Current version # 071405



Subject: OPD AND COMPUTER

Policy: BLOOD CULTURE COLLECTION

APPROVED BY: Laboratory Director or designee Subsidiaries: ☑ Copley Hospital □ Copley Woodlands □ Copley Terrace Department(s): Laboratory

POLICY STATEMENT: To assure appropriate computer and OPD protocols in the Laboratory

POLICY PROVISIONS:

BLOOD CULTURE COLLECTION

MATERIALS:

1. BACTEC PLUS AEROBIC/F Culture Vial. Soybean-Casein Digest Broth supplemented with vitamin B6. Stable room temp. until posted outdate.

2. BACTEC PLUS ANAEROBIC/F Culture Vial. Soybean-Casein Digest Broth supplemented with vitamin K1, yeast extracts, and thiols. Stable room temp. until posted outdate.

3. BACTEC PEDS PLUS/F Culture Vial. Soybean-Casein Digest Broth supplemented with vitamin B6. Stable room temp. until posted outdate.

- 4. Butterfly collection set
- 5. 70% isopropol alcohol swab
- 6. ChloraPrep applicator

** for children less than 2 months old a Betadine Swab is used instead of the ChloraPrep.

SPECIMEN:

Whole blood, 16-20 ml (8-10 ml each for each if two adult blood culture bottles), 1-3 ml for a pediatric blood culture bottle.

COLLECTION AND HANDLING PROCEDURE:

*DO NOT USE BLOOD DRAWN THROUGH AN INDWELLING I.V. OR AN INTRA ARTERIAL CATHETER IF AT ALL POSSIBLE.

1. Wash your hands thoroughly. Wear disposable gloves.

2. Mark the projected fill volume on the side of each bottle. Use the pre marked 5 ml gradation lines to assist you.

a. Adult = 10 mlb. Pedi = 3 ml

3. Put the tourniquet tightly around the patient's arm and select a collection site. Do not draw above an IV site.

4. Pinch the wings on the ChloraPrep applicator to break the ampule and release the cleanser. Do not touch the sponge. Repeatedly press and release the sponge against the skin area to wet the sponge and are able to see wetness on the area. Use repeated back and forth motions on the site for approximately 30 seconds. Do not blot or wipe the cleansed area. Extend the path above and below the area to be cleaned. Doing this will help your aim and prevent having to touch the prepared area. After a vein is found, the tourniquet is released while the area is prepared.

**The ChloraPrep Applicator sponges are not to be used on children less then 2 months old. On these children the area is cleansed with an alcohol prep pad and then swab the area with a Betadine Swab, starting at the center and concentrically until you have a 2-3 inch circle. Allow the area to dry. Repeat this process for two more cycles. Tighten the tourniquet before the third cycle. Do not touch or palpate the area after cleansing.

5. Remove flip-off caps from BACTEC culture vials. Wipe tops of vials with a single alcohol swab and allow to dry. Do not use iodine!

6. Clean the threads of the vacutainer holder with alcohol swab. Attach the holder to the butterfly set (preferably 21 gauge to facilitate the blood flow from adult patients).

7. Perform the venipuncture..

8. Keep bottles in an upright position during collection to prevent back flushing and to verify accurate collection volume.

9. Remove the second culture bottle from the needle before removing the needle from the arm so that no air is injected into the bottle. Mix the bottles well.

10. Label the bottles with patient's name, date, time, and sequence number (if more than one set is ordered). Be careful to avoid the barcode when writing or applying labels to bottles. Be sure, when using preprinted labels, that you match order numbers for both bottles of each set.

11. Repeat the entire procedure for each set (two bottles for adult – one bottle for children under 3 years old. Separate sites are used for each set unless explicitly ordered otherwise by the physician.

12. Remove gloves and wash hands. Gloves contaminated with blood are disposed of in infectious waste containers.

13. Deliver the specimens and labels to the Micro lab.

NOTES:

1. Each set of blood cultures must be drawn from a separate site unless you are instructed otherwise by the physician. You may request that more than one set be collected from the same site for certain difficult to draw individuals.

2. If other tests are ordered, draw those tubes after the second blood culture bottle is taken off the needle.

3. No more than four sets of blood cultures will be collected within a 24 hour period without a specific request and must be brought to the attention of the supervisor and pathologist.

REFERENCES:

1. Frank Koontz-Professor of Pathology, Director of Clinical Microbiology Lab, University of Iowa Medical Center.

2. Fletcher Allen Health Care (Microbiology Lab)

3. BACTEC Blood Collection Instruction sheet