Guidelines for venous blood sample collection:

- Always properly identify your patient before collecting any blood sample.
- Observe routine practices must be observed for all patient venipunctures and blood collections from vascular access devices (VAD).
- Some tests may require exact timing of sample collection, e.g. monitoring of antimicrobial or other drug level. Be sure to clearly communicate time of last dose and time of next dose to lab staff to ensure the sample is collected at the right time.
- Blood specimens should not be collected from an arm with an intravenous catheter if alternate sites are available. Special precautions must be taken when that arm is the only option.
- Lab staff is not permitted to access indwelling vascular lines, infant scalp veins, fistulas or arteries.
- Lab staff is not permitted to turn IV infusion pumps off or on.
- Patients should inform the collector when a particular collection site should not be used. In the event that the patient may not be able to provide this information, an alternate means of communicating the information, such as signage above the patient bed should be employed.
- Patients requiring Transfusion Medicine Service (TMS) sample collection must have a TMS armband placed on the patient’s arm after the patient has been properly identified. Only specifically trained staff is authorized to collect TMS samples.
- Order of tube collection is important to ensure that the tube additive from a preceding tube does not introduce a contaminant or interferent into the following tube.
- Follow the guidelines for micro-collections when collecting samples by capillary skin puncture.
- Use only in-date collection tubes.
- Never pre-label tubes with patient information prior to blood collection.
- Tourniquet should only be tied to the arm for up to one minute, then released.
- Select an appropriate collection site for venipuncture.
- Patient collection site must be appropriately disinfected prior to sample collection, including blood culture samples.
- Consult the Lab Test Directory for specific information regarding any special patient preparation or sample collection requirements.
- Gently mix samples immediately following collection to ensure proper preservation of the analytes. 180° tube inversion, allowing bubble to travel the length of the tube, followed by return to upright position is one mix.
- Do not transfer sample from one specimen tube to another.
- Label tubes at the time of collection in the presence of the patient with the following information:
  - Patient first and last name
  - Patient date of birth
  - Personal Health Number (PHN) (preferred) / Medical Record Number (MRN)
  - Collector mnemonic
  - Date of collection

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✓ Time of collection
✓ TMS Identification number (from TMS band attached to the patient arm) for any sample for testing for possible transfusion.

▸ Samples will be assessed for acceptability at the lab according to the following criteria:
  ✓ Inadequate sample volume (includes under- and over-filled coagulation tubes)
  ✓ Presence of hemolysis or other interferent
  ✓ Wrong collection tube
  ✓ Wrong collection time (ie. therapeutic drug monitoring)
  ✓ Inadequate or improper tube labelling
  ✓ Prolonged delay in delivery to lab
  ✓ Other individual criteria related to the test requested

▸ Samples not meeting acceptance criteria will require recollection.

Guidelines for collecting from Vascular Access Device:

Refer to the IH Parenteral Practice Manual for collection from any vascular access device.

▸ Always withdraw adequate amounts of blood for discard when collecting from an indwelling line (VAD) to prevent contamination or dilution of the sample due to infused solutions. Discard two times the dead space volume for non-coagulation testing, 5 mL or six times the dead space volume for coagulation tests.

▸ Do not collect coagulation samples through power-picc line.

▸ Do not collect samples for diagnostic testing through lines that are also used to infuse medications or other therapies:
  ✓ Therapeutic drugs for therapeutic drug monitoring tests
  ✓ Heparin or other anti-coagulant for coagulation testing
  ✓ Parenteral Nutrition for chemistry analytes

▸ Use a blood transfer device when transferring blood from a syringe to a Vacutainer® tube.

▸ Never apply pressure to syringe to facilitate filling of Vacutainer® tube. Tube vacuum will be sufficient for complete fill.