

## CLARIFICATION REGARDING AEROBIC/ANAEROBIC CULTURES

### **BACKGROUND:**

Cultures for anaerobic organisms present a special challenge. Many different anaerobic species reside on the skin and on the surfaces of the upper respiratory tract and intestinal tract. Appropriate specimen collection and transport is extremely important and allows the Microbiology laboratory to provide clinically useful information.

The problems most often encountered with anaerobic cultures include:

- ◆ Contamination from adjacent skin or mucous membranes
- ◆ Inappropriate collection devices
- ◆ Inappropriate transport conditions

### **SPECIMEN TYPES:**

It is very important to collect specimens from appropriate sites of infection **AND** to provide detailed information regarding the specimen on the requisition.

<u>ACCEPTABLE SPECIMENS</u>	<u>UNACCEPTABLE SPECIMENS</u>
Abscess	Unspecified or Superficial Wound
Deep Wound	Lesion
Bronchial tissue or protected brush	Bronchial wash or lavage
Surgical or Deep Wound Tissue	Fluid from drains
Sterile Body Fluid	Sputum
Suprapubic puncture	Urine (voided or catheterized)
	Stool

### **SPECIMEN COLLECTION:**

Collect specimens in a manner to avoid contamination from adjacent skin or mucous membranes. Avoid exposure to air as much as possible.

- ◆ Abscess and fluid specimens should be collected by aspiration. Transfer aspirate to red-top vacutainer tube without additives.
- ◆ Tissue specimens should be collected by dissecting a small portion of infected tissue. Transfer tissue to red-top vacutainer tube without additives.
- ◆ **Swabs should be used only when fluid or tissue cannot be obtained. Use aerobic/anaerobic culture swab containing gel bacterial transport (blue-top gel swab). Dry swabs or swabs containing liquid transport WILL NOT be accepted for anaerobic culture.**

### **TRANSPORT:**

- ◆ Transport specimens as soon as possible (within 24 hours) at room temperature. **Do not refrigerate.**

**Reference: Murray, P. R., E. J. Baron, J. H. Jorgensen, M. L. Landry, and M. A. Pfaller.** Manual of Clinical Microbiology, 9th ed. 2007. American Society for Microbiology, Washington, D.C.