Remove the supplies from the container. These can be stored in the government office.

—Check the Buffered Peptone Water (BPW) container for cloudiness. Prechill the BPW by placing it in a secure refrigerator. (If ground product is to be sampled, no BPW is required.)

*Note: Use only clear BPW. Do not use BPW that has any particulate matter, cloudiness, or turbidity. The containers of defective BPW should be clearly marked "bad," and returned to the supplying laboratory.*

—Place gel packs in the freezer.

—Place the open shipping container in the cooler/refrigerator to prechill.



**c. On the Day of Sampling**

—Gather the appropriate FSIS Form 10,210-7; the general supplies for sample collection (e.g., sample collection bags, sterile gloves); and the specific materials listed under the Materials section for the type of sample to be collected (e.g., template and specimen sponge for livestock and turkey samples or sterile ring for ground product).

You should already have removed these supplies from the shipping container the previous day when you placed the open container in the cooler.

Also remember to collect the sanitizing solution, if needed.

—Retrieve the appropriate container of BPW from the refrigerator/cooler.

—Ensure that all sampling supplies are on hand and readily available before beginning sample collection.

—Sanitize the cart, caddy<sup>1</sup>, tote<sup>1</sup>, or other designated work area surfaces by wiping with a clean disposable cloth or paper towel dipped in a freshly prepared 500 ppm sodium hypochlorite solution (0.05% sodium hypochlorite) or other approved sanitizing solution that provides an equivalent available chlorine concentration. The sample work area surfaces must be free of standing liquid before sampling supplies or product containers are placed on them.



If a sodium hypochlorite solution is used, it must be made just prior to its use, since its strength diminishes upon standing.

The hypochlorite solution is made by adding

2-4 oz of sodium hypochlorite (Purex® or its equivalent)<sup>1</sup> to one gallon (128 oz) of potable water. This will give a strength of 500-1000 ppm hypochlorite.

—Before starting the actual sample collection procedure, thoroughly wash and scrub your hands to the mid-forearm. Use antibacterial hand soap. Dry your hands using disposable paper towels. The abrasive effect of the paper will aid in removing additional bacteria.

---

<sup>1</sup>The IIC can purchase a plastic tote or caddy and Purex® bleach if necessary. Reimbursement of these expenses can be obtained either by submitting a travel voucher or an FSIS Form 1164.

## SAMPLE COLLECTION

### a. Cattle

---

#### *Materials*

- Sterile specimen sponge in sterile Whirl-Pak® bag
  - 10 ml sterile Buffered Peptone Water (BPW)
  - Sterile template in bag
  - Sterile gloves
  - Sodium hypochlorite sanitizing solution
  - Wheeled ladder, sampling platform, or step ladder
  - Small tote or caddy for carrying supplies
- 



#### *Collection*

If necessary, reread earlier presampling sections (Three, Four, and Five) in this guide before beginning the sampling procedure.

A single, sterile, BPW-moistened sampling sponge will be used to sample three sites on the carcass—the **flank**, **rump**, and **brisket**. These sites are illustrated in Attachment 4.

It is important to sponge the sampling sites in the order of "least to most" contaminated to avoid spreading contamination on the carcass. Be sure to sponge sampling sites in the sequence indicated in this guide.

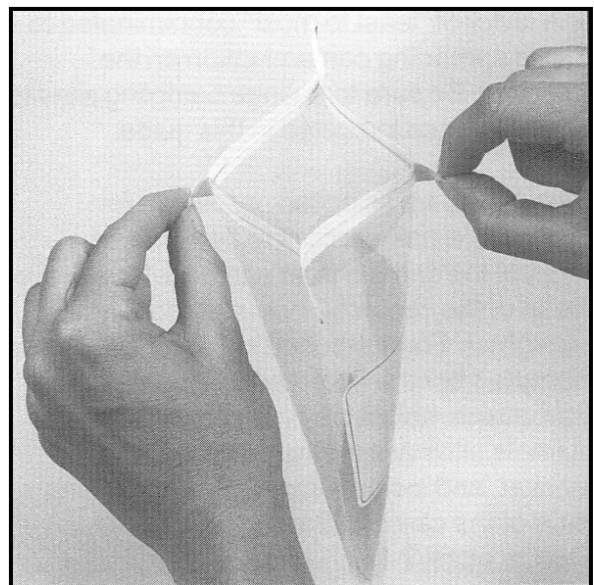
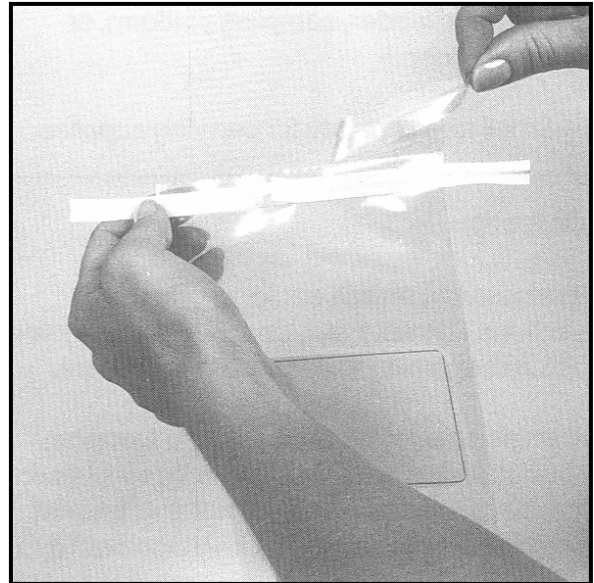
Use a random selection procedure for selecting a half-carcass to be sampled. Collect the sample from carcasses that have been in the cooler 12 hours or more after slaughter. For hot-boned carcasses, take the sample after the final wash. For hide-on calf carcasses, select a whole carcass. The sample sites are the inside flank, inside brisket, and inside rump. Only sample one side of the carcass. See Section Three, Part a, page 3-1.

## Section Six

Conduct nondestructive surface sampling as follows:

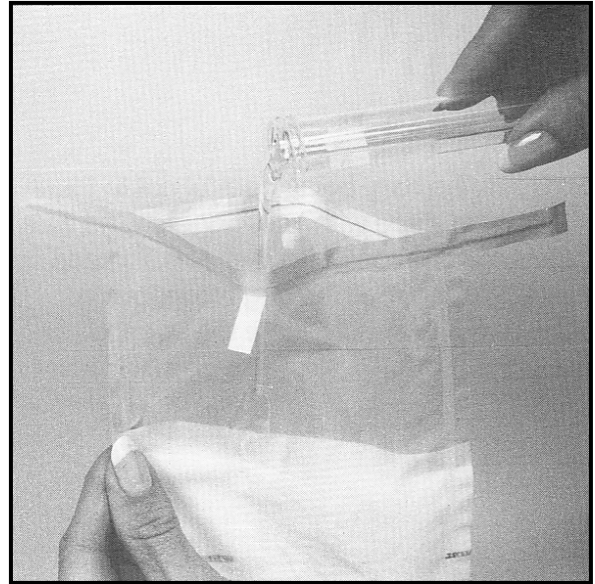
1. Ensure that all bags and supplies are on hand. Label the sample bag (Whirl-Pak® with sponge) with the bar code sticker.
2. Wash, sanitize, and dry your hands.
3. Locate the **flank**, **brisket**, and **rump** sampling sites using the directions and illustrations in Attachment 4.
4. Position the wheeled ladder, sampling platform, or step ladder near the carcass so the **rump** sample site is within easy reach from the ladder. Keep your personal safety in mind.

5. Open the sponge bag by holding it at one corner by the wire closure (usually colored white or yellow). Tear off the clear, perforated strip at the top of the bag. Do not remove or tear off the wire closures. Now pull apart the two small white tabs on either side of the bag to open the mouth of the bag.

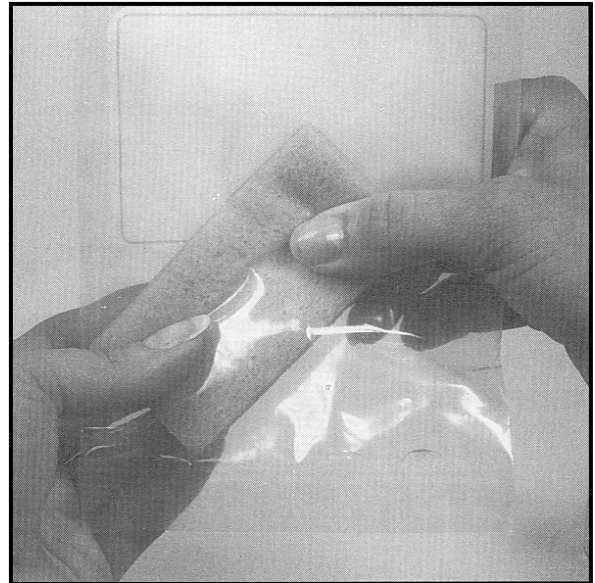




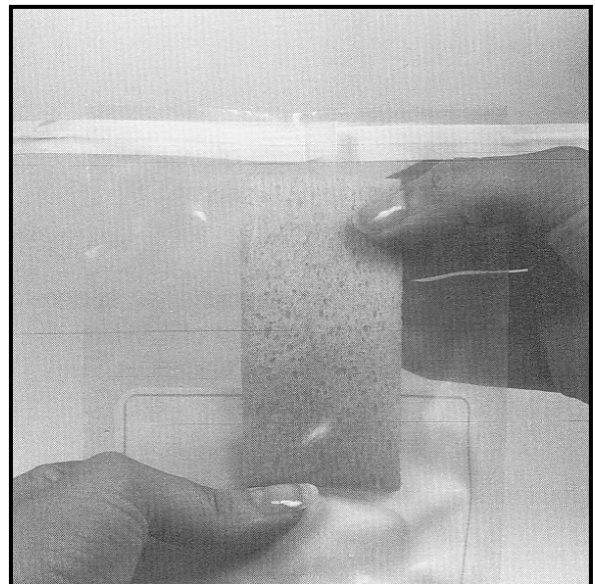
6. Remove the cap from the sterile prechilled BPW container, being careful not to touch the container opening. Carefully pour the entire contents of the BPW container (10 ml) into the sponge bag to moisten the sponge; then set the container aside.



7. Press the wire closures back together to close the top of the sponge bag. Use hand pressure on the bag to carefully massage the sponge until it is fully moistened.

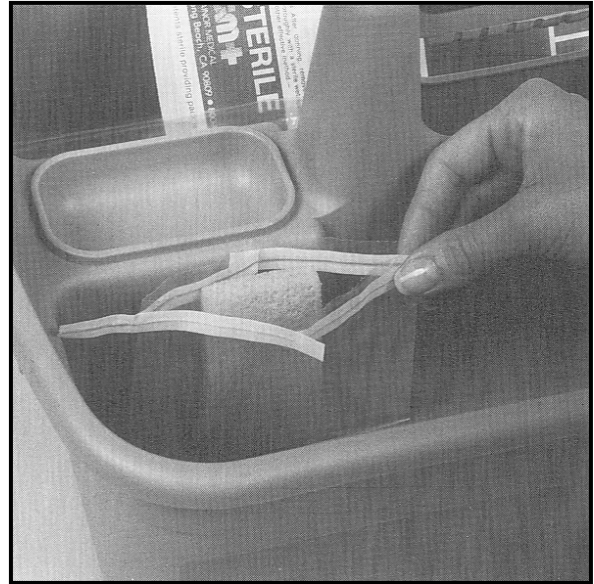


8. With the bag still closed, carefully push the moistened sponge to the upper portion of the bag. Position one width end of the sponge toward the opening.

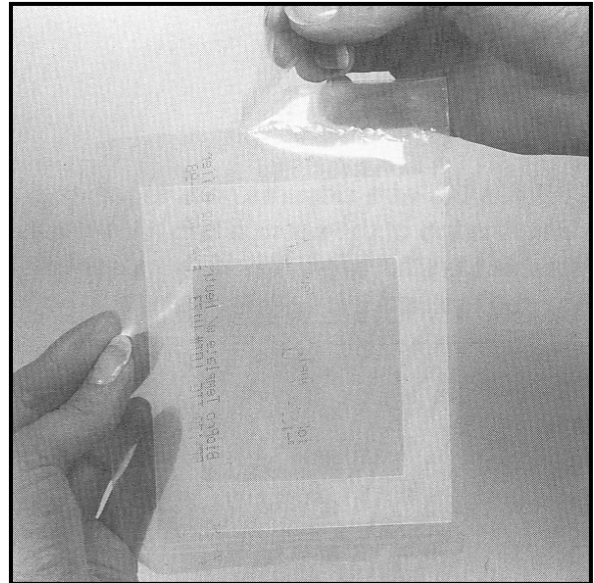


## Section Six

9. Open the bag, being careful not to touch its inner surface with your fingers. The wire closure at the top of the bag should keep the bag open. Set the bag aside, being careful not to contaminate the sponge.



10. Open the template bag by holding the bag at one corner and tear off the clear, perforated strip at the top of the bag. Set the bag aside, being careful not to contaminate the template.



11. *Put on a pair of sterile gloves* as described in Section Four, **Aseptic Sampling Techniques**.

12. Carefully remove the moistened sponge from the bag by grasping the end of the sampling sponge with your sampling hand. Do not touch the outside of the bag.

13. With your other hand, retrieve the template by its outer edge, taking care not to contaminate the inner edges that define the template's sampling area.

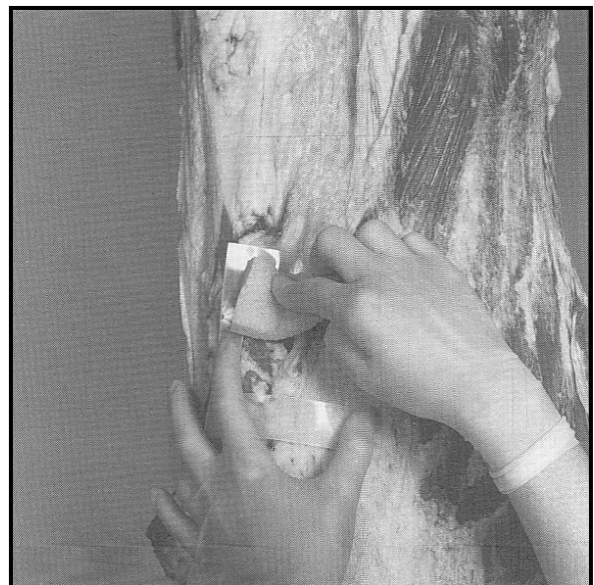


14. Place the template over the **flank** sampling area and hold it in place. Be careful not to contaminate the enclosed sampling area with your hands.



15. With your sampling hand, wipe the sponge over the entire enclosed area (10 cm x 10 cm) approximately 10 times vertically and 10 times horizontally. (See **Sponging Technique**, page 4-4.)

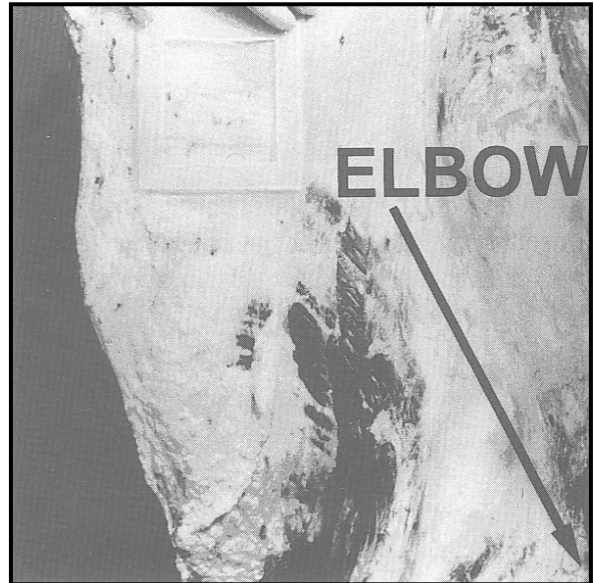
You may need to "roll" the template from side to side as you sponge since the surface of the carcass is not flat. This will ensure that the sample area is a full 100 cm<sup>2</sup>.



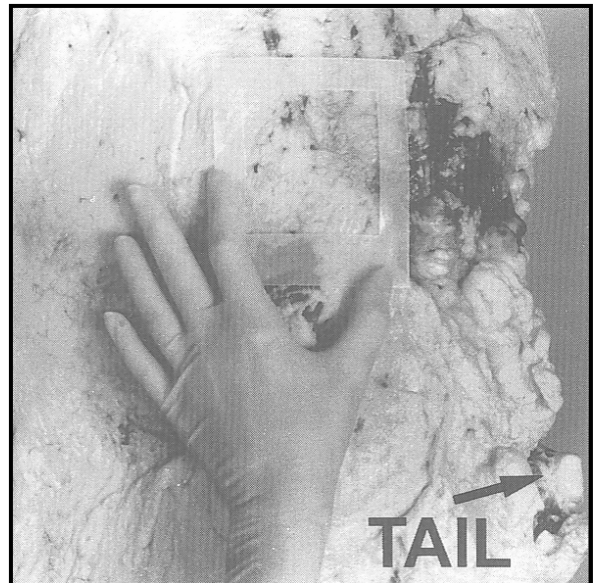
Section Six

16. Repeat steps 14-15 for the **brisket** area, using the **same** surface of the sponge that you used to wipe the **flank** sampling area.

17. After sponging the **brisket** area, transfer the template to your sampling hand. Be careful not to contaminate the inner edges of the template's sampling area.



18. Climb the ladder or platform, holding on to the handrail with the hand not used to perform sponging. This glove is now contaminated and must be treated as such, so do not handle any sterile surfaces with it. Once you are at a convenient and safe height for sampling the **rump**, transfer the template back to your "climbing" hand, taking care not to contaminate the inner edges of the template's sampling area. Also take care not to contaminate your sampling hand.

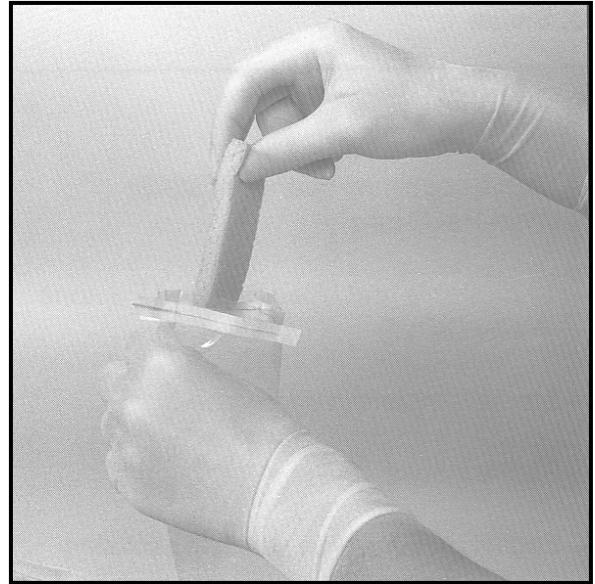


19. Repeat steps 14-15 for the **rump** area, this time using the "clean" surface or side of the sponge—the side that was not used to wipe the **flank** and **brisket** area.

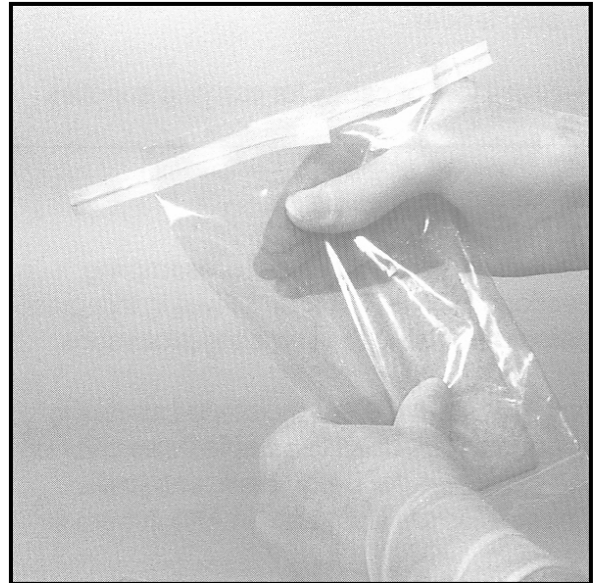
20. After sponging the **rump** area, transfer the template back to the sampling hand. Be careful not to contaminate the sponge.

21. Climb down from the ladder while holding the handrail with your "climbing" hand.

22. Lay the template aside to discard later. Carefully place the sponge back into the sample bag. Be careful not to touch the outside of the bag with the sponge.

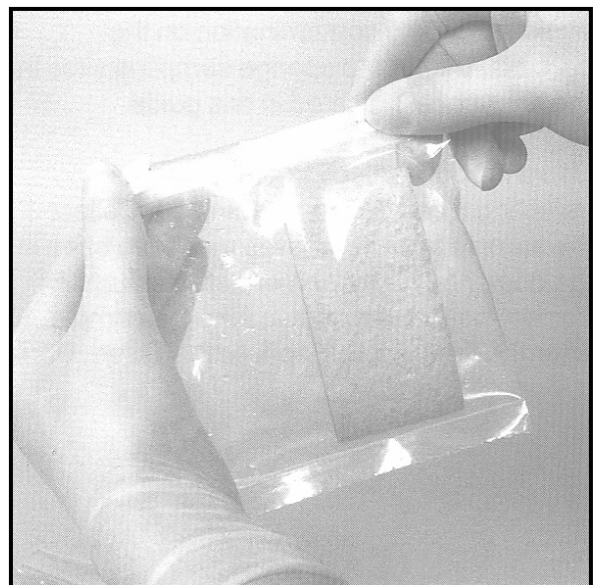


23. Expel any excess air from the sample bag and fold over the top edge of the bag 3 or 4 times to close it. Secure the bag by folding the attached wire back against the bag. Do not double-bag the sample. You can discard the template.



24. Repeat these steps above for each *Salmonella* testing program sample requested. (Note: There will be a separate sample request form for each sample to be collected.) Use a different carcass for each sample.

25. Follow the procedures described for **Sample Storage** (Section Eight) and **Sample Shipment** (Section Nine).



**b. Swine**

---

*Materials*

- Sterile specimen sponge in sterile Whirl-Pak® bag
  - 10 ml sterile prechilled Buffered Peptone Water (BPW)
  - Sterile template in bag
  - Sterile gloves
  - Sodium hypochlorite sanitizing solution
  - Wheeled ladder, sampling platform, or step ladder
  - Small tote or caddy for carrying supplies
- 

*Collection*

If necessary, reread earlier presampling sections (Three, Four, and Five) in this guide before beginning the sampling procedure.

A single, sterile, BPW-moistened sampling sponge will be used to sample three sites on the carcass—the **belly**, **ham**, and **jowl**. These sites are illustrated in Attachment 4.

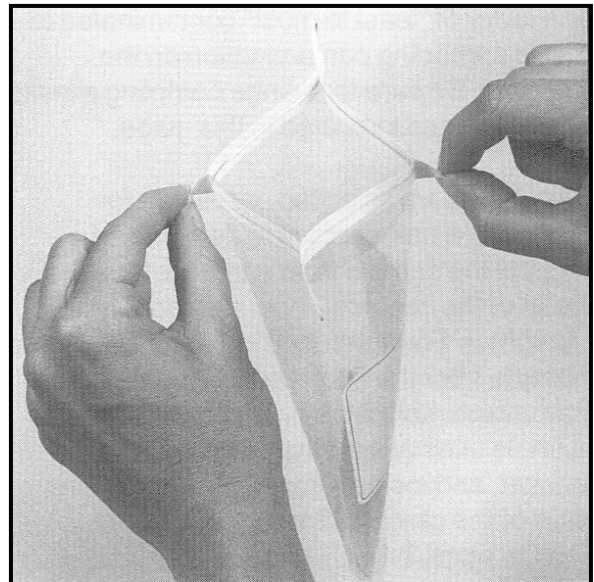
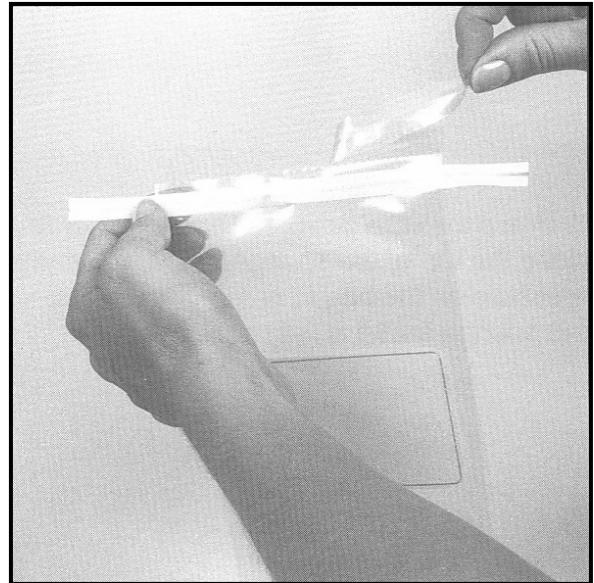
It is important to sponge the sampling sites in the order of "least to most" contaminated to avoid spreading contamination on the carcass. Be sure to sponge sampling sites in the sequence indicated in this guide.

Use a random selection procedure for selecting a carcass to be sampled. Collect the sample from carcasses that have been in the cooler 12 hours or more after slaughter. For hot-boned carcasses, take the sample after the final wash. See Section Three, Part b, page 3-2.

Conduct nondestructive surface sampling as follows:

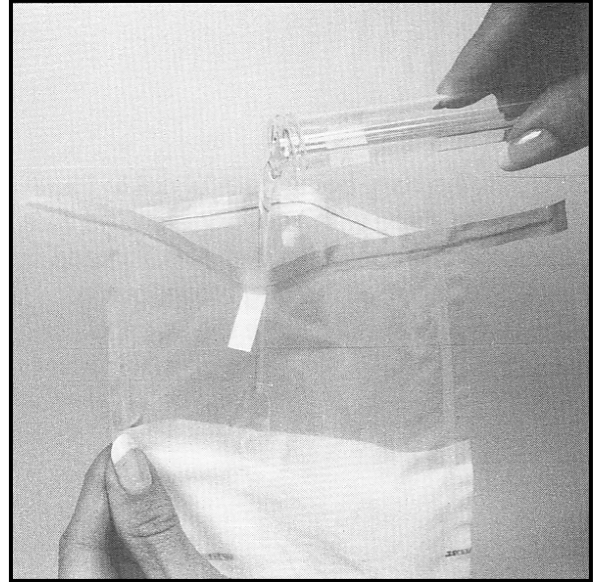
1. Ensure that all bags and supplies are on hand. Label the sample bag (Whirl-Pak® with sponge) with the bar code sticker.
2. Wash, sanitize, and dry your hands.
3. Locate the **belly, ham, and jowl** sampling sites using the directions and illustrations in Attachment 4.
4. Position the wheeled ladder, sampling platform, or step ladder near the carcass so the **ham** sample site is within easy reach from the ladder. Keep your personal safety in mind.

5. Open the sponge bag by holding it at one corner by the wire closure (usually colored white or yellow). Tear off the clear, perforated strip at the top of the bag. Do not remove or tear off the wire closures. Now pull apart the two small white tabs on either side of the bag to open the mouth of the bag.

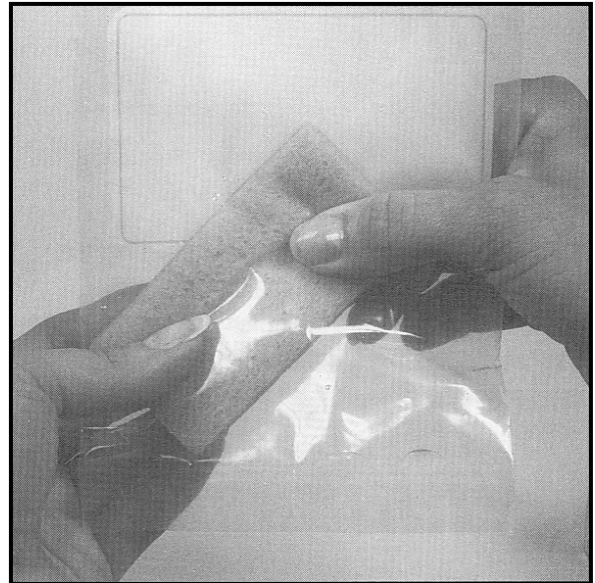


## Section Six

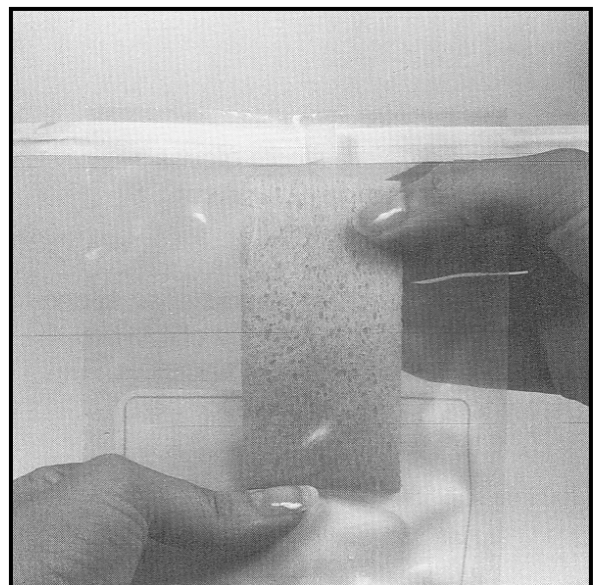
6. Remove the cap from the sterile prechilled BPW container, being careful not to touch the container opening. Carefully pour the entire contents of the BPW container (10 ml) into the sponge bag to moisten the sponge; then set the container aside.



7. Press the wire closures back together to close the top of the sponge bag. Use hand pressure on the bag to carefully massage the sponge until it is fully moistened.

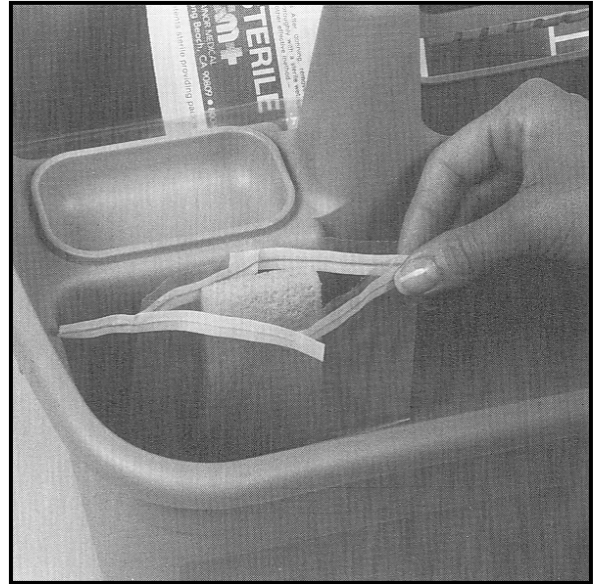


8. With the bag still closed, carefully push the moistened sponge to the upper portion of the bag. Position one width end of the sponge toward the opening.

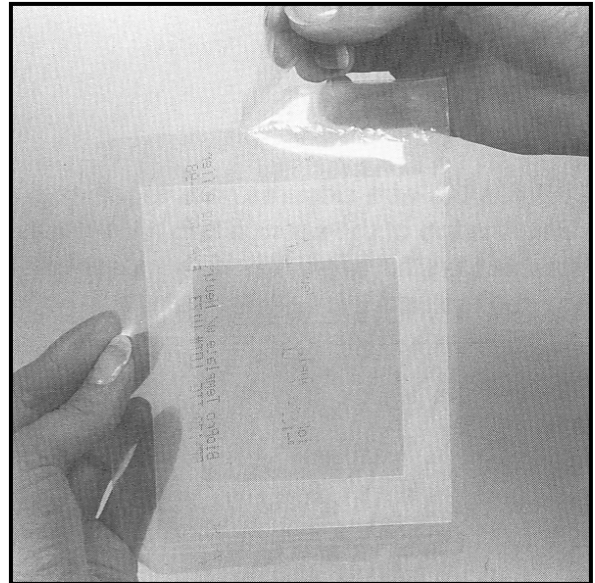




9. Open the bag, being careful not to touch its inner surface with your fingers. The wire closure at the top of the bag should keep the bag open. Set the bag aside, being careful not to contaminate the sponge.



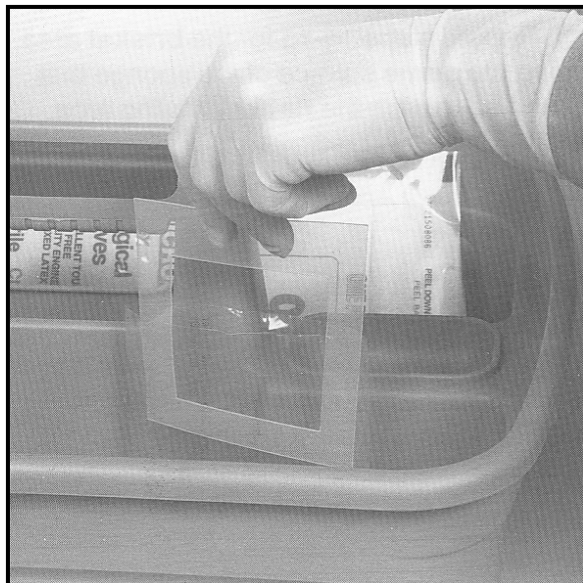
10. Open the template bag by holding the bag at one corner and tear off the clear, perforated strip at the top of the bag. Set the bag aside, being careful not to contaminate the template.



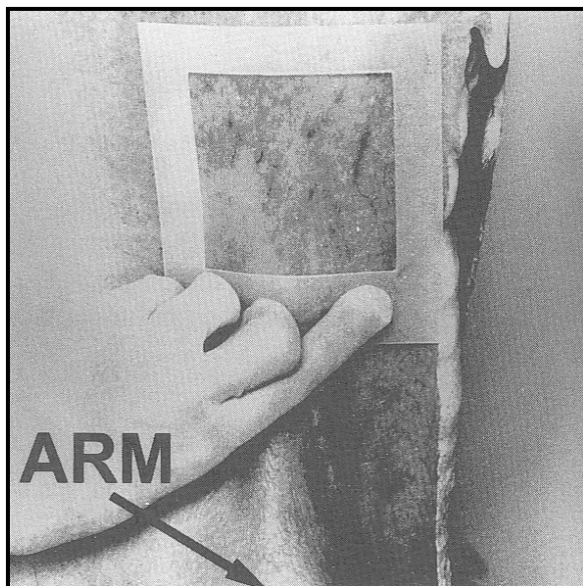
11. *Put on a pair of sterile gloves* as described in Section Four, **Aseptic Sampling Techniques**.

12. Carefully remove the moistened sponge from the bag by grasping the end of the sampling sponge with your sampling hand. Do not touch the outside of the bag.

13. With your other hand, retrieve the template by its outer edge, taking care not to contaminate the inner edges that define the template's sampling area.

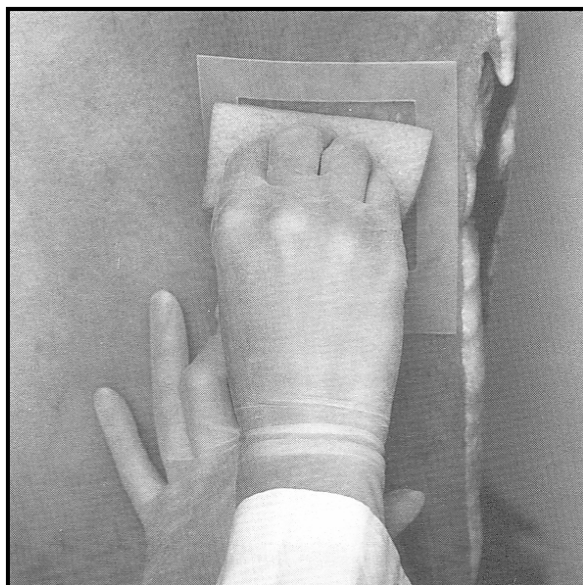


14. Place the template over the **belly** sampling area and hold it in place. Be careful not to contaminate the enclosed sampling area with your hands.



15. With your sampling hand, wipe the sponge over the entire enclosed area (10 cm X 10 cm) approximately 10 times vertically and 10 times horizontally. (See **Sponging Technique**, page 4-4.)

You may need to "roll" the template from side to side as you sponge since the surface of the carcass is not flat. This will ensure that the full 100 cm<sup>2</sup> area is sampled during the sponging.



16. After sponging the **belly** area, transfer the template to your sampling hand. Be careful not to contaminate the inner edges of the template's sampling area.

17. Climb the ladder or platform, holding on to the handrail with the hand not used to perform sponging. This glove is now contaminated and must be treated as such. Do not handle any sterile surfaces with it. Once you are at a convenient and safe height for sampling the ham, transfer the template back to your "climbing" hand, taking care not to contaminate the inner edges of the template's sampling area. Also take care not to contaminate your sampling hand.

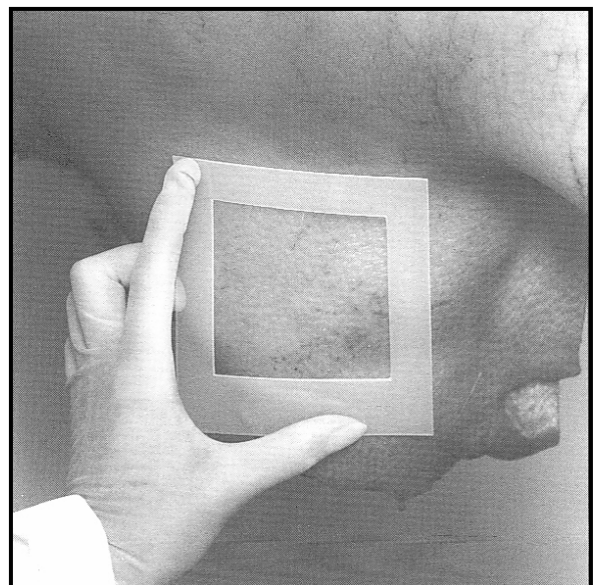
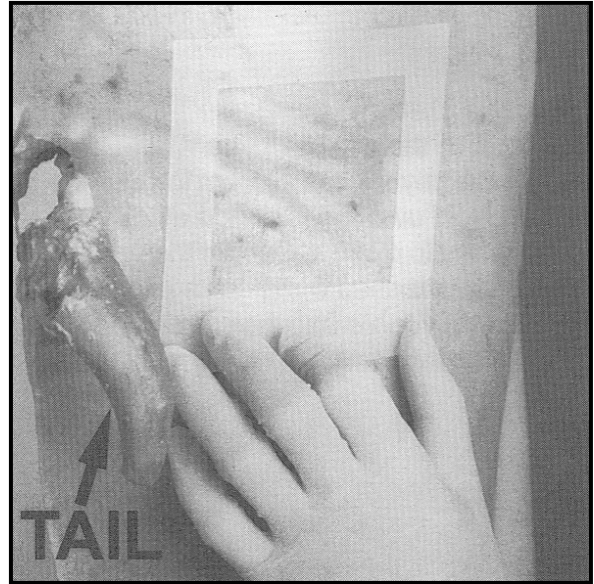
18. Repeat steps 14-15 for the **ham** area, using the same surface of the sponge that you used to wipe the **belly** area.

19. After sponging the **ham** area, carefully transfer the template back to the hand holding the sponge. Do not contaminate the inner edges of the template's sampling area.

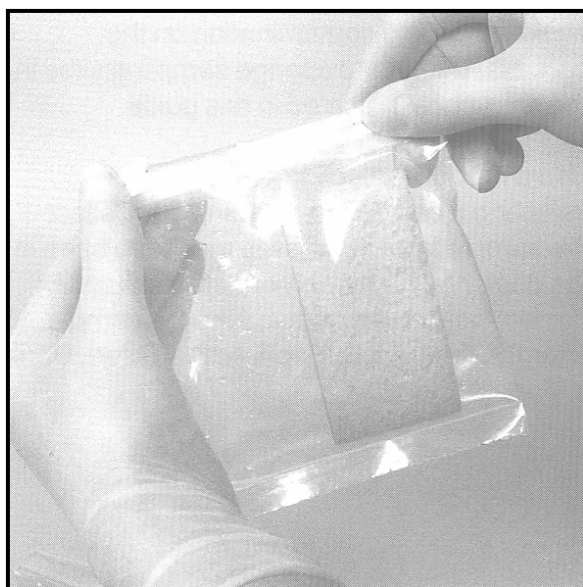
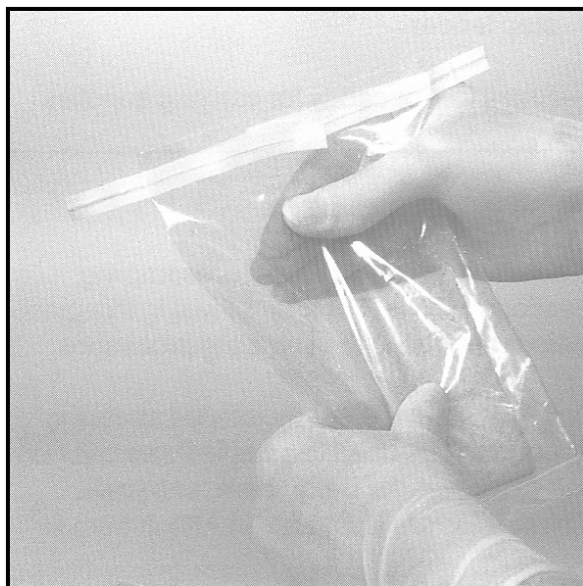
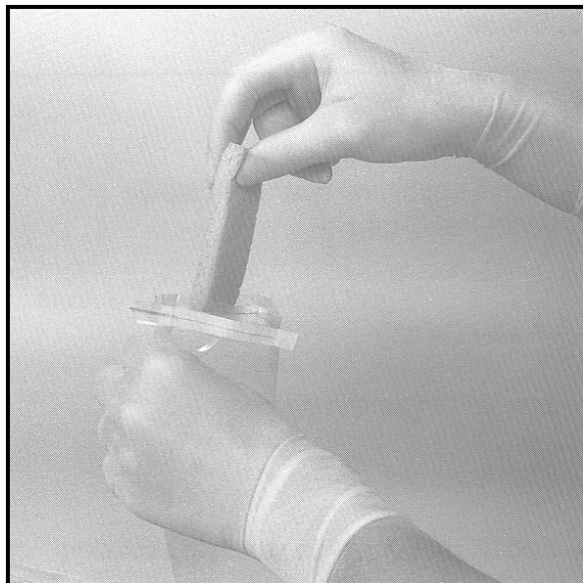
20. While holding the handrail with the hand not used for sampling, climb down the ladder.

21. Transfer the template from your sampling hand back to your other hand, taking care not to contaminate the template's inner edges.

22. Repeat steps 14-15 for the **jowl** area, this time using the "clean" surface or side of the sponge—the side that was not used to wipe the **belly** and **ham** areas.



23. Replace the sponge in the Whirl-Pak® bag. Expel any excess air from the sample bag and fold over the top edge of the bag 3 or 4 times to close it. Secure the bag by folding the attached wire back against the bag. Do not double-bag the sample. You can discard the template.



24. Repeat these steps above for each *Salmonella* testing program sample requested. (*Note:* There will be a separate sample request form for each sample to be collected.) Use a different carcass for each sample.

25. Follow the procedures described for **Sample Storage** (Section Eight) and **Sample Shipment** (Section Nine).

**c. Chicken***Materials*

- 1 large (3500 ml) sterile bag
- 400 ml sterile prechilled Buffered Peptone Water (BPW)
- Sterile gloves
- Sodium hypochlorite (or equivalent) sanitizing solution
- Empty, sterile screw-cap container (jar)
- 1 small resealable bag

*Collection*

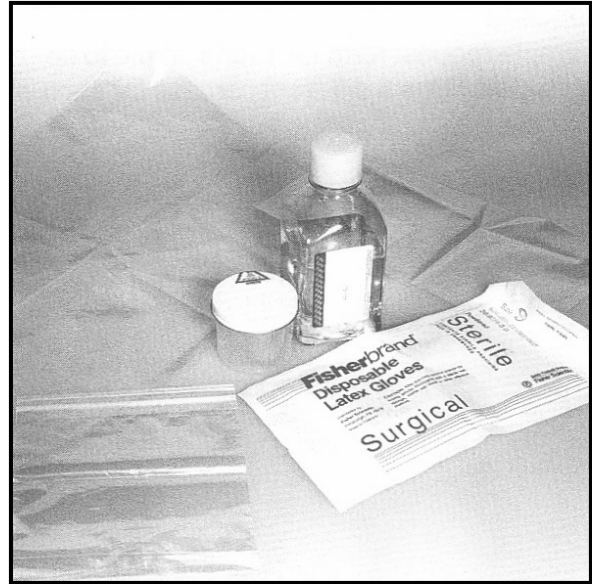
If necessary, reread earlier presampling sections (Three, Four, and Five) in this guide before beginning the sampling procedure.

Use a random selection procedure for selecting a carcass to be sampled. The selected bird should be collected after the chiller, at the end of the drip line, or at the last readily available point prior to packing/cut-up. *Note:* For safety purposes, do not remove the chicken from the shackles, but collect it after it has dropped from the line.

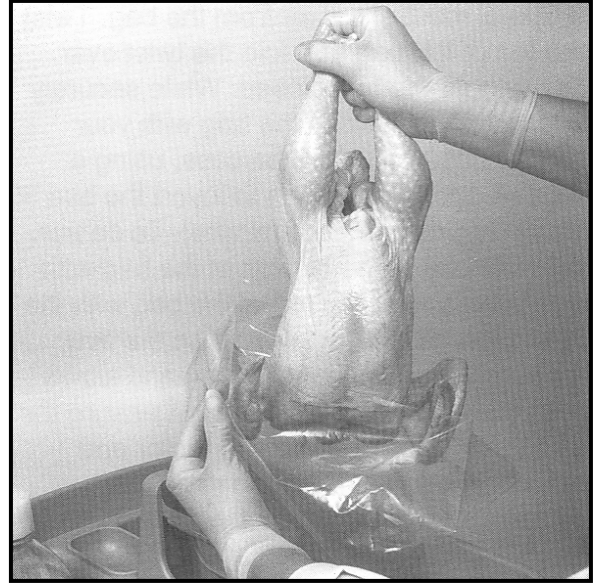
1. Ensure that all supplies are on hand. An assistant may be helpful during the sampling process to hold the large sterile sampling bag. Label the screw-cap container with the bar code sticker.
2. Wash, sanitize, and dry your hands.
3. Carefully open the *large* sterile bag. Do not contaminate the interior of the bag. The bag may lay on its side, opened, while you select the bird.

4. Put on sterile gloves as described in Section Four, **Aseptic Sampling Techniques**.

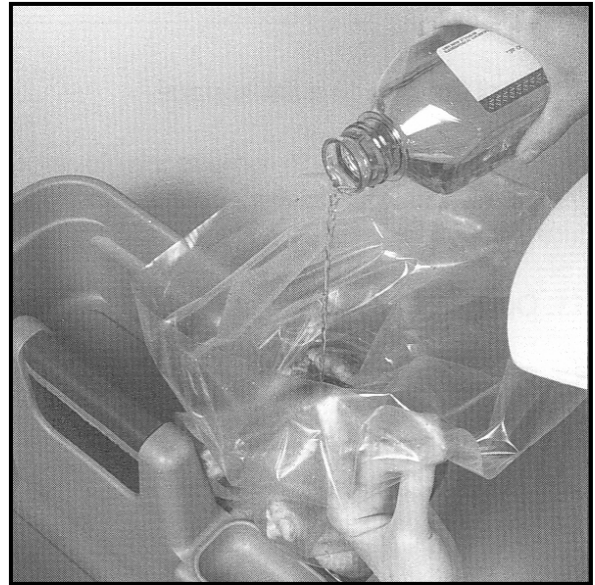
5. With one gloved hand, pick up the selected chicken carcass by the legs and allow any excess fluid to drain.



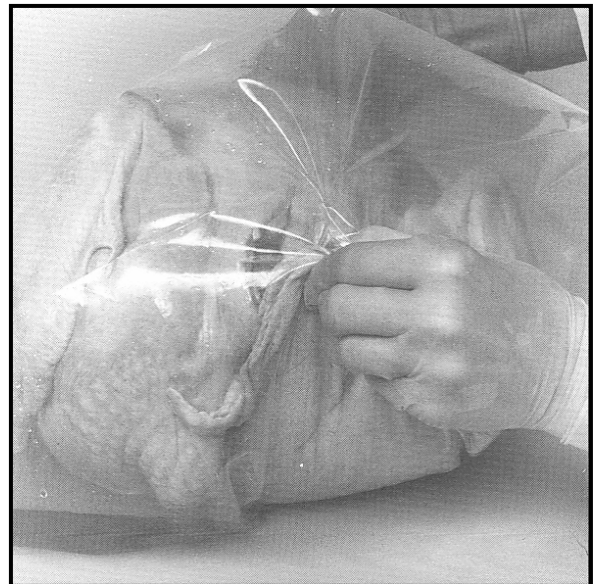
6. With your other hand, pick up the open sample bag. Place the bird in the sampling bag, with the legs and vent toward the bag opening. Do not touch the inside of the bag with either hand.



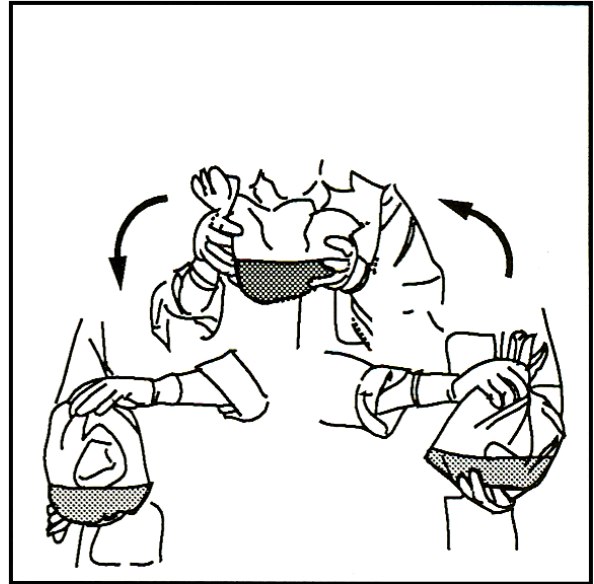
7. Rest the bottom of the bag on a flat surface. Holding the top of the bag slightly open, uncap the prechilled BPW container and pour its entire contents into the carcass cavity.



8. Pick up the bag by the top and, through the bag, manipulate the loose neck skin on the carcass to position it over the neck bone to act as a cushion and prevent punctures to the bag.



9. Expel most of the air from the bag. Twist the top of the bag and fold the twist over. Firmly hold the bag closed. While securely supporting the bird in the bag with your hands, rinse the entire carcass, using a repeated rocking motion to invert the bird 30 times (approximately 1 minute). To do this, hold the bird at the bottom of the bag with one hand and at the top of the bag with the other. Keeping a secure grip on the bird, repeatedly invert your bottom hand slowly over the top. This procedure will ensure that all surfaces of the carcass, interior and exterior, are rinsed. As you rinse the carcass, you should hear the fluid "slosh."

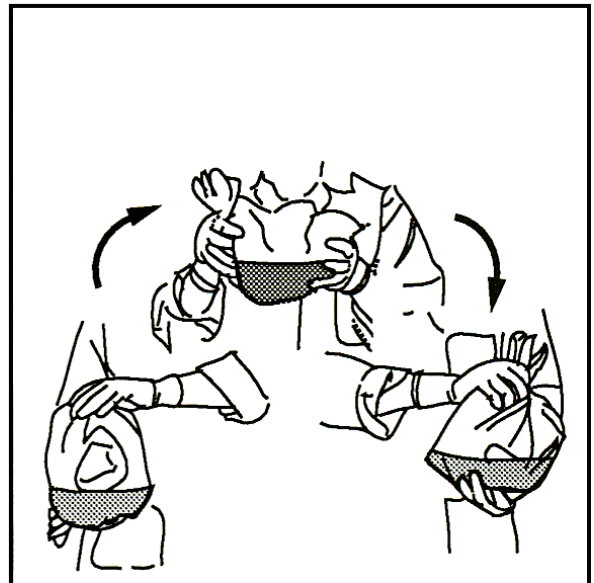


10. Rest the bag on a flat surface.

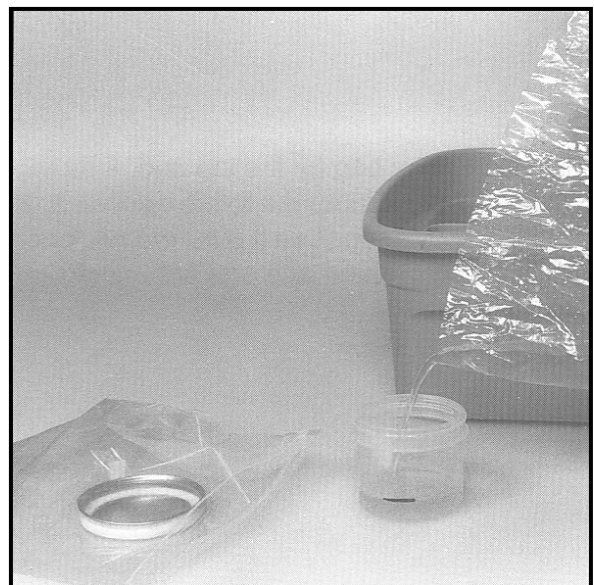
*Note:* It is acceptable to remove the gloves at this point. Continue to work in an aseptic manner.

11. Open the small resealable bag.

12. Remove the lid from the empty screw-cap container and place the lid in the bag. Be careful not to contaminate the lid or inside of the container.



13. Carefully open the bag containing the bird. With one hand, hold the chicken carcass through the bag by a leg. With the other, grasp the top corner of the bag. Using the "V" formed by the bag at the lower corner as a pouring spout, carefully pour the rinse fluid into the open container. Fill the container to the 30 ml volume line.





14. Remove the screw-top lid from the small resealable bag and close the sample container. Be sure not to touch the inside surfaces of the lid. Check to be sure that the lid is securely in place.

15. Place the sealed sample container in the small resealable bag, expel any excess air, and seal the bag.



16. Discard all the remaining rinse fluid into a drain.

17. Return the chicken carcass to the chill tank or to where you collected the bird.

18. Repeat these steps above for each *Salmonella* testing program sample requested. (Note: There will be a separate sample request form for each sample to be collected.) Use a different carcass for each sample.

19. Follow the procedures described for **Sample Storage** (Section Eight) and **Sample Shipment** (Section Nine).

**d. Turkey**

---

*Materials*

- Sterile specimen sponge in Whirl-Pak® bag
  - 10 ml sterile prechilled Buffered Peptone Water (BPW)
  - Sterile template in bag
  - 2 pair of sterile gloves
  - Sodium hypochlorite (or equivalent) sanitizing solution
  - Small tote or caddy for carrying supplies
- 

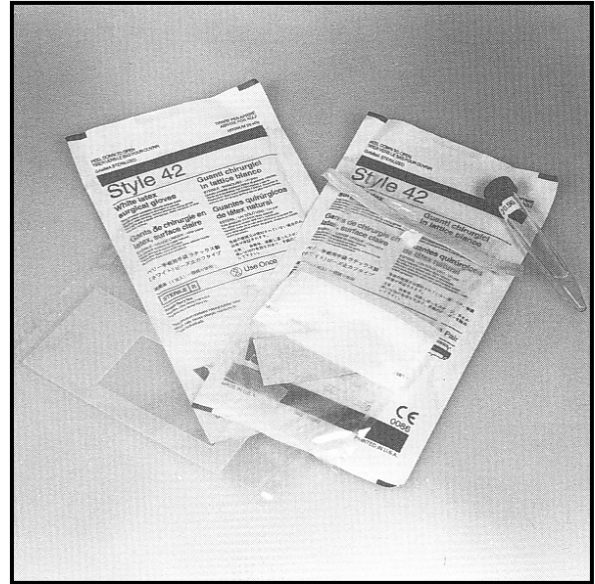
*Collection*

If necessary, reread earlier presampling sections (Three, Four, and Five) in this guide before beginning the sampling procedure.

A single, sterile BPW-moistened sampling sponge will be used to sample two sites on the carcass—the **midback** and **thigh**. These sites are illustrated in Attachment 4.

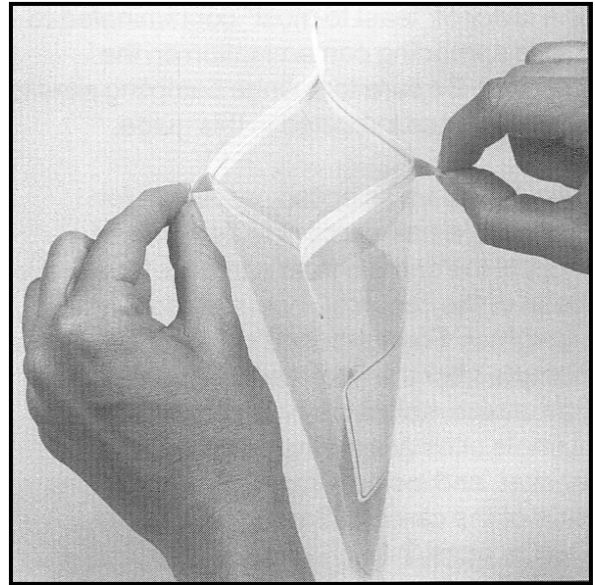
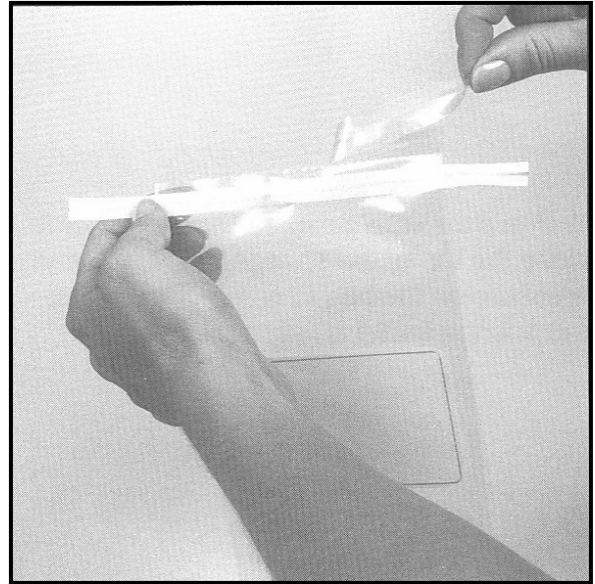
It is important to sponge the sampling areas in the order of "least to most" contaminated to avoid spreading contamination on the carcass. Be sure to sponge sampling sites in the sequence indicated in this guide.

Use a random selection procedure for selecting a carcass to be sampled. The selected bird should be collected after the chiller, at the end of the drip line, or at the last readily accessible point prior to packing/cut-up. *Note:* For safety purposes, do not remove the turkey from the shackles, but collect it after it has dropped from the line.

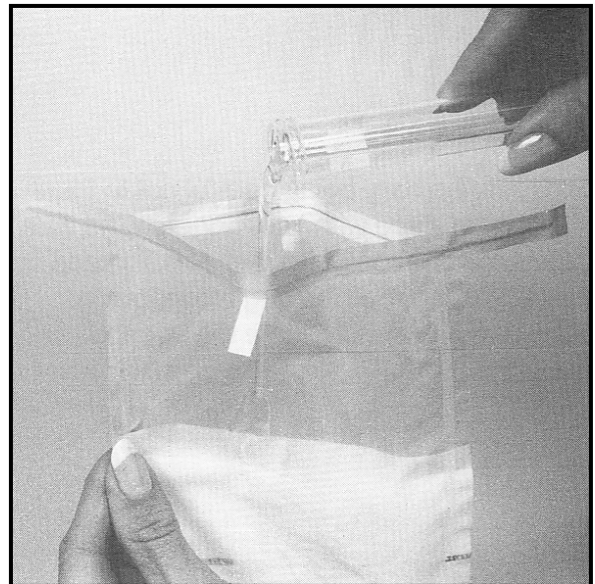


1. Ensure that all supplies are on hand. Label the Whirl-Pak® bag with the appropriate bar code sticker.
2. Wash, sanitize, and dry your hands.
3. Place clean paper towels, tray-pack absorbent pads, a sanitized wire rack, or equivalent on the sanitized sampling work surface. These will prevent the turkey carcass from slipping during sponge sampling.
4. *Put on one pair of sterile gloves* as described in Section Four, **Aseptic Sampling Techniques**.
5. Go to the collection point and pick up the selected turkey by grasping its legs. Do not touch the **back** or **thigh** areas. Allow any excess fluid to drain from the cavity.
6. Place the turkey breast down on the towels, pads, or wire rack. Be careful that the sample sites (**midback** and **thigh**) do not touch any holding or supporting surfaces. Either the left or right **thigh** may be sampled.
7. Remove and discard the gloves.

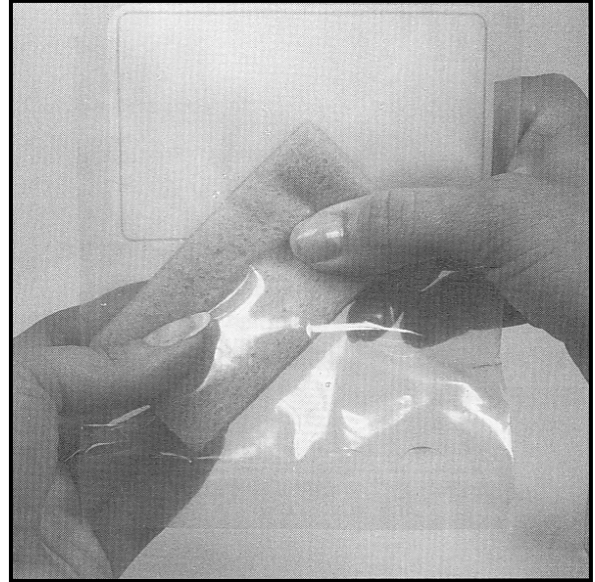
8. Open the sponge bag by holding it at one corner by the wire closure (usually colored white or yellow). Tear off the clear, perforated strip at the top of the bag. Do not remove or tear off the wire closures. Now pull apart the two small white tabs on either side of the bag to open the mouth of the bag.



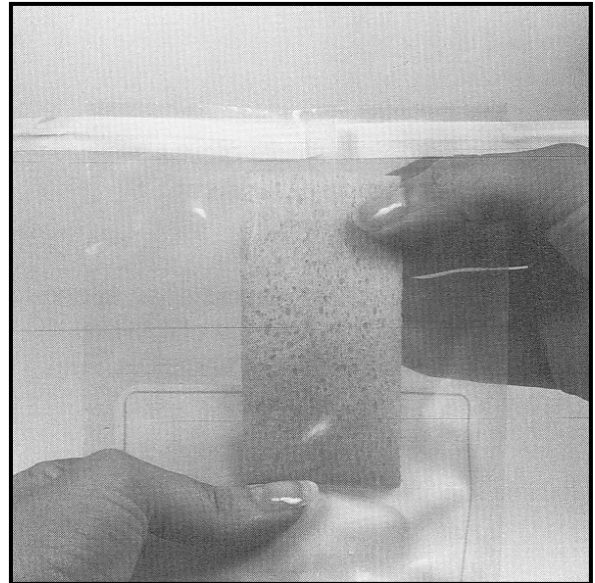
9. Remove the cap from the prechilled sterile BPW container, being careful not to touch the container opening. Carefully pour the entire contents of the BPW container (10 ml) into the sponge bag to moisten the sponge; then set the container aside.



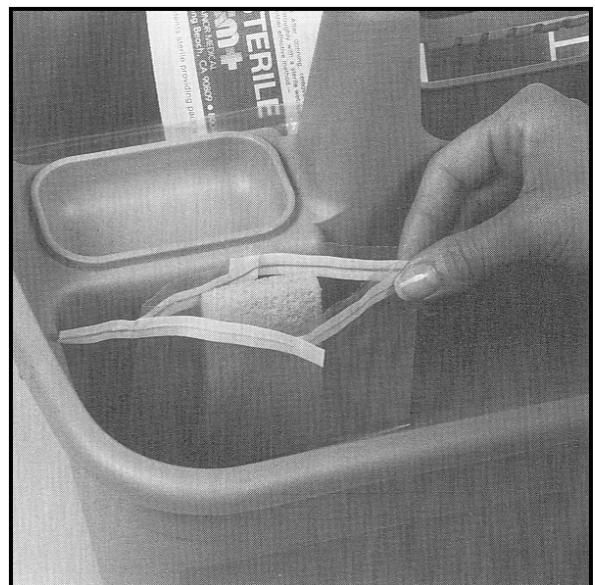
10. Press the wire closures back together to close the top of the sponge bag. Use hand pressure on the bag to carefully massage the sponge until it is fully moistened.



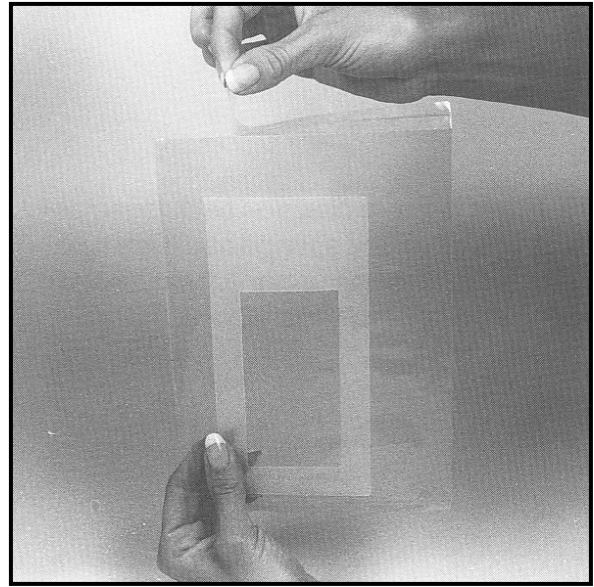
11. With the bag still closed, carefully push the moistened sponge to the upper portion of the bag. Position one width end of the sponge toward the opening.



12. Open the bag, being careful not to touch its inner surface with your fingers. The wire closure at the top of the bag should keep the bag open. Set the bag aside, being careful not to contaminate the sponge.



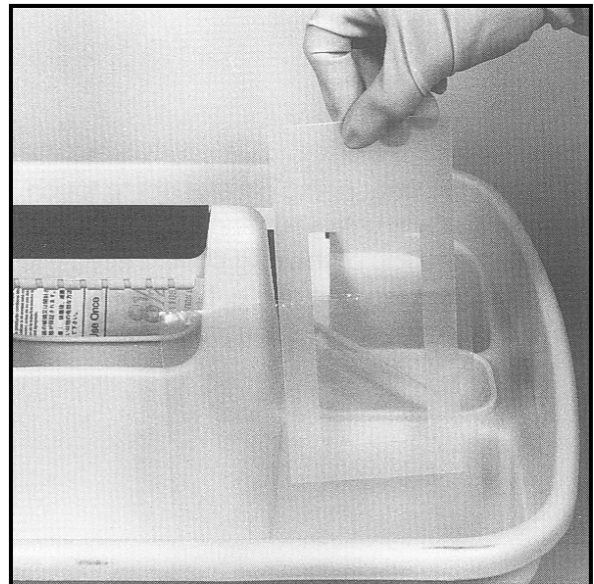
13. Open the template bag by holding the bag at one corner and tear off the clear, perforated strip at the top of the bag. Set the bag aside, being careful not to contaminate the template.



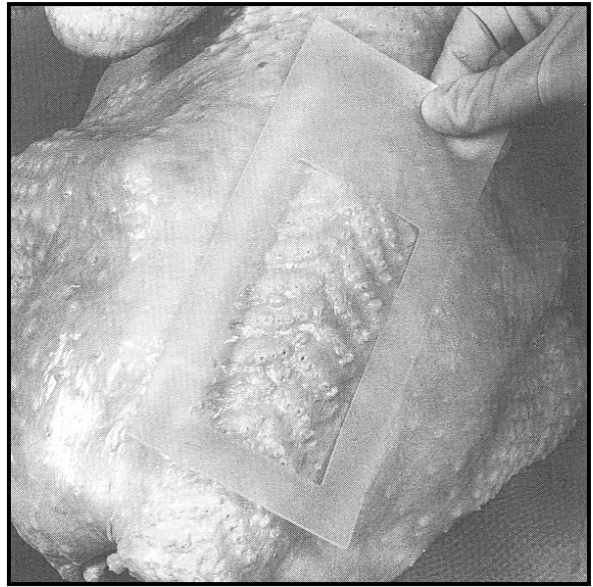
14. Put on the second pair of sterile gloves as described in Section Four, **Aseptic Sampling Techniques**.

15. Carefully remove the moistened sponge from the bag by grasping the end of the sampling sponge with your sampling hand. Do not touch the outside of the bag.

16. With your other hand, retrieve the template by its outer edge, taking care not to contaminate the inner edges that define the template's sampling area.



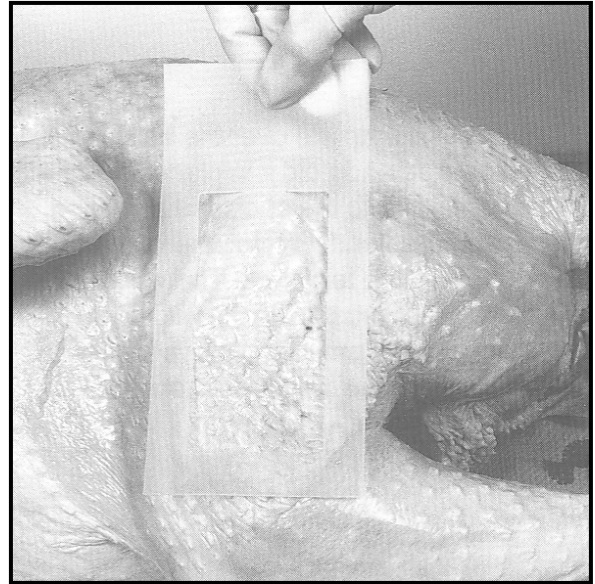
17. Place the template over the **back** sampling area and hold it in place. Be careful not to contaminate the enclosed sampling area with your hands. Note where on the back to place the template. The vertebral column (spine) must be in the middle so there is an equal amount of space to the left and the right of the spine for sponging.



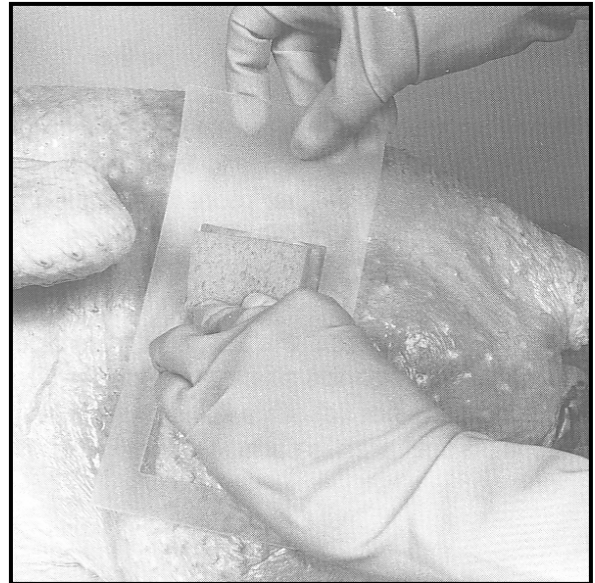
18. With your sampling hand, wipe the sponge over the entire enclosed area (5 cm x 10 cm) approximately 10 times vertically and 10 times horizontally. Refer to **Sponging Technique**, page 4-4, for more information on how to sponge the sampling site. Use only one side of the sponge.

You may need to "roll" the template from side to side as you sponge since the surface of the carcass is not flat. This will ensure that the full 50 cm<sup>2</sup> area is sampled during the sponging.

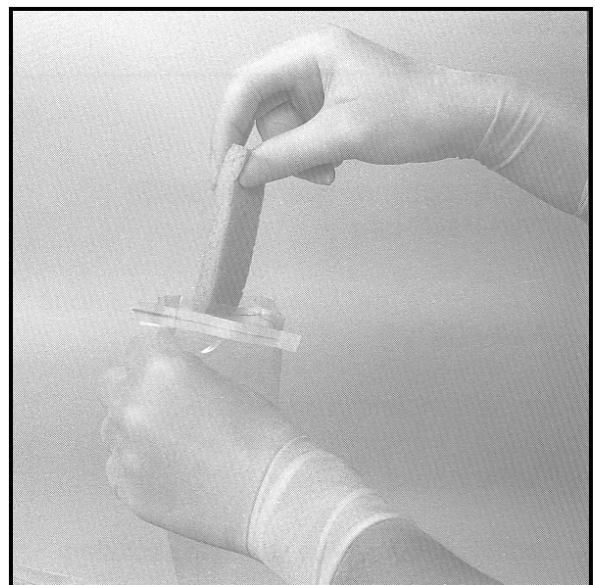
19. Place the template over the **thigh** sampling area. Note that this is the area between the hip and the knee. Be careful not to touch the area inside the template.



20. Repeat Step 18 for the **thigh** area. Turn the sponge over so the **unused**, opposite side of the sponge will contact the **thigh** surface.

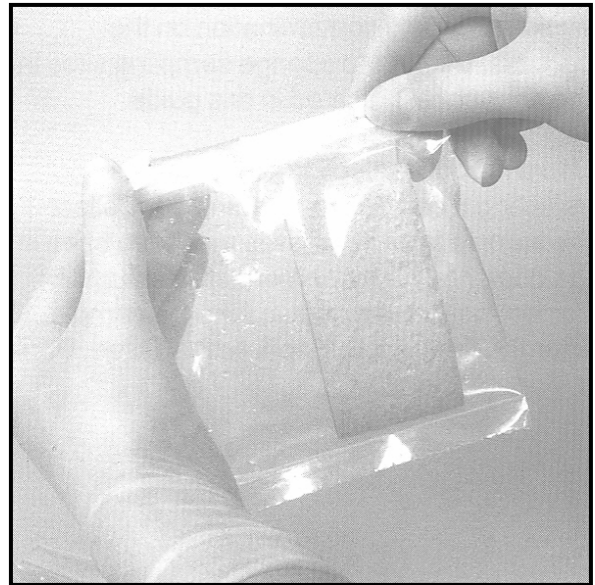
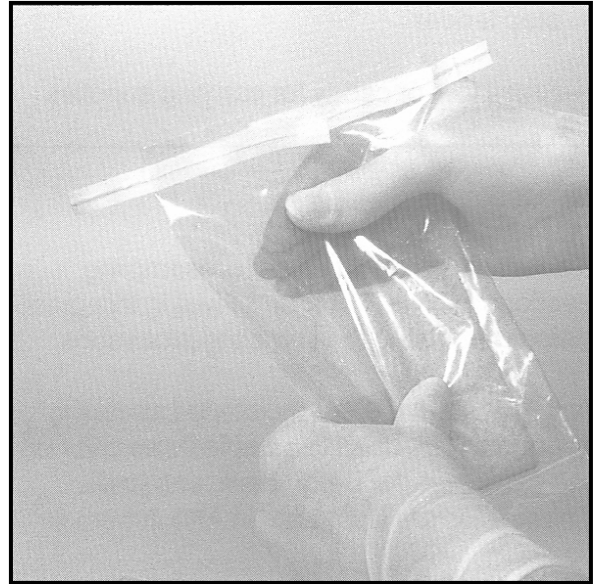


21. Replace the sponge in the sample bag. Be careful not to touch the outside of the bag with the sponge.





22. Expel any excess air from the sample bag and fold over the top edge of the bag 3 or 4 times to close it. Secure the bag by folding the attached wire back against the bag. Do not double-bag the sample. You can discard the template.



23. Return the turkey carcass to the point where you collected the bird.

24. Repeat these steps above for each *Salmonella* testing program sample requested. (Note: There will be a separate sample request form for each sample to be collected.) Use a different carcass for each sample.

25. Follow the procedures described for **Sample Storage** (Section Eight) and **Sample Shipment** (Section Nine).

## e. Ground Product

### Materials

- Sterile Whirl-Pak® sample bag with a sterile clear, rigid plastic ring template over-wrapped in a sealed sheet of sterile plastic
- Sterile gloves
- Sodium hypochlorite (or equivalent) sanitizing solution
- Small tote or caddy for carrying supplies

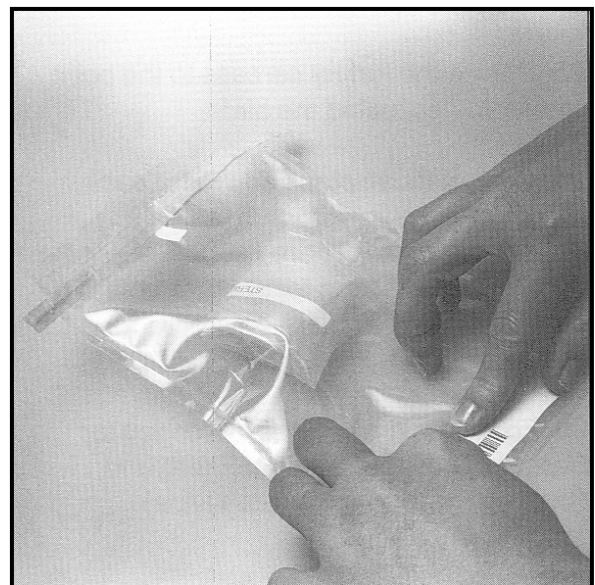
### Collection

If necessary, reread earlier presampling sections (Three, Four, and Five) in this guide before beginning the sampling procedure.

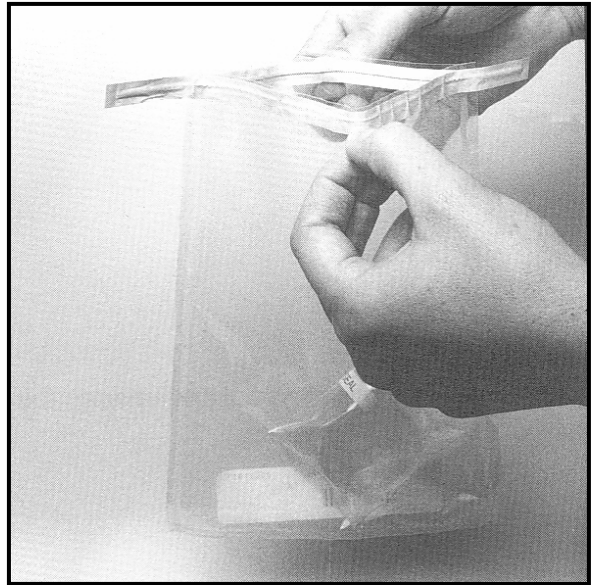
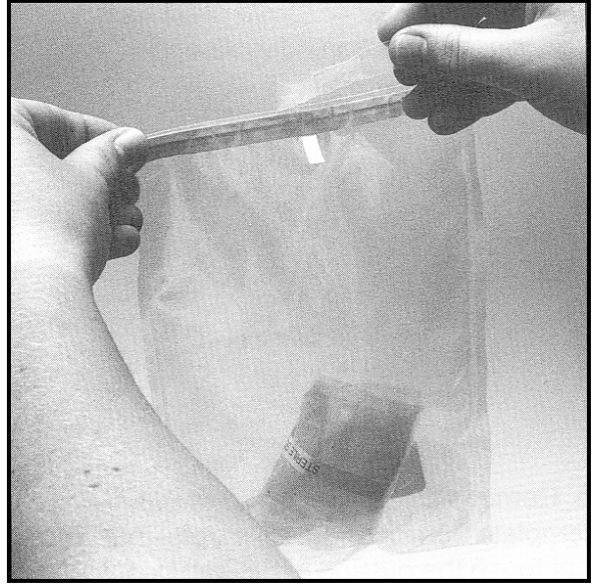
Random samples of ground product will be collected after the grinding process and, if possible, before the addition of spices/seasonings, but prior to final packaging. Where it is not possible, or is unsafe, to collect product prior to packaging, samples may be aseptically taken after packaging just prior to chilling or freezing. Select several packages from which to collect a portion of the sample. Sanitize the outside of the packages and the utensils used to open the packages. On a sanitized surface, aseptically open all the packages and follow the steps outlined below.

1. Ensure that all supplies are on hand. Label the Whirl-Pak® bag with the appropriate bar code sticker.

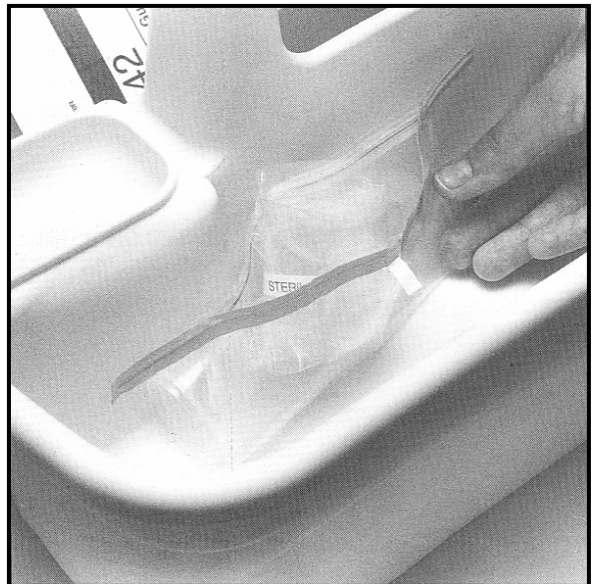
2. Wash, sanitize, and dry your hands.



3. Open the Whirl-Pak® bag by holding it at one corner by the wire closure (usually colored white or yellow). Tear off the clear, perforated strip at the top of the bag. Do not remove or tear off the wire closures. Now pull apart the two small white tabs on either side of the bag to open the mouth of the bag.



4. Manipulate the sterile plastic wrapped ring up to the top of the bag. Do this through the outside of the bag. Fold the bottom of the bag to keep the ring at the top, and set the bag upright on a sterile surface. Be careful **not** to contaminate the ring or the inside of the bag.



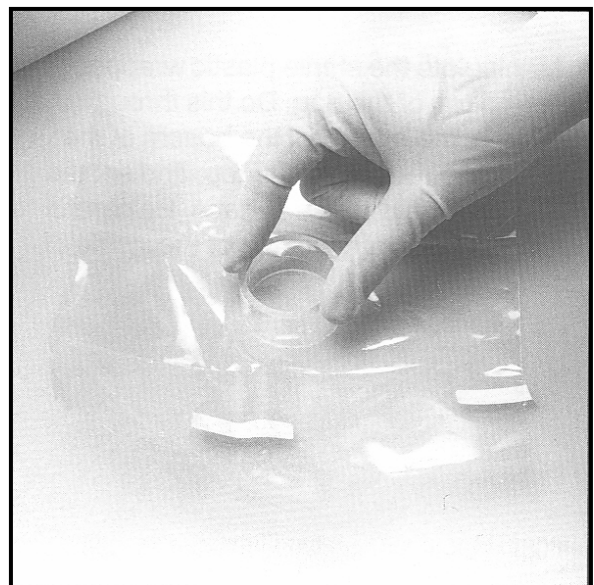
5. Put on the pair of sterile gloves as described in Section Four, **Aseptic Sampling Techniques**.

6. Remove the sterile plastic wrapped ring template from the bag. Be careful that you do not touch the outside of the bag or any other nonsterile surface.



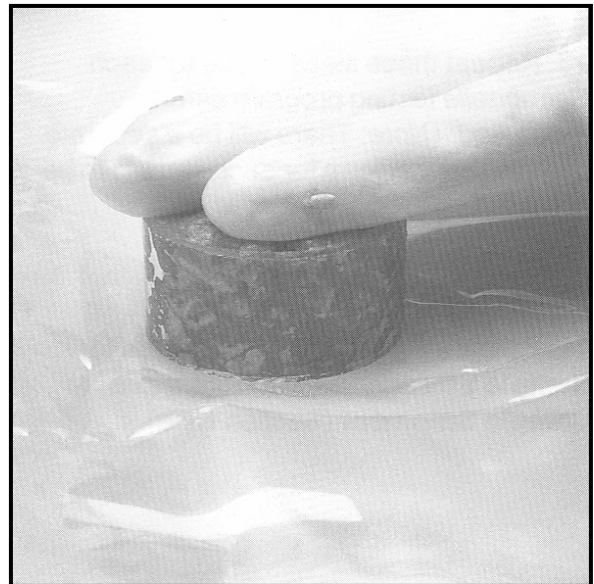
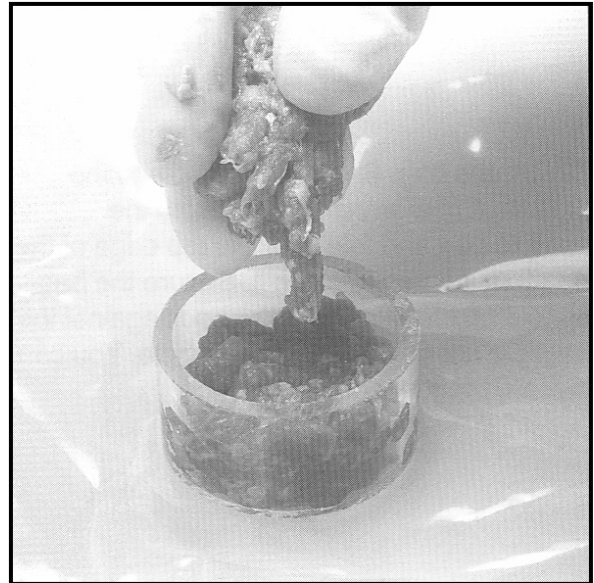
7. Open the sterile tape/seal and unwrap the sterile plastic ring template.

8. Place the sterile sheet of plastic on a flat sanitized work surface. Place the sterile rigid plastic ring in the center of the plastic sheet.

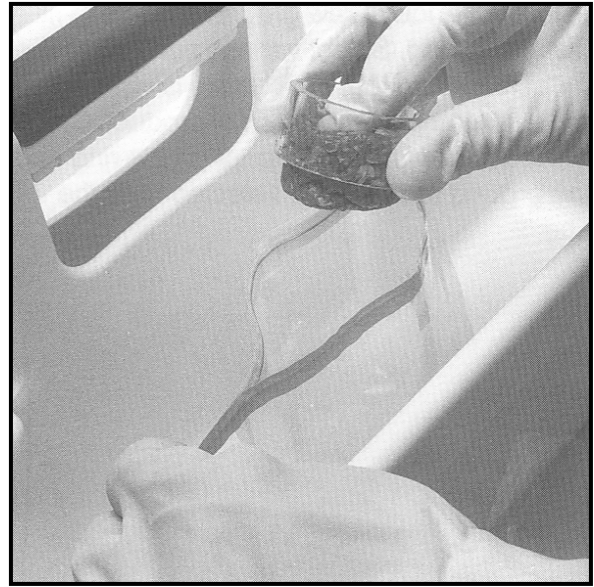


9. Collect enough raw ground product to fill the sterile ring. Select various portions of the meat to ensure that the sample is representative of the batch of product. Do not touch any surface except for the ring and the ground product you selected to fill the ring.

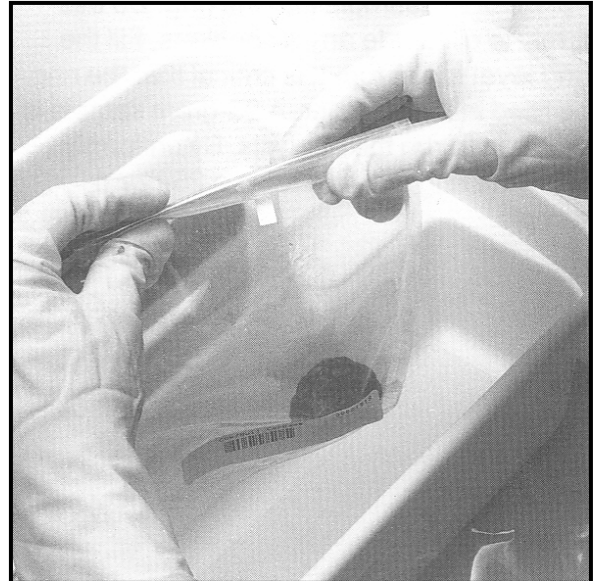
10. Pack the sample into the ring. Do this firmly to eliminate any air pockets. Fill the ring level to the top. It is critical that the ring be filled in this manner. A 25-gram sample is required to run the analysis. By uniformly filling the ring, you will have a 25-gram sample.



11. Lift the filled ring from the plastic sheet. Hold the ring over the open end of the sterile Whirl-Pak® bag. Push the sample out of the ring and into the bag. Do not let the sample touch anything other than the inside of the bag.



12. Lift the bag. Shake the sample to the bottom. Expel any excess air from the sample bag and fold over the top edge of the bag 3 or 4 times to close it. Secure the bag by folding the attached wire back against the bag. Do not double-bag the sample. You can discard the template.



13. Repeat these steps above for each *Salmonella* testing program sample requested. (*Note:* There will be a separate sample request form for each sample to be collected.)

14. Follow the procedures described for **Sample Storage** (Section Eight) and **Sample Shipment** (Section Nine).

## SAMPLES NOT COLLECTED

If any sample cannot be collected, complete the "Reason If Uncollected" block on the first FSIS Form 10,210-7 in the set of sample collection forms by checking the appropriate coded box:


72—Requested species/product not produced in the last 30 days. If 30 days passes and the requested product has not been produced, check box 72 on **one** Form 10,210-7 and mail it to the designated laboratory using the pre-addressed laboratory mailing label. If another 30 days passes without production of the requested product, again send **one** Form 10,210-7 with box 72 checked to the laboratory. Continue this process until the requested product is produced again.

60—Plant does not slaughter or produce designated product. (If this box is checked, the plant will be removed from this sampling frame.) Indicate on the back of the form what product the plant does slaughter or produce that is subject to the *Salmonella* Testing Program.

53—Other. (Explain, using the back of the form if necessary.)

For codes 60 or 53, place the entire sample set of FSIS Forms 10,210-7, including the completed one, in an envelope, apply the preaddressed laboratory mailing label, and mail the envelope to the designated FSIS laboratory via regular mail.

### SAMPLE COLLECTION REQUEST

FOR LAB USE ONLY				
<i>Internal lab code here</i>	RECEIPT DATE	RECEIPT CONDITION	SEAL CONDITION	DISCARD CONDITION
FORM 12345678 	LAB ATHENS GA	PRODUCT/SPECIES Turkey Carcass	COLLECTION DATE:	
ESTABLISHMENT 12345 P	TIME COLLECTED ( <i>Military</i> )	MAIL/SHIP DATE <b>5/19/98</b>	REASON IF UNCOLLECTED 72 <input type="checkbox"/> Not produced in last 30 days 60 <input checked="" type="checkbox"/> No longer produced 53 <input type="checkbox"/> Other ( <i>explain on back</i> )	

FSIS FORM 10,210-7 (5/98)

REPLACES FSIS FORM 10,210-7 (1/98), WHICH MAY BE USED UNTIL EXHAUSTED.

USDA - FSIS

## **SAMPLE STORAGE PRIOR TO SHIPMENT**

After they are collected, samples need to be maintained at refrigeration temperatures, then shipped refrigerated via overnight delivery to the designated laboratory performing the analysis.

Correct use of the refrigerant gel-ice packs and proper packing of the shipping container are necessary so that samples arrive at the laboratory at an acceptable temperature. Frozen samples or samples that are too warm are not considered valid and must not be analyzed. Some bacteria may be damaged by temperatures that are too cold, while temperatures that are too warm can allow bacteria to multiply. Maintaining samples at improper temperatures may contribute to inaccurate analytical results.

The sample should be kept refrigerated and in the shipping container prior to pickup by the courier. The shipping container itself should not be used as a refrigerator. However, multiple samples for that day (if needed) may be stored in the open shipping container placed in a cooler or refrigerator.

Sample security must be maintained at all times. (See FSIS Directive 7355.1.)



## SAMPLE SHIPMENT

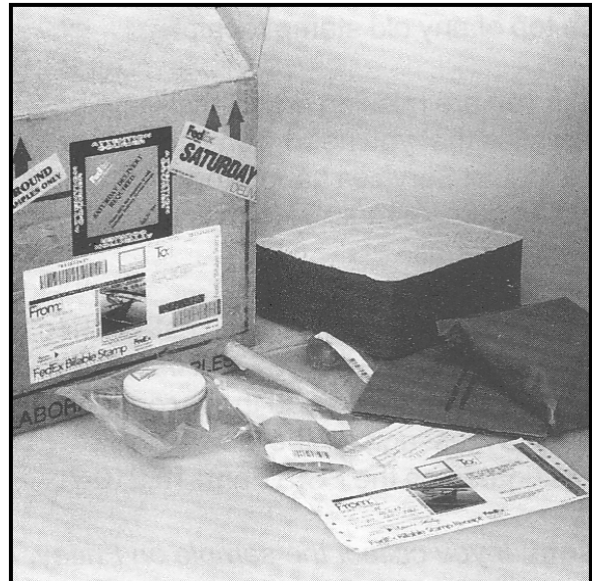
Samples must be picked up by the overnight courier the *same* calendar day the sample is collected. Samples must be analyzed the day after collection. If a sample is not collected and shipped on the same day or if samples are not received by the laboratory the day after collection, the sample is discarded.

*Note:* See Section Three, page 3-1, paragraphs 4 and 5, for instructions on collecting samples from late production.

To ship samples:

1. Retrieve the **prechilled** shipping container you placed in the refrigerator the day before sampling. (See Section Five, **Preparation for Sample Collection.**)
2. Retrieve the gel packs placed in the freezer at the same time.
3. Place the sample you are submitting (sponge, jar, or ground product) in the prechilled shipper.
4. Place a corrugated cardboard pad on top of the sample. If a corrugated cardboard pad is not supplied, use some newspaper or similar material. This prevents the gel packs from directly contacting the sample. If the gel packs directly contact the sample, the sample temperature may be lowered enough to freeze portions of the sample, which will have an effect on the sample results. Place sufficient frozen coolant on top of the corrugated pad or paper to keep the sample refrigerated during shipment to the designated laboratory. Insert the foam plug and press it down to minimize the shipper's headspace. If your shipping container does not have a foam plug, cover the sample with the insulated lid of the shipping container.

*Note:* Do not tape or wrap the sample nor fill the headspace with newspaper or similar paper. This is not necessary and creates problems for the receiving laboratory.



5. Fill in the "Collection Date," "Time Collected," and "Mail/Ship Date" sections on the FSIS Form 10,210-7. Each sample should have an accompanying completed FSIS Form 10,210-7.

6. Place the FSIS Form 10,210-7 in the shipping container, **directly** on top of the foam plug. Close box flaps so that the container closure system is secure. If there are tapeless closures, do not tape the box. Do not remove old stamp receipts from the shipping container.

7. Prepare the pre-addressed FedEx Billable Stamp Receipt. Fill in the plant number, ship date, and plant phone number. Sign the receipt and remove the top copy for your records. Place the stamp receipt on the box on top of any old stamp receipt.

8. If you are missing any of the shipping supplies that you need, contact the Technical Services Laboratory designated on the sample request form to obtain the missing items.

A **toll-free** number has been established to request supplies. Call **1-877-709-1982** and follow the instructions in the recording to leave a message for the laboratory designated on the FSIS Form 10,210-7.

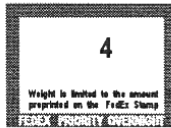
**Note:** *If you collect the sample on Friday, you will need to attach the special "Saturday Delivery" label to the shipping container. This label has special instructions to the FedEx driver to alert him or her that the lab will accept shipments on Saturday. Apply this label above the stamp receipt for Friday shipments only.*

*If you do not specifically mark it, the sample will not be delivered to the lab until Monday. This is too late to run the sample for a viable analysis and the sample will be discarded.*



705382323235

QUESTIONS? CALL 1-800-Go-FedEx.  
We Cannot Deliver To P.O. Boxes or P.O. Zip Codes



To:

USE ONLY FOR SHIPMENTS WITHIN THE CONTINENTAL UNITED STATES

From:

ORDER: 00502814

PLANT NO: \_\_\_\_\_

SHIP DATE: \_\_\_\_\_

Ph: ( ) -

EXPIRATION DATE 01/31/99

Release

Signature: ►

Next Business Morning



USDA-FSIS-EASTERN LAB  
950 COLLEGE STATION ROAD  
ATHENS, GA 30605  
(706) 546-3576

DECLARED VALUE \$100

\*\* If you require a different amount of declared value, please use a Federal Express airbill.

FedEx Billable Stamp Receipt


FEDEX PRIORITY OVERNIGHT

**FedEx**  
Federal Express  
Nontransferable

Customer Receipt - For your Records  
Do Not Place on Your FedEx Package

**SAMPLE COLLECTION REQUEST**

**FOR LAB USE ONLY**

<i>Internal lab code here</i>		RECEIPT DATE	RECEIPT CONDITION	SEAL CONDITION	DISCARD CONDITION
FORM 12345678 	LAB ATHENS GA	PRODUCT/SPECIES Turkey Carcass	COLLECTION DATE:		
ESTABLISHMENT 12345 P	TIME COLLECTED (Military)	MAIL/SHIP DATE	REASON IF UNCOLLECTED 72 <input type="checkbox"/> Not produced in last 30 days 60 <input type="checkbox"/> No longer produced 53 <input type="checkbox"/> Other (explain on back)		

FSIS FORM 10,210-7 (5/98)

REPLACES FSIS FORM 10,210-7 (1/98), WHICH MAY BE USED UNTIL EXHAUSTED.

USDA - FSIS

**USDA-FSIS-OPHS-EASTERN LAB  
 RICHARD RUSSELL RESEARCH CENTER  
 MICR SECT, COLLEGE STATION ROAD  
 ATHENS GA 30605-2720**

Pre-addressed lab label

**Turkey Carcass                      00152650**  


Bar code sticker to label  
sample bag or container

RESERVED

## SAMPLING STEPS CHECKLISTS

### Beef

- Randomly select sampling time.
- Wash and sanitize hands.
- Sanitize work surfaces (surfaces that will contact supplies while they are being gathered).
- Gather supplies.
- Label sponge bag.
- Wash and sanitize hands.
- Take supplies to sampling location.
- Sanitize work surfaces (surfaces that will contact supplies during sampling).
- Position equipment (keep safety in mind).
- Locate areas of carcass for sampling.
- Layout supplies.
- Open sponge bag.
- Pour BPW into sponge bag.
- Close bag and massage sponge.
- Push sponge to top of bag and then open bag; set bag aside on a sanitized surface.
- Open template bag; set bag aside on a sanitized surface.
- Put on gloves.
- Remove sponge.
- Remove template.
- Lay the template over the flank. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Lay the template over the brisket. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Carefully climb to sample the rump without touching the template or sponge to any area not being sampled.
- Lay the template over the rump. **Don't touch the sampling area.**
- Hold template with one gloved hand; use the other hand to wipe area with sponge.
- Use other side of sponge and do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Place the sponge in the Whirl-Pak® bag and seal the bag.
- One sample is now complete (follow storage and shipping instructions).

### Pork

- Randomly select sampling time.
- Wash and sanitize hands.
- Sanitize work surfaces (surfaces that will contact supplies while they are being gathered).
- Gather supplies.
- Label sponge bag.
- Wash and sanitize hands.
- Take supplies to sampling location.
- Sanitize work surfaces (surfaces that will contact supplies during sampling).
- Position equipment (keep safety in mind).
- Locate areas of carcass for sampling.
- Layout supplies.
- Open sponge bag.
- Pour BPW into sponge bag.
- Close bag and massage sponge.
- Push sponge to top of bag and then open bag; set bag aside on a sanitized surface.
- Open template bag; set bag aside on a sanitized surface.
- Put on gloves.
- Remove sponge.
- Remove template.
- Lay the template over the belly. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Carefully climb to sample the ham without touching the template or sponge to any area not being sampled.
- Lay the template over the ham. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Carefully climb down to sample the jowl without touching the template or sponge to any area not being sampled.
- Lay the template over the jowl. **Don't touch the sampling area.**
- Hold template with one gloved hand; use the other hand to wipe area with sponge.
- Use other side of sponge and do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Place the sponge in the Whirl-Pak® bag and seal the bag.
- One sample is now complete (follow storage and shipping instructions).

## Chicken

- Randomly select sampling time and chiller location.
- Wash and sanitize hands.
- Sanitize work surfaces (surfaces that will contact supplies while they are being gathered).
- Gather supplies.
- Label sample container.
- Wash and sanitize hands.
- Take supplies to sampling location.
- Sanitize work surfaces (surfaces that will contact supplies during sampling).
- Layout supplies.
- Open large sterile bag.
- Put on sterile gloves.
- Select carcass, allow excess fluid to drain without contaminating any sterile items.
- Place carcass in bag (neck first).
- Place bag with carcass on flat sanitized surface.
- Open BPW container and pour BPW into carcass cavity of chicken in bag.
- Manipulate loose neck skin over the neck bones. (Do this through the bag.)
- Expel excess air from bag, twist it closed, and fold the twist over.
- Mix BPW through carcass cavity and outside of carcass; do this for 1 minute.
- Place the bag with the chicken on the sanitized flat surface with the top of the bag facing up.
- It is acceptable to remove the gloves at this time. Continue to work in an aseptic manner.
- Remove screw-cap from sterile sample container; put cap in small resealable sterile bag.
- Open bag with the chicken and pour 30 ml of liquid into sterile sample container.
- Take screw-cap out of small resealable bag and close sample container.
- Place sample container in small resealable bag, expel excess air, and seal bag.
- Discard remaining liquid.
- Return chicken to chill tank or to where bird was collected.
- One sample is now complete (follow storage and shipping instructions).

## Turkey

- Randomly select sampling time and chiller location.
- Wash and sanitize hands.
- Sanitize work surfaces (surfaces that will contact supplies while they are being gathered).
- Gather supplies.
- Label sponge bag.
- Wash and sanitize hands.
- Take supplies to sampling location.
- Sanitize work surfaces (surfaces that will contact supplies during sampling).
- Lay absorbent towels or sanitized rack on work surface to prevent the carcass from slipping.
- Layout supplies.
- Put on gloves.
- Select carcass, allow excess fluid to drain without contaminating any sterile items.
- Place the turkey breast-down on the towels or rack. **Don't touch the back or thigh areas.**
- Remove and discard gloves.
- Open sponge bag.
- Pour BPW into sponge bag.
- Close bag and massage sponge.
- Push sponge to top of bag and then open bag; set bag aside on a sanitized surface.
- Open template bag; set bag aside on a sanitized surface.
- Put on gloves.
- Remove sponge.
- Remove template.
- Lay the template over the back. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Lay the template over the thigh. **Don't touch the sampling area.**
- Hold template with one gloved hand; use other hand to wipe area with sponge.
- Turn sponge over to use its unused side for the thigh.
- Do 10 vertical wipes over entire sample surface; then do 10 horizontal wipes over entire sample surface.
- Place the sponge in the Whirl-Pak® bag and seal the bag.
- One sample is now complete (follow storage and shipping instructions).

## Ground Product

- Randomly select sampling time and location.
- Wash and sanitize hands.
- Sanitize work surfaces (surfaces that will contact supplies while they are being gathered).
- Gather supplies.
- Label sample bag.
- Take supplies to sampling location.
- Sanitize work surfaces (surfaces that will contact supplies during sampling).
- Open Whirl-Pak® bag.
- Manipulate the ring to the top of the bag. Do this through the bag. Fold the bag bottom and set the bag upright on a sanitized surface.
- Put on gloves.
- Remove ring.
- Unwrap ring and lay it in the center of the sterile plastic wrap.
- Collect ground product (before final packaging) and uniformly pack it into the ring.
- Hold ring over open Whirl-Pak® bag and push plug of ground product into the bag. **Don't let the product touch the outside of the bag.**
- Shake the sample to the bottom of the bag, expel excess air, and close bag.
- One sample is now complete (follow storage and shipping instructions).

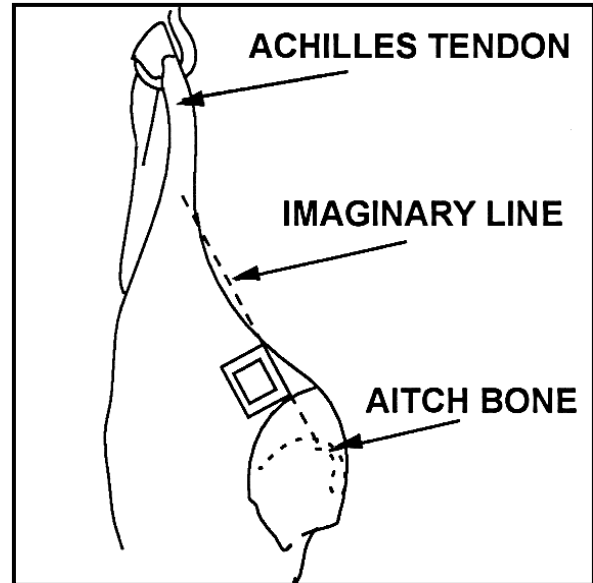


## SAMPLING SITES FOR *SALMONELLA* TESTING OF CATTLE CARCASSES

### *Rump*

Locate the posterior aspect of the aitch bone. Draw an imaginary line toward the Achilles tendon. At the point where the line intersects the cut surface of the round is the starting point for the rump sample. Place the template over this area of the rump.

Note: This upper illustration has been purposely altered somewhat. A true lateral view of the carcass would not show the aitch bone. From a medial view, the whole 10 cm x 10 cm sampling area could not be seen. Therefore a lateral view with a portion of the round removed so the location of the aitch bone is shown is illustrated.

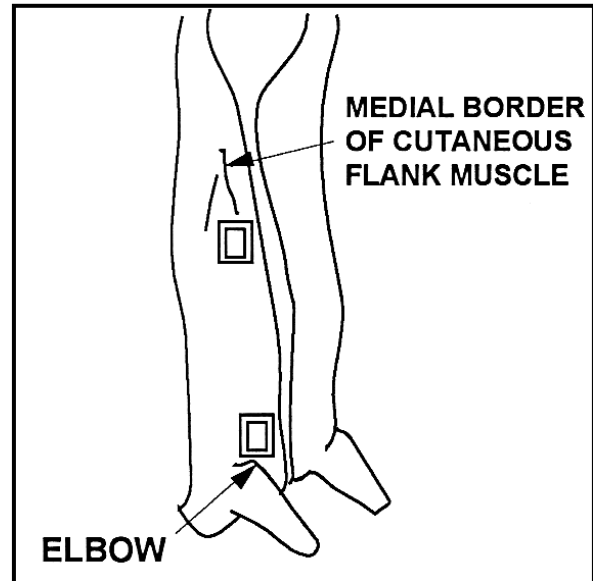


### *Flank*

Locate the cutaneous flank muscle (external abdominal oblique) and follow the medial border of the muscle anteriorly until it comes within approximately 3" of the midline. This will be where to place the template.

### *Brisket*

Locate the elbow of the carcass. Draw an imaginary line straight across (medially) to the midline cut. This will be where to place the template.



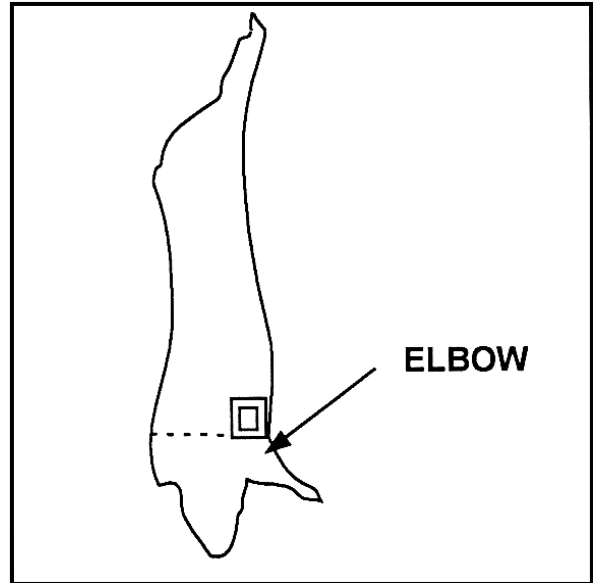
### SAMPLING SITES FOR SALMONELLA TESTING OF SWINE CARCASSES

#### Belly

Locate the elbow of the carcass. Place the template over this area (armpit) of the belly.

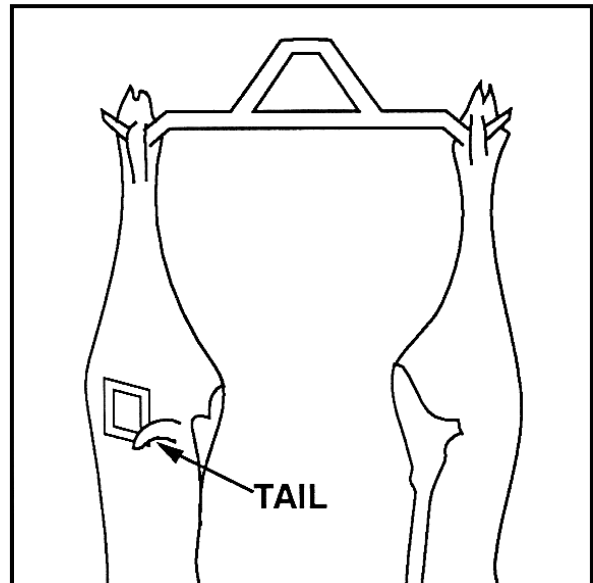
#### Jowl

Draw an imaginary line from the atlas/axis joint to the ventral midline; all skin below that point will be considered the jowl.



#### Ham

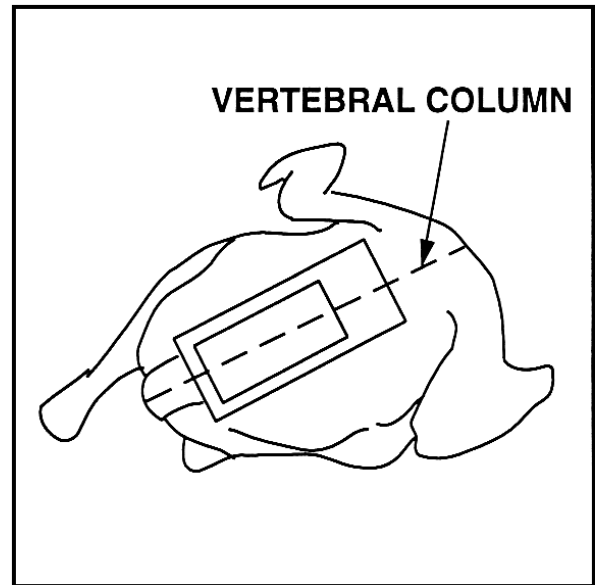
From the dorsal position, locate the lateral surface of the base of the tail. Place the template over this area of the ham. Do not include the base of the tail.



## SAMPLING SITES FOR *SALMONELLA* TESTING FOR TURKEY CARCASSES

### Back

Locate the tail. The area to sample (5 cm x 10 cm) starts just anteriorly from the tail and extends forward over the vertebral column. The area should be evenly divided on either side of the vertebral column



### Thigh

Locate the hip joint. The area to sample (5 cm x 10 cm) starts at the hip joint and extends laterally and ventrally to cover the thigh area.

