

# Cultures, Specimen Collection

## Purpose

Correct collection and handling of culture specimens helps ensure more accurate and timely results and subsequent treatment.

## Procedure Guidelines

1. Labeling of the specimen must include:
  - a. Resident name;
  - b. Location of resident (room and bed number);
  - c. Physician ordering;
  - d. Date and time specimen collected;
  - e. Source of specimen;
  - f. Test desired; and
  - g. Name of person collecting specimen.
2. Explain the procedure completely to the resident and/or family.
3. Stay with the resident during the specimen collection if practical.
4. Use a sterile container (except for stool cultures).
5. Label the specimen correctly and send it to the laboratory.
6. Avoid contamination of the container.
7. Place all specimens in a secondary plastic bag with an appropriate biohazard label to contain spills.
8. Fill out and include the laboratory requisition form. Identify the site and organism being cultured, as indicated.

## Equipment and Supplies

1. **For Throat Culture**
  - a. Gloves;
  - b. Mask and goggles/face shield (if indicated);
  - c. Sterile culture swab;
  - d. Tongue blade; and
  - e. Penlight.
2. **For Nasopharyngeal Culture**
  - a. Appropriately sized cotton swab;
  - b. Sterile container; and
  - c. Clean gloves.
3. **For Nasal Culture**
  - a. Sterile culture swab; and
  - b. Clean gloves.
4. **For Eye Culture**
  - a. Clean gloves;
  - b. Sterile culture swab;
  - c. Sterile normal saline solution; and
  - d. Sterile 2 x 2 gauze pads.
5. **For Ear Culture**
  - a. Clean gloves;
  - b. Sterile culture swab;
  - c. Sterile normal saline solution; and
  - d. Sterile 2 x 2 gauze pads.
6. **For Rectal Culture**
  - a. Clean gloves;
  - b. Sterile culture swab; and
  - c. Washcloth, soap, and water.

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## Equipment and Supplies (continued)

7. **For Wound Culture**
  - a. Clean gloves;
  - b. Sterile general purpose tray;
  - c. Alcohol sponges; and
  - d. Sterile culture swab.
8. **For Vaginal Culture**
  - a. Clean gloves;
  - b. Sterile culture swab; and
  - c. Sterile normal saline solution.
9. **Swabs of Skin Surfaces**
  - a. Sterile culture swab;
  - b. Sterile normal saline solution; and
  - c. Clean gloves.
10. **Stool Culture**
  - a. Clean specimen container with lid;
  - b. Bedpan or bedside commode; and
  - c. Clean gloves.
11. **Urine Culture From Indwelling Catheter**
  - a. Alcohol sponge;
  - b. Syringe;
  - c. Sterile needle;
  - d. Sterile specimen container; and
  - e. Clean gloves.

## Steps in the Procedure

1. **Throat Culture**
  - a. Validate the Physician's order for culture.
  - b. Wash hands and put on clean gloves. (Use a mask and eyewear if splashing, spraying, or spattering of blood or saliva is likely.)
  - c. Explain to the resident that he/she may gag during collection.
  - d. Ask the resident to sit up, if possible.
  - e. Ask the resident to tilt head back, if possible.
  - f. Depress the tongue using the tongue blade and illuminate the throat using a penlight.
  - g. Swab the tonsillar areas from side to side, including any inflamed or purulent sites. Do not touch the tongue, cheeks, or teeth with the swab.
  - h. Withdraw the swab and place it in the sheath, immediately crush the ampule of culture medium at the bottom of the tube. Push the swab into the medium to keep it moist.
  - i. Label the specimen.
  - j. Discard gloves and other protective equipment into appropriate receptacles. Wash hands.
  - k. Label the specimen and send to the lab.
2. **Nasopharyngeal Culture**
  - a. Validate the Physician's order for culture
  - b. Wash hands and put on clean gloves.
  - c. Tell the resident he/she may gag or feel the urge to sneeze during the procedure.
  - d. Ask the resident to sit up if possible.
  - e. Ask the resident to blow his/her nose, if possible.
  - f. Tell the resident to occlude one nostril and then the other as he/she exhales. Insert the swab tube into the more patent nostril

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**Steps in the  
Procedure  
(continued)**

- g. Ask the resident to cough.
  - h. Open the package containing the swab and carefully bend the wire into a curve, maintaining sterility.
  - i. Ask the resident to tilt his/her head back and then pass the swab through the nostril, keeping it near the nasal septum and floor of the nose.
  - j. Rotate the swab quickly, then withdraw it and give to the lab person standing at bedside, or insert contaminated end of wire into sterile container and break, seal cap.
  - k. Discard gloves and other protective equipment into an appropriate receptacle. Wash hands.
  - l. Label the specimen and send to the lab.
3. **Nasal Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on clean gloves.
  - c. Using your thumb, gently elevate the nares by pushing up on the tip of the nose.
  - d. Insert a sterile culture swab into the anterior tips of the nares, and rotate the swab to collect any moisture.
  - e. Remove the swab from the nose and replace in the sheath.
  - f. Squeeze the capsule to release the culture medium. Be sure the swab is in the medium.
  - g. Discard gloves and other protective equipment into an appropriate receptacle. Wash hands.
  - h. Label the specimen and send to the lab.
4. **Eye Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on sterile gloves.
  - c. Gently clean excess debris from the outside of the eye with sterile normal saline solution and gauze pads, wiping from inner to outer corners.
  - d. Retract the lower eyelid to expose the conjunctival sac. Gently rub a sterile swab over the conjunctiva (hold the swab parallel to the eye, rather than pointing it directly at the eye).
  - e. Place the swab immediately into the sheath and squeeze the ampule to release the culture medium.
  - f. Remove gloves and discard into appropriate receptacle. Wash hands.
  - g. Label the specimen and send immediately to the lab.
5. **Ear Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on clean gloves.
  - c. Clean excess debris from the ear with sterile normal saline solution and gauze pads.
  - d. Insert the swab into the ear canal and rotate it gently along the walls of the canal.
  - e. Withdraw the swab, being careful not to touch any other surfaces.
  - f. Place the swab into the sheath and squeeze the capsule to release the culture medium.
  - g. Remove gloves and discard into an appropriate receptacle. Wash hands.
  - h. Label the specimen and send to the lab.
6. **Rectal Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands, put on clean gloves.
  - c. Clean the area around the anus with soap and water.

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**Steps in the  
Procedure  
(continued)**

- d. Insert the swab, moistened with sterile normal saline into the anus and advance it (about 1 1/2 inches). While withdrawing the swab, gently rotate it against the walls of the lower rectum.
  - e. Place the swab into the sheath and squeeze the capsule to release the culture medium. Be sure the swab is in the medium.
  - f. Remove gloves and discard into appropriate receptacle. Wash hands.
  - g. Label the specimen and send to the lab.
7. **Wound Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on gloves.
  - c. Remove the dressings to expose the wound.
  - d. Cleanse the wound area with normal saline, removing all old drainage from wound bed.
  - e. Allow the area to dry.
  - f. Using the sterile culture swab, collect as much fresh drainage as possible, or insert the swab gently into any open, draining area of the wound and rotate swab over a 1 cm area when processing culture swab into base of wound to express wound exudates from viable tissue. Never collect drainage from the outside and then insert the same swab into the wound. Don't just swab the surface of the wound.
  - g. Place the swab back into the sheath and squeeze the capsule to release the culture medium.
  - h. Remove the sterile gloves and discard into appropriate receptacle. Wash hands.
  - i. Label the specimen and send to the lab.
8. **Vaginal Culture**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on gloves.
  - c. With gloved hand, separate labia and cleanse the area with Betadine (if the resident not allergic).
  - d. Moisten the swab with sterile saline.
  - e. Insert the swab into vagina with labia still separated and obtain culture.
  - f. In withdrawing the swab, take care not to contaminate with rectal organisms.
  - g. Place the swab in sheath and squeeze capsule to release culture medium. Be sure the swab is in medium.
  - h. Remove gloves and discard into appropriate receptacle. Wash hands.
  - i. Label the specimen and send to the lab.
9. **Swabs of Skin Surfaces**
- a. Validate the Physician's order for culture
  - b. Wash hands and put on clean gloves.
  - c. Moisten sterile swab with sterile normal saline solution.
  - d. Roll moistened sterile swab over surface to be cultured.
  - e. If lesion is purulent, clean it out first with sterile swab sticks, then use a sterile specimen swab to take the specimen.
  - f. Place the swab in sheath and squeeze capsule to release culture medium. Be sure the swab is in medium.
  - g. Remove gloves and discard into appropriate receptacle. Wash hands.
  - h. Label the specimen and send to the lab.
10. **Stool Culture**
- a. Validate the Physician's order for culture
  - b. Explain the procedure to the resident.
  - c. Tell the resident to notify you when he has the urge to defecate.
  - d. Have the resident defecate into a clean, dry bedpan or commode.

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**Steps in the Procedure (continued)**

- e. Instruct the resident to try to avoid contaminating the specimen with urine or toilet tissue.
  - f. Put on clean gloves.
  - g. Use a scoop attached to top of stool specimen container to obtain stool. A specimen the size of a pea pod is sufficient.
  - h. Place the specimen in container and close cap tightly.
  - i. Label the container.
  - j. Remove gloves and discard into appropriate receptacle. Wash hands.
  - k. Transport the specimen immediately to the lab.
11. **Urine Culture From Indwelling Catheter**
- a. Validate the Physician's order for culture
  - b. Approximately 30 minutes prior to collecting the specimen, clamp the collection tube to allow urine to accumulate.
  - c. Put on gloves.
  - d. Wipe the sampling port with an alcohol sponge.
  - e. Connect a needle to a syringe and uncap the needle.
  - f. Insert the needle into the sampling port at a 90° angle to the tubing.
  - g. Aspirate the specimen into the syringe.
  - h. Transfer the specimen to a sterile container.
  - i. Unclamp the drainage tube.
  - j. Remove gloves and discard into appropriate receptacle.
  - k. Wash hands.
  - l. Label the specimen and send to the lab.

**Special Considerations**

- 1. For a wound specimen, although you would normally cleanse the area around the wound to prevent contamination by normal skin flora, do not cleanse a perineal wound area with alcohol, to avoid irritating sensitive tissue.
- 2. Be sure antiseptic does not enter the wound.
- 3. For an ear/eye specimen, culture gently and carefully, and ask for help holding combative residents.
- 4. Document the time, date, and site of the specimen collection. Note any unusual appearance or odor of the specimen.
- 5. Dry swabs from dry wounds are not acceptable; surface swabs from wounds are of little if any value.