

Providence Health Care	Department: Respiratory Services	Date Originated: March 1990 Date Reviewed/Revised: Nov 2012
PROCEDURE	Topic: <u>Critical Care</u> – Blood Sampling From Arterial Lines Using VAMP (Closed) or Stopcock (Open) System (Respiratory Therapy) Number: B-00-12-12003	Related Links:

APPLICABLE SITES:

St. Paul's Hospital
 Mount Saint Joseph Hospital

GENERAL INFORMATION:

Drawing blood samples from an arterial catheter is a shared responsibility between the Respiratory Therapist and Registered Nurse.

Prior to drawing samples, the therapist and nurse should consult with each other to determine the need for additional blood sampling. This ensures unnecessary blood draws and subsequent blood loss can be avoided.

Assess the need for arterial blood gas sampling as per the Arterial Blood Gas Clinical Practice Guideline, [B-00-12-12012](#).

PROCEDURE FOR DRAWING ARTERIAL BLOOD GAS SAMPLE:

Follow this link to interdisciplinary guideline [BD-00-12-40003](#).

PROCEDURE FOR DRAWING VACUTAINER BLOOD SAMPLES AND ARTERIAL BLOOD GAS SAMPLE:

1. Refer to [Phlebotomy Quick Reference Guide](#) for order of blood draw.
2. Gather additional supplies:
 - Vacutainer
 - Vacutainer luer-lock adaptor needle
 - Blood specimen tubes for sampling
 - **For VAMP:** VAMP needleless shielded cannula
 - **For Stopcock:** additional specimen tube for discard
3. Follow steps for drawing arterial blood gas sample above (note that you will be drawing other samples prior to drawing the ABG sample).

4. **For the VAMP system:**

- a. Attach the Vacutainer luer-lock adaptor needle to the Vacutainer. Attach the VAMP needleless shielded cannula to the tip of the Vacutainer.
- b. Place blood specimen tube into the Vacutainer and allow filling to occur passively. Repeat this step for all required blood tubes.
- c. Grasp the shielded cannula with Vacutainer and pull straight out from the sample site.

NOTE: Failure to remove the shielded cannula with the Vacutainer will result in arterial blood loss through the cannula.

- d. Swab the sample site with an alcohol swab. Proceed with ABG sampling.

5. **For the Stopcock system:**

- a. Attach the needleless luer-lock adaptor needle to the Vacutainer.
- b. Place a Vacutainer with luer-lock adaptor needle into the blood sampling port of the three-way stopcock.
- c. Turn the stopcock OFF to the flush solution.
- d. Place one blood specimen tube into the Vacutainer for the discard volume. Completely engage the blood specimen tube into the Vacutainer.
- e. Remove the discard specimen tube from the Vacutainer and discard.
- f. Engage each specimen tube into the Vacutainer until all tubes have been filled.
- g. Turn the stopcock OFF to the patient.
- h. Remove the Vacutainer from the sampling port.
- i. Swab the sample site with an alcohol swab. Proceed with ABG sampling.