



Wound Culture Protocols

Applies to patients presenting with:

- Soft skin and tissue infections with open or draining lesions
- (Appearance of) insect/spider bite with necrotizing center, drainage & erythema
- Abscess - ulcer
- Infected laceration

⇒ Culture wound prior to initiation of antibiotics if signs or symptoms of infection are present. If Culture & Sensitivity is obtained after antibiotics have been started, list the drug on the laboratory C& S request.

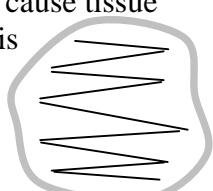
Supplies

For swab culture	Additional supplies for aspiration culture
Supplies for cleaning/irrigating wound Gloves Biohazard plastic lab transport bag Culture collection/transport kit with gel for aerobic C&S Culture collection/transport kit without gel (for gram stain)	10ml sterile syringe 22 gauge needle Syringe end cap Sterile gloves Skin antiseptic (betadine, etc.)

Wound Cleansing: Wound must be thoroughly cleaned prior to culturing. Do not culture purulent or necrotic debris or drainage over hard eschar. See also Wound Irrigation Procedure.

Procedure	Comments
<ol style="list-style-type: none"> 1. Cleanse wound by removing excess debris from wound base with normal saline (pink saline fish or saline bullet). 2. Thoroughly flush wound with sterile saline. 3. Gently blot excess saline from wound bed with sterile gauze. 4. Remove soiled gloves; apply hand sanitizer. 5. Apply clean gloves. 	<p>Maintain aseptic environment. When flushing/irrigating wound wear gown and face protection – see PPE section above.</p>

Culture Method – Swab Technique

Procedure	Comments
<ol style="list-style-type: none"> 1. Open sterile culture collection/transport kit containing Amies or Stuarts transport medium and remove swab. 2. If wound is dry, moisten tip of swab with transport fluid at the bottom of the transport sleeve or sterile preservative-free saline (pink saline fish or saline bullet). If wound is moist (weepy) after cleaning, this might not be necessary. 3. Without touching swab to surrounding wound edges or skin, rotate tip of swab 	<p>Culture collection/transport kit contains a synthetic swab (rayon or Dacron). Cotton tip swabs are not recommended. Note: for a Gram Stain use a <i>non gel</i> culture collection kit</p> <p>Apply sufficient pressure to cause tissue fluid to be expressed. It is the bacteria in the tissue fluid that is desired for culture.</p> <p><i>10-point culture of wound</i></p> 

<p>over a 1cm area of open wound for 5 seconds (preferred method), or rotate the swab while making a zigzag pattern across the wound at 10 points.</p> <ol style="list-style-type: none"> 4. Place swab in culture transport sleeve. Make sure swab tip is in contact with the liquid transport medium at the base of the sleeve. Break ampule containing transport fluid if present in the collection kits being used. 5. Label culture collection/transport kit with name, birth date, specimen source, date and time of culture. 6. Place in lab biohazard transport bag. 	<p>Avoid contaminating outside of culture collection/transport kit.</p>
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Culture Method – Tissue Aspiration Technique (MD, PA, ARNP Responsibility)	
Procedure	Comments
<ol style="list-style-type: none"> 1. Perform hand hygiene and apply sterile gloves. 2. Face shield and gown may be necessary to avoid potential exposure to inadvertent wound spray. 3. Cleanse <i>intact skin</i> with antiseptic and allow to dry. 4. Expel all air from a 10mL syringe with a 22 gauge needle prior to aspiration. Insert needle into intact skin and apply suction (aspirate). 5. Aspirate approximately 0.5mL of wound fluid. 6. Discard needle, then cap syringe with sterile cap used for blood gases. 7. Label syringe (see Swab Culture, above). 8. After labeling syringe, place in lab biohazard transport bag and send aspirate immediately to lab. 	<p>Involves insertion of a needle into the tissue adjacent to the wound to aspirate tissue fluid.</p> <p>This is a sterile procedure.</p> <p><i>Intact skin</i> next to the wound is disinfected and allowed to air dry. Do not fan area to speed drying as it allows the organisms in environment to settle on the skin surface.</p> <p>The needle is moved backward and forward at different angles for 2-4 explorations.</p> <p>Remove needle with hemostat and place immediately in sharps container. Place end cap on syringe to prevent leakage.</p>
Culture Method – Incision and Drainage (I&D) (MD, PA, ARNP Responsibility)	
Procedure	Comments
<ol style="list-style-type: none"> 1. Follow the clinic/office procedure for incision & drainage. 2. Follow the procedure for swab culture technique (above). 	<p>Culture the drainage from the incision <u>regardless of appearance.</u></p>

Note: Reviewed by microbiologists from all Pierce County acute care hospitals (07/2006).