



**KAISER PERMANENTE®**  
COLORADO LABORATORY

## **BLOOD CULTURE COLLECTION**

### **PRINCIPLE**

Blood culture specimens are drawn into special collection vials that contain a medium that enhances bacterial growth.

### **MATERIALS AND SUPPLIES**

- Bio-Merieux Adapter Cap with Insert Vacutainer Holders for BacT/Alert Blood Culture bottles
- Safety-Lok Butterfly Device: 23 gauge with safety device
- Tourniquet, non-latex
- Alcohol preps
- Chloraprep - 2% chlorhexidine gluconate (CHG) and 70% Isopropyl alcohol (IPA) applicators
- Cotton balls and sterile gauze
- Sharps containers
- Transpore tape, paper tape, Gauztex tape, Coban Wrap, Band-aids

### **IDENTIFICATION OF THE PATIENT**

#### **Positively identify the patient!**

- a. After the patient is seated in the blood drawing area, say the following to the patient:

***“For identification purposes, please “repeat”  
your first and last name and birth date”***

- b. **Compare the name and birth date the patient “repeated” to you against the name and birth date on the Kaiser ID card or the Patient Visit Record and then compare the name and age on “EACH” label, making sure that each label belongs to the patient you are about to draw.**
- c. If the patient appears disoriented or is unable to answer or you are otherwise unsure of the patient’s identity, request verification from a third party.
- d. If the patient is a child, ask the parent or the adult accompanying the child to “repeat” the name of the child to you
- e. **Immediately resolve/correct any identification discrepancies**
- f. **Do not draw the patient until all identification issues have been resolved/corrected and you are sure of the patient’s identity and the labels have the correct information**

## PROCEDURE

1. An adult blood culture “set” requires 2 bottles: Aerobic – Blue top  
Anaerobic – Maroon top
2. For patients older than 12 yrs of age – two (2) sets of blood cultures are required. (Lab Formulary Change Notice – 03/08/07).
3. A pediatric blood culture “set” requires 1 bottle – yellow top, 1.0 ml minimum
4. For patients less than 12 yrs of age, one (1) set is required. (Lab Formulary Change Notice – 03/08/07).
5. Initially cleanse the venipuncture site using a 70% isopropyl alcohol swab; allowing the alcohol to air dry.
6. Perform a friction scrub of the venipuncture site using the Choraprep applicator. The friction scrub should cover the area around the venipuncture site. The antiseptic should remain in contact with the skin for at least 30 seconds to allow the antiseptic to cleanse the area. Allow the area to air dry.
7. For infants under the age of 2 months, use three alcohol wipes to cleanse the area and allow to dry. Chloraprep applicators are not approved for use in infants under the age of 2 months.
8. Do not touch the site with a gloved finger unless it has been disinfected with alcohol and then with the Chloraprep applicator/swab.
8. Cleanse the tops of each blood culture bottle with 70% alcohol and allow them to dry 1-2 minutes.
9. Perform the phlebotomy using a Safety-Lok Butterfly Device: 23 or 25 gauge with safety device and a BioMerieux blood culture adapter cap with insert vacutainer holder or a syringe with safety needle.
10. Draw 10 ml into the blue top (aerobic) bottle and 10 ml into the maroon top (anaerobic) blood culture bottle.
11. Always draw the blue top (aerobic) blood culture bottle first.
12. Unless otherwise ordered by the provider, draw the 2<sup>nd</sup> “set” 5 minutes after the 1<sup>st</sup> “set”, from a different venipuncture site.
13. For pediatric patients: Draw 1-3 ml into one yellow top pediatric blood culture bottle, 1.0 mls minimum.
14. If using a syringe, do not change needles before injecting the blood into the culture bottle(s).
15. If the specimen is not obtained and a redraw is required, use a new needle and re-cleanse the site.
16. After the specimen is obtained and the bleeding has stopped, clean the residual Chloraprep solution from the patient’s arm with an alcohol prep.

17. Apply pressure bandage.

18. If unable to obtain the optimum amount of blood, refer to the following chart

<b>PATIENT</b>	<b>TOTAL DRAWN</b>	<b>INOCULATION</b>
<b>Adult</b>	<b>10 to 20 mls</b>	<b>Split equally between one aerobic bottle and one anaerobic bottle</b>
<b>Adult</b>	<b>3 to 10 mls</b>	<b>Inoculate entire amount into one aerobic bottle</b>
<b>Adult</b>	<b>Less than 3 mls</b>	<b>Inoculate entire amount into one pediatric bottle</b>
<b>Pediatric</b>	<b>1 to 3 mls 1 ml minimum</b>	<b>Inoculate entire amount into one pediatric bottle</b>

### **LABELING THE BLOOD CULTURE BOTTLES**

1. Place the large LIS label on the bottle, lengthwise, (vertically), with the patient's name closest to the top of the bottle. Do not cover the lot #, exp. date information, do not wrap the label around the bottle.
2. Write the time and date collected on each bottle.
3. Two LIS labels with the same ACCN will print for each blood culture. Initial each LIS label away from the barcode.
5. Leave the bottles at room temperature and transport to RRL Microbiology dept.

### **CULTURES DRAWN AFTER THE LAST COURIER RUN OF THE DAY**

All blood cultures collected or received after the last courier run of the day must be delivered to RRL before closing. If the last courier has left, call a STAT courier to deliver the specimen to RRL. Staff will be available at RRL to put the cultures on the instrument during the following times:

<b>M-F</b>	<b>Until 1000 pm</b>
<b>Sat/Sun</b>	<b>Until 2 pm</b>

If the specimen cannot be delivered by the times noted above:

1. Choose the hospital closest to your facility and cancel the order with the code:  
**Test referred, results viewable in chart**
2. Place an order in Cerner for Blood Culture-SJ.
3. Label the specimen correctly and fill out a requisition.
4. Call a STAT courier for delivery to SJH.

**\*\*Do not leave a blood culture in a lock box for a courier. Bacteria, if present could be compromised if exposed to extreme temperatures.\*\***



**KAISER PERMANENTE®  
COLORADO REGION PROCEDURE REVIEW**

<b>TITLE: BLOOD CULTURE PROCEDURE</b>	
LABORATORY SITE: <b>All Locations</b>	DEPARTMENT: <b>LABORATORY</b>
WRITTEN BY: E. Gibson	WRITTEN DATE: 5/09
REVISED BY: E. Gibson	REVISED DATE: 6/12

PATHOLOGIST	SIGNATURE	DATE
Dr. John Smith	<i>John Smith</i>	7/3/12
Dr. James Williams	<i>James Williams</i>	7/2/12
Dr. Teresa Launder	<i>Teresa Launder</i>	7/5/12
Dr. Terry Andres	<i>Terry Andres</i>	7/5/12
Dr. Vanitha Kumar	<i>Vanitha Kumar</i>	7/10/12
Dr. Joe Chorny	<i>Joe Chorny</i>	7/5/12
Dr. David Biddle	<i>David Biddle</i>	7/9/12
Dr. Cheryl Teuton	<i>Cheryl Teuton</i>	7/2/12
Dr. Jeanette Grube	<i>Jeanette Grube</i>	7/6/12
Dr. Martin Dinges	<i>Martin Dinges</i>	7/5/12

MANAGER/SUPVSR/DESIGNEE	SIGNATURE	DATE

