

Step	Procedure	Yes	No	Remarks
1.	Identify the client (using two identifiers; name and date of birth), introduce yourself, and obtain informed consent for the procedure if the client is conscious or unconscious. (Inform about what, why, and how of the procedure.)			
2.	<u>Gather equipment and supplies</u> ☐ Pre-heparinized syringe ☐ Choose the right size of needles for the site (i.e. 20, 23, and 25 gauge, of different lengths) ☐ Smaller gauges are more likely to lyse the specimen ☐ A safety lock syringe with a needle cover that allows the syringe to be capped before transport, without manually recapping. ☐ Sterile gauze or bandage to cover the puncture site after collection ☐ A ice container with crushed ice (For transporting the sample if the analysis is not done at the point of care) ☐ 3 mls syringe filled with local anesthetic (if hospital protocol allows).			
3.	Perform hand hygiene			
4.	Position the client flat on their back. Ask for help if positioning needs assistance (Note: If the client is clenching their fist, holding their breath, or crying, this can change breathing and thus alter the test result.)			
5.	Locate the radial artery by performing an Allen test for collateral circulation.			
6.	Repeat the Allens test on the next hand if the Allens test fails to locate the radial artery on the previous hand.			

7.	Once the site is identified, palpate the artery again for confirmation.			
8.	Clear the bedside area to set up a sterile field.			
9.	<u>Prepare yourself:</u> ☐ Perform hand hygiene ☐ Prepare supplies ☐ Put on PPEs ad per the situation/client's disease and condition ☐ Put on sterile gloves			
10.	Scrub the site with 70% alcohol and allow it to air dry.			
11.	Use the index finger to locate the pulse, hold the syringe like a dart.			
12.	<u>During the procedure:</u> ☐ Insert the needle at a 45-degree angle, about 1 cm away from the index finger to avoid contamination. ☐ Advance the needle into the radial artery until a bright red blood flashback appears, then allow the syringe to fill to the appropriate level. DO NOT pull back the syringe plunger.			
13.	After the procedure: ☐ After the desired sample is drawn, withdraw the needle and syringe. ☐ Place a sterile gauze or bandage over the site. ☐ Have the client or an assistant apply firm pressure for sufficient time to stop the bleeding. ☐ Check whether bleeding has stopped after 2–3 minutes. Note: Five minutes or more may be needed for clients who have high blood pressure or a bleeding disorder, or are taking anticoagulants.			
14.	Activate the mechanisms of a safety needle to cover the needle before placing it in the ice container.			

	OR Use a one-hand scoop technique (fishing method) to recap the needle after removal.			
15.	Expel air bubbles, cap the syringe and roll the specimen between the hands to gently mix it.			
16.	Label the sample syringe as per the facility's protocol.			
17.	Discard the used waste and PPE as per protocol.			
18.	Wash hands thoroughly with soap and water.			
19.	Check the client site for bleeding (if necessary, apply additional pressure), adjust the bed and position, and thank the client.			
20.	Transport the sample immediately to the laboratory, following laboratory handling protocols.			

Reference:

WHO Guidelines on Drawing Blood: Best Practices in Phlebotomy. Geneva: World Health Organization; 2010. 5, Arterial blood sampling. Available from:
<https://www.ncbi.nlm.nih.gov/books/NBK138661/>