Blood Specimen Collection from Venipuncture

Only individuals trained and certified to perform phlebotomy should be allowed to collect blood from a patient. When performing venipuncture the procedure described in CLSI document H3-A6 should be followed. The procedure described below is for illustrative purposes only. NTD Labs supplies Vacutainer tubes and mailing containers to clients, but not patients, upon request. To request these supplies please call 1-888-638-5227.

The collection of blood from veins is called venipuncture. For the convenience of technician and patient, arm veins are best for obtaining a blood sample. If arm veins cannot be used due to interference from bandage or IV therapy, thrombosed or hardened veins, etc., consult your supervisor for instructions on the use of hand or foot veins.

A valid physician’s order and a legible completed NTD Labs test requisition form is required before proceeding.

**NOTE:** Do not draw blood from an arm with IV fluid running into it. Choose another site. The IV fluid will alter tests results.

**Materials Required for Venipuncture Procedure**

To perform a venipuncture, the following materials are required:

- Sterile gauze pads (2” x 2”)
- 70% isopropyl alcohol solution pads
- Tourniquet
- needles and holder
- tube appropriate for the test to be performed

Arrange your equipment in an orderly manner and have it within easy reach. Also, wash your hands before the procedure.
Venipuncture Procedure

Position the patient so that the vein is easily accessible and you are able to perform the venipuncture in a comfortable position. Always have the patient either lying in bed or sitting in a chair with the arm propped up.

WARNING
Safeguards should be in place to prevent patients from falling forward when they are seated.

To perform venipuncture, follow the steps given below.

1. Identify the patient by asking “What is your Name?” , then explain the procedure to the patient.
2. Apply tourniquet around the arm approximately 2 to 3 inches above the antecubital fossa (the depression in the anterior region of the elbow with enough tension so that the VEIN is compressed, but not the ARTERY.
3. Position the patient’s arm extended with little or no flexion at the elbow.
4. Locate a prominent vein by palpation (feeling). If the vein is difficult to find, it may be made more prominent by massaging the arm with an upward motion to force blood into the vein.
5. Cleanse the puncture site with a 70% alcohol pad and allow to dry.

CAUTION: After cleaning the puncture site, only the sterile needle should be allowed to touch it.

6. "Fix" or hold the vein taut. This is best accomplished by placing the thumb under the puncture site and exerting a slight downward pressure on the skin or placing the thumb to the side of the site and pulling the skin taut laterally.
7. Using a smooth continuous motion, introduce the needle, bevel side up, into the side of the vein at about a 15-degree angle with the skin.
8. Holding the barrel with one hand, push the tube into the holder with the other hand and watch for the flow of blood into the tube until filling is completed. The order of specimen collection is important. Please collect them in the following order i. Blood Culture, ii. Coagulation Testing, iii. Serum specimens with or without clot activator and with or without gel, iv. Collect the remaining specimens.
9. Once all the specimens have been collected, hold the arm with one hand and release the tourniquet with the other.
10. Place the sterile gauze over the puncture site and remove the needle with a quick, smooth motion.
11. Apply pressure to the puncture site and instruct the patient to keep the arm in a straight position. Have the patient hold pressure for at least 3 minutes.
12. Take this time to invert any tubes that need to have anticoagulant mixed with the blood.
13. Label specimens with the patients first and last names and identification number such as date of birth, today’s date and the identification of the individual collecting the specimen. Place the specimens with the completed test requisition form and compare the information to ensure that it is the same.
14. Re-inspect the puncture site to ensure bleeding has stopped, and apply a bandage.

NOTE: When disposing of needles and syringes, please be aware that they are considered to be biohazardous medical waste and CANNOT be disposed of in the regular garbage. They should be placed in a hard plastic container labeled as biohazardous and removed by a licensed biohazard material hauler. Please note that NTD cannot accept such materials and is not affiliated with any licensed haulers.

Special handling needs between time of collection and time received by laboratory

Do not freeze specimens. Label all specimen tubes. Close shipping canisters tightly. Ship specimens within 24 hours via FedEx (priority overnight and Saturday delivery). Transport at room temperature. Refrigerate specimens if delayed before shipping.

Positive Patient Identification and Specimen Labeling

The phlebotomist is responsible for correctly identifying the patient using two unique patient identifiers that include the patient's complete first and last name, date of birth and/or medical record or hospital number.

Every patient must verbalize his/her name to the phlebotomist, if able to do so by asking "Would you please tell me (or spell) your name and birthdate". It is unacceptable for the phlebotomist to ask the patient to confirm his/her name that was verbalized by the phlebotomist.

The Specimen MUST be labeled with two forms of patient ID that match EXACTLY with the information on the test requisition. The test Requisition has peel off labels preprinted with the Test Requisition Number that may act as one form of ID. Please print the patient's full first and last names on the label exactly as they appear on the requisition and affix to the specimen. Please retain the requisition number in your records and use if inquiring about test results.

If using your own specimen labels please include two unique patient identifiers that include the patient's complete first and last name, date of birth and/or medical record or hospital number and/or the test requisition number. All information must match exactly on the test requisition form.
Enter the name of the person drawing the specimen on the test requisition to allow for traceability

Safe disposal of materials used in collection

Use only an approved disposal container for syringes and needles used in collection of specimens. Do not throw needles or syringes into the garbage, recycling containers, the toilet, plastic milk jugs, bleach bottles, or soda bottles. NTD cannot accept biohazardous materials and is not affiliated with any licensed medical waste haulers. If necessary please contact a regional hospital to direct you to an appropriate medical waste removal expert.