

	Procedure Title: Blood Culture Collection
	Document Owner(s): Mike Brandon

X	Main Campus	X	Kids Express
X	South Campus	X	Ohio Peds Associates - Vandalia
X	North Campus	X	Ohio Peds Associates - Kettering
X	Genetics	X	Suburban Pediatrics – Liberty Township
X	KTC	X	Suburban Pediatrics – Mason
X	BCT	X	Peds Associates of Dayton (Beavercreek)
X	VTC Troy	X	Peds Associates – North (Dayton)
X	SCCWC	X	Peds Associates – Far Hills (Kettering)
X	Children's Health Pavilion	<input type="checkbox"/>	

I. Principle and Clinical Significance

A. Principle

The most important criteria for the recovery of microorganism from the blood stream is adequate volume of blood

B. Clinical Significance

Microorganism in the blood stream is a serious condition and the patient will benefit by the rapid and early detection using culture techniques.

II. Specimen

A. Patient Preparation

B. Type

C. Storage

D. Unacceptable Specimens

E. Precautions – handle all samples using Universal Precautions

III. Reagents

A. ChloroPrep® or hospital approved product for skin prep.

B. Alcohol Prep containing 70% Isopropyl Alcohol equivalent. Available from Central Distribution.

C. Iodine Tincture, 2% USP in 47% alcohol. Available as Antiseptic Applicators.

D. Angel Wing transfer device

E. Blood Media/Tube for the type of microorganism suspected. See III below. Obtain from the Clinical Laboratory.

IV. Equipment

NA

V. Calibration

NA

VI. Quality Control

NA

VII. Procedure

Guidelines for amounts of blood to be inoculated into each bottle:

Age	Volume of blood
0-1 month	0.5-1 mL
2months -3 years	1-4 mL
4 years-adult	2mL-8 mL

TYPE	BOTTLE	AMOUNT OF SPECIMEN
Aerobic (Routine)	GREEN	1-8 mL
Anaerobic	ORANGE	1-8 mL
Fungal	Isolator	1-1.5 mL
Mycobacteria tuberculosis (TB, MIA)	Isolator	1-1.5 mL
Viral (Includes CMV)	Green top (Heparin)	1-4 mL

**PROCEDURE FOR SKIN PREPARATION AND BOTTLE DIAGRAM
DECONTAMINATION****Patients more than 2 weeks old and larger than 1000 grams**

Cleanse skin with Chloraprep® or equivalent (see below if patient is allergic to chlorhexidine)

1. Hold the applicator sponge downward, pinch the applicator to break ampule and release the antiseptic.
2. Use a side-to side motion to scrub the site with friction pad for a full 30 seconds; allow site to dry completely (at least 30 sec.) before venipuncture. (DO NOT TOUCH SITE AFTER PREP)
3. Cleanse each septum of bottle of tube with a separate 70% alcohol pad or Chloraprep®. Allow to dry.

4. Draw blood and inoculate each bottle using angel wing transfer device.
5. Label with at least two patient identifiers.

NOTE: Do not vent or overfill (more than 8 mL) in blood culture bottles

If patient is less than 1000 grams OR less than 2 weeks gestation (or has a sensitivity to alcohol or chlorhexidine), use povidone-iodine pads, let dry for two minutes. Wipe with Sali-Wipes when procedure is completed (for patient less than 1000 gram or less than 2 weeks of age). Scrub top of blood culture bottle with chlorhexidine pad for 30 seconds

If patient is allergic to chlorhexidine or if Chloraprep® cannot be used, prep site with 70% alcohol followed by iodine tincture applied in concentric circles (starting in the center). Allow to dry at least 1-2 minutes before venipuncture. Cleanse site after venipuncture with 70% alcohol to remove any iodine.

Note: Once disinfected, the venipuncture's site should not be palpated with a finger unless it has been similarly decontaminated.

Always inoculate blood cultures first before filling other tubes

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VIII. Procedural Performance

NA

IX. Procedural Notes

NA

X. References

Cumitech Blood Culture, Donnelly, JP et al. ASM 2006.

XI. Related Documents

