

BHTL-013

**CERTIFICATE IN
PHLEBOTOMY ASSISTANCE
(CPHA)**

**BLOCK
2
CHECK LIST MANUAL**



School of Health Sciences
Indira Gandhi National Open University
Maidan Garhi, New Delhi - 110068

CURRICULUM DESIGN COMMITTEE

Dr. A. K. Mandal
HOD, Department of
Pathology, Dr. Baba Saheb
Ambedkar Medical College,
New Delhi

Prof. Neelkamal Kapoor
HOD, Department of
Pathology, AIIMS, Bhopal

Dr. Archana Bajpai
Associate Professor
Transfusion Medicine,
AIIMS, Jodhpur

Prof. Kolte Sachin
Department of Pathology
VMMC and Safdurjung Hospital

Dr. Reeta Devi
Assistant Professor (Sr. Scale)
SOHS, IGNOU
Maidan Garhi, New Delhi

Ms Laxmi
Assistant Professor (Sr. Scale)
SOHS, IGNOU, Maidan Garhi
New Delhi

Prof. T. K. Jena
SOHS, IGNOU,
Maidan Garhi, New Delhi

Dr. Neerja Sood
Assistant Professor (Sr. Scale)
SOHS, IGNOU, Maidan Garhi,
New Delhi

Dr. Biplab Jamatia
Assistant Professor (Sr. Scale)
SOHS, IGNOU, Maidan Garhi,
New Delhi

BLOCK PREPARATION TEAM

Dr. Biplab Jamatia
Assistant Professor (Sr. Scale)
SOHS, IGNOU
Maidan Garhi, New Delhi

Dr. A. K. Sood
Senior Consultant,
Skill Training Cell,
SOHS, IGNOU

Prof. T. K. Jena
Project Director
Skill Training Cell, SOHS, IGNOU,
Maidan Garhi, New Delhi

Dr. D. C. Jain
Senior Consultant,
Skill Training Cell,
SOHS, IGNOU

EDITORIAL TEAM

Dr. Biplab Jamatia
Assistant Professor (Sr. Scale)
SOHS, IGNOU
Maidan Garhi, New Delhi

Dr. A. K. Sood
Senior Consultant,
Skill Training Cell,
SOHS, IGNOU

Dr. D. C. Jain
Senior Consultant,
Skill Training Cell,
SOHS, IGNOU

CO-ORDINATION

Prof. T. K. Jena
Project Director
Skill Training Cell,
SOHS, IGNOU

Dr. A. K. Sood
Senior Consultant,
Skill Training Cell,
SOHS, IGNOU

Dr. D. C. Jain
Senior Consultant,
Skill Training Cell, SOHS, IGNOU

Course Coordinator

Dr. Biplab Jamatia
Assistant Professor (Sr. Scale)
SOHS, IGNOU
Maidan Garhi, New Delhi

MATERIAL PRODUCTION

Sh. Ajit Kumar
Section Officer (Publication)
School of Health Sciences, IGNOU

The curriculum has been adapted from the "Short term Training Curriculum Handbook for Phlebotomy Assistance" prepared by MoHFW, 2017, whose Standards are based on the National Skills Qualifications Framework (NSQF), Ministry of Skill Development and Entrepreneurship (MSDE).

July, 2019

© Indira Gandhi National Open University, 2019

ISBN : 978-93-89200-84-3

All rights reserved. No part of this work may be reproduced in any form, by mimeograph or any other means, without permission in writing from the Indira Gandhi National Open University.

Further information on the Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110 068 or the website of IGNOU www.ignou.ac.in

Printed and Published on behalf of the Indira Gandhi National Open University, New Delhi, by Director, School of Health Sciences, IGNOU.

LaserTypeset by : Rajshree Computers, V-166A, Bhagwati Vihar, (Near Sector 2, Dwarka), Uttam Nagar, New Delhi-110059

Contents

Sr.No.	Page No.
1.	Check lists for Basic skills for phlebotomy assistance 5
1.1	CHECK LIST FOR COMMUNICATION WITH PATIENT 5
1.2	CHECKLIST FOR HEIMLICH MANOEUVRE 6
2.	CHECK LISTS FOR SAMPLE COLLECTION 7
2.1	CHECK LIST FOR FILING UP OF THE TEST REQUISITION FORM (TRF) 7
2.2	CHECK LIST FOR PATIENT PREPARATION AND POSITIONING 8
3.	CHECK LISTS FOR COLLECTION AND PACKAGING OF BLOOD SAMPLES 10
3.1.	CHECK LIST FOR COLLECTION OF BLOOD SAMPLE 10
3.2	CHECK LIST FOR PACKAGING AND TRANSPORT OF SAMPLES 12
4.	CHECK LISTS FOR POST COLLECTION PROCEDURES 14
4.1	CHECK LIST FOR SERUM PREPARATION 14
4.2	CHECK LIST FOR PLASMA PREPARATION 15
4.3	CHECK LIST FOR PREPARATION OF ALIQUOTS 16
5.	CHECK LISTS FOR BLOOD BANK PROCEDURES 17
5.1	CHECK LIST FOR DONOR INTERVIEW AND SCREENING 17
5.2	CHECK LIST FOR DONOR BLOOD COLLECTION 18
5.3	CHECK LIST FOR DONOR BLOOD COLLECTION 20
6.	CHECK LISTS FOR PREVENTION OF INFECTION 22
6.1	CHECK LIST FOR HYGIENIC HAND WASHING 22
6.2	CHECK LIST FOR WEARING STERILE GLOVES 23

BLOCK INTRODUCTION

Various skills for the Phlebotomists have been discussed in the Practical manual (BHT 013) have been regrouped under 6 heads and each group has been presented separately.

The check lists given here are for helping you in self evaluation.

While going through a check list for learning the respective skills follow the instructions as follows:

Go through the steps in the chronological order

Use tick mark in the respective square of the check list.

We have provided five blank columns to be used for five cases as you practice these skills. However you can practice any of the skills more times as you want by using the check lists. By cross checking the steps, you ensure the correct performance of the procedure.

This manual will help you to develop your self confidence. We hope , this manual will be of long term value in your practice.



1. CHECK LIST FOR BASIC SKILLS FOR PHLEBOTOMY ASSISTANCE

1.1 CHECK LIST FOR COMMUNICATION WITH PATIENT

Steps for Communication with patient	Case 1	Case 2	Case3	Case4	Case 5
Step 1: Introduce yourself: Hello/ Namaskar, I am Mr A.					
Step 2: Ensure patient identification: What is your name. [Match the details such as age, sex and ward identification number with the request form]					
Step 3: Explain the procedure: I will now insert a needle into your vein and draw blood for testing. [Mention the names of the tests to be done and amount of blood to be taken]					
Step 4: Ascertain that the patient understands: did you understand me, do you have any questions, can we start the procedure?					
Step 5: Enquire about any allergies to disinfectants, adhesive tape or history of fainting during phlebotomy.					
Step 6: Shall we start, if you feel uncomfortable, please let me know immediately.					

1.2 CHECK LIST FOR HEIMLICH MANOEUVRE

Steps for Heimlich manoeuvre	Case 1	Case 2	Case 3	Case 4	Case 5
Step 1: Stand behind the person. Wrap your arms around the waist. Tip the person forward slightly.					
Step 2: Put the fist of one hand slightly above the naval.					
Step 3: Grasp the fist with the other hand. Give a quick, upward thrust, as if trying to lift the person up.					
Step 4: Perform between six and 10 abdominal thrusts until the blockage is dislodged.					
Step 5: If the obstruction is not relieved and the person becomes unconscious, then standard cardiopulmonary resuscitation (CPR) must be started immediately.					

2. CHECK LISTS FOR SAMPLE COLLECTION

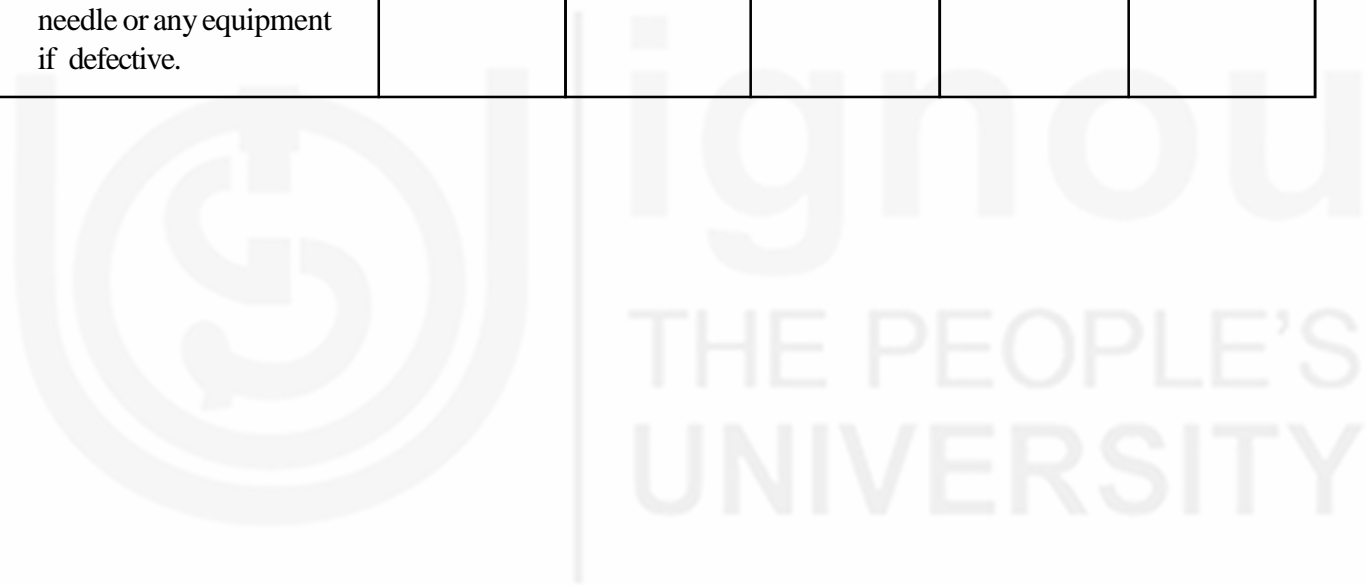
2.1 CHECK LIST FOR FILING UP OF THE TEST REQUISITION FORM (TRF)

Steps for Filing up of the test requisition Form (TRF)	Case 1	Case 2	Case 3	Case 4	Case 5
1. Verify the sample to be collected and the time and date of collection, and to determine whether any special requirements e.g. fasting or patient preparation requirements must be met before the venipuncture.					
2. Patient's first and last names					
3. Identification number (The identification number may be a hospital-generated number or manual laboratory assigned no.)					
4. Patient's date of birth					
5. Patient's location					
6. Name of the doctor who requested the test					
7. Tests requested					
8. Requested date and time of sample collection					
9. Special collection information (such as fasting sample or latex sensitivity)					

2.2 CHECK LIST FOR PATIENT PREPARATION AND POSITIONING

Steps for patient preparation and positioning	Case 1	Case 2	Case 3	Case 4	Case 5
1. Reassure the patient and give a brief explanation of the procedure to the patient, it will make the patient comfortable.					
2. Verifying any pretest preparation for e.g. fasting or withholding drugs before test.					
3. Ask the patient if he or she has a latex sensitivity or any allergic predisposition.					
4. Patient seated in a special chair with arm support. The patient's arm should be firmly supported and extended downward in a straight line.					
5. Collect all necessary supplies and arrange them near to the patients.					
6. Arrange the tubes according to recommended order of draw in a phlebotomy tray.					
7. Perform hand sanitization and applying gloves					
8. Apply the tourniquet 3 to 4 inches above the puncture site.					
9. Proper Venipuncture site selection					

Steps for patient preparation and positioning	Case 1	Case 2	Case 3	Case 4	Case 5
<p>10. Proper cleansing the site with 70 percent isopropyl alcohol or other antiseptic. Start from the inward to the outward in widening concentric circles spiraling about 2 to 3 inches at the venipuncture site. Repeat the same with a new alcohol swab for particularly dirty skin.</p>					
<p>11. Examine the needle for defects, such as a blunted or barbed point, an obstructed lumen, or a bent shaft. Discard the needle or any equipment if defective.</p>					



3. CHECK LISTS FOR COLLECTION AND PACKAGING OF BLOOD SAMPLES

3.1. CHECK LIST FOR COLLECTION OF BLOOD SAMPLE

Steps for collection of blood sample	Case 1	Case 2	Case 3	Case 4	Case 5
1. Extend the patient's arm and inspect the antecubital fossa or forearm.					
2. Locate a vein of a good size that is visible, straight and clear.					
3. Apply the tourniquet about 4–5 finger widths above the venepuncture site and re-examine the vein.					
4. Select gauge of a needle (the most frequently used gauges for phlebotomy are 20, 21 and 22)					
5. Ask the patient to form a fist so that the veins become more prominent.					
6. While performing a phlebotomy, the bevel of the needle must face upward when the needle is inserted into the vein.					
7. Introduce the needle into the vein at an angle of 30 degree or below.					
8. Once sufficient sample has been collected, remove the tourniquet.					

Steps for collection of blood sample	Case 1	Case 2	Case 3	Case 4	Case 5
9. Withdraw needle from the vein and simultaneously apply pressure over the venepuncture site with a sterile gauze held by the other hand.					
10. Apply firm pressure at the site of venepuncture. The arm must either be extended or raised. It should not be bent at the elbow since there would be a chance of hematoma formation					



ignou
THE PEOPLE'S
UNIVERSITY

3.2 CHECK LIST FOR PACKAGING AND TRANSPORT OF SAMPLES

Steps in packaging and transport of samples	Case 1	Case 2	Case3	Case4	Case 5
1. The samples need to be identified before packaging along with the laboratory requisition.					
2. The samples are kept in sample holder with their identification labels towards one side.					
3. The samples are placed in a zip lock bag and secured.					
4. The samples that are to be transported at room temperature or warmed are separated and packed separately, since a majority of samples are transported in the cold.					
5. The hard transport box is selected and ice packs placed on the sides.					
6. The ice packs need to be separated from the samples to prevent direct contact. This is done by the use of either thermocol sheets or aluminum foils.					
7. The primary packaged samples are then placed in bubble wraps or shredded newspaper or cotton wool and packed in a secondary watertight packing.					

Steps in packaging and transport of samples	Case 1	Case 2	Case3	Case4	Case 5
8. This secondary packs are then placed in the hard box.					
9. The laboratory requisitions for the samples are then placed in another primary packing and placed along with the secondary packs of the samples.					
10. The lid of the box is then secured.					
11. A label containing the name and address of sender and receiver, telephone number of emergency contact, date and time of sending the packing, total weight and number of samples is then placed on the pack.					
12. A bio hazard sticker and an orientation sticker are stuck on the box.					

4. CHECK LISTS FOR POST COLLECTION PROCEDURES

4.1 CHECK LIST FOR SERUM PREPARATION

Steps for Serum preparation	Case 1	Case 2	Case3	Case4	Case 5
1. Collect whole blood in a covered test tube or vacutainer.					
2. Allow the blood to clot by leaving it undisturbed at room temperature. This usually takes 15–30 minutes.					
3. Separate the serum by centrifuging at 1,000–2,000 x g for 10 minutes.					
4. Immediately transfer the liquid supernatant (serum) into a clean polypropylene tube using a pipette.					
5. The samples should be maintained at 2–8°C while handling.					
6. If the serum cannot analyzed immediately, the serum should be stored in 0.5 ml aliquots at –20°C or lower					

4.2 CHECK LIST FOR PLASMA PREPARATION

Steps for plasma preparation	Case 1	Case 2	Case3	Case4	Case 5
1. Collect whole blood into commercially available anticoagulant containing tubes or vacutainers.					
2. Centrifuge for 10 minutes at 1,000–2,000 x g using a refrigerated/ temperature controlled centrifuge for 15 minutes. This removes platelets from the plasma sample.					
3. Transfer the liquid supernatant (plasma) into a clean polypropylene tube using a pipette.					
4. The samples should be maintained at 2–8°C while handling.					
5. If the plasma is not analyzed immediately, the plasma should be stored in 0.5 ml aliquots at –20°C or lower					

4.3 CHECK LIST FOR PREPARATION OF ALIQUOTS

Steps for aliquots preparation	Case 1	Case 2	Case3	Case4	Case 5
1. Wear protective gear (cap, mask, gloves etc.) to prevent exposure to specimen and aerosols					
2. Keep all the sample tubes ready (after centrifugation if necessary) along with the requisitions.					
3. Identify the number of aliquots to be prepared from a sample depending upon the requisition.					
4. Label the aliquot tubes with the name and unique identifier of the patient whose sample is to be transferred. Use printed/ barcode labels wherever available.					
5. Without disturbing the sample, using a disposable Pasteur pipette or mechanical pipette with changeable tip to draw the required amount of serum/ plasma and drop it into the aliquot.					
6. Cap/ close the lid of the aliquot tightly and secure with a tape when required.					
7. Recheck the label of the patient and the required test to be done and store according to the instructions/institutional SOP until further management.					
8. Discard the waste in biohazard waste as per institutional protocol.					

5. CHECK LISTS FOR BLOOD BANK PROCEDURES

5.1 CHECK LIST FOR DONOR INTERVIEW AND SCREENING

Steps for Donor interview and screening	Case 1	Case 2	Case3	Case4	Case 5
1. Donor registration requires identification (including name, age, sex, address, telephone number, date of birth).					
2. The registered donor is then asked to fill a questionnaire. The donor is then screened for fitness to donate. A donor who does not fulfill the criteria is said to be deferred.					
3. If the donor is accepted, the donor is counselled regarding the phlebotomy process and the complications that may occur as a result of donation. The donor then moves into the phlebotomy area after consent.					
4. Selection of appropriate bag					
5. Check the bag visually for puncture or discolouration. Check the expiry date of the bag					
6. Write unit number on blood bag and satellite bags, registration form, and pilot tubes with a marker.					
7. Write date of collection and expiry on the blood bag/ satellite bags to be mentioned as per format as per DD/MM/YY					

5.2 CHECK LIST FOR DONOR BLOOD COLLECTION

Steps for Donor Blood collection	Case 1	Case 2	Case3	Case4	Case 5
1. Allow prepared site to dry for at least 30 sec. Dispose swab into waste bin meant for biomedical waste management.					
2. After the skin has been prepared it must not be touched again; do not re-palpate the vein at the intended venipuncture site					
3. Inflate the BP cuff / tourniquet to about 80-100mm Hg and perform the phlebotomy.					
4. Apply micropore or similar surgical tape to hold the needle in place and cover venipuncture site with a sterile gauze piece.					
5. Ask the donor to open and close the fist by squeezing the rubber ball throughout the procedure.					
6. Communicate with the donors (especially first time donors) during donation.					
7. Never leave the donor unattended during and immediately after the donation					
8. Ensure smooth blood flow and that collection should be completed within 8 to 10 min.					
9. As soon as required quantity of blood is collected the blood collection monitor automatically clamps the tube and gives an alarm.					

Steps for Donor Blood collection	Case 1	Case 2	Case3	Case4	Case 5
10. Release the blood pressure cuff and apply plastic clamp distal to phlebotomy needle.					
11. Withdraw the needle from the arm while applying pressure over the gauze					
12. Ask the donor to apply pressure on the puncture site over the gauze with the other hand for 5 minutes until blood stops oozing.					
13. Place the needle inside pilot tube and transfer blood in the pilot tube(s) with same number as on blood bag.					
14. Dispose the cut tube and needle into appropriate puncture proof container.					
15. Strip blood bag tubing, starting at seal, pushing blood into bag. Invert bag several times to mix blood thoroughly; then allow tubing to refill with anticoagulated blood from the bag.					
16. Ask donor to rest on the couch for five minutes and observe for any adverse reaction.					
17. Ask donor to proceed to the refreshment area.					
18. Seek the help of medical officer in case of any donor reaction. Also learn to identify and manage common donor reactions.					

5.3 CHECK LIST FOR POST DONATION CARE AND COUNSELING

Steps for Post donation care	Case 1	Case 2	Case3	Case4	Case 5
1. In the refreshment area, the donor is offered some light refreshment and post donation counseling is done here.					
2. Have the donor under close supervision for atleast 30 minutes post donation when most of the donor reactions occur.					
3. Recheck for veni-puncture site for bleeding.					
4. Thank the donor for his thoughtful donation and encourage giving feedback and donating again after 3-4 months.					

Give the donor the following instructions:	Case 1	Case 2	Case3	Case4	Case 5
1. Drink more fluids than usual in the next 4 hours.					
2. Do not smoke/drive for half an hour.					
3. Do not take alcoholic drinks for at least 6 hours.					
4. If there is bleeding from phlebotomy site, apply pressure and raise the arm.					
5. If there is feeling of faintness or dizziness, either lie down or sit with head between knees. If					

Give the donor the following instructions:	Case 1	Case 2	Case3	Case4	Case 5
symptoms persist, ask for help, return to the blood bank or consult a doctor.					
6. Remove the bandage/ band-aid after 4 hours.					
7. Restrain from heavy work or exercise for next 24 hours.					



ignou
THE PEOPLE'S
UNIVERSITY

6. CHECK LISTS FOR PREVENTION OF INFECTION

6.1 CHECK LIST FOR HYGIENIC HAND WASHING

Steps for Hygienic hand washing	Case 1	Case 2	Case3	Case4	Case 5
1. Remove all jewellery and watch.					
2. Wet your hands under running water.					
3. Apply sufficient soap on your hands and wrist; rub your hands to form good lather.					
4. Interlace the fingers and rub them thoroughly.					
5. Rub the thumbs of both the hands.					
6. Rub the palm surface and palm graves.					
7. Thoroughly wash and rinse the hands and wrist under running water.					
8. Keep your hands in a upward direction so that water dribbles down.					
9. Dry hands and arms thoroughly with clean towel or under the fan.					

6.2 CHECK LIST FOR WEARING STERILE GLOVES

Steps for wearing sterile gloves	Case 1	Case 2	Case3	Case4	Case 5
1. Wash your hands before putting on sterile gloves.					
2. Make sure your gloves fit properly for you to wear them comfortably during all patient care activities.					
3. If you or your patient is allergic to natural rubber latex, you should choose gloves made from other synthetic materials					
4. Be aware that sharp objects can puncture medical gloves.					
5. Always change your gloves if they rip or tear.					
6. After removing gloves, wash your hands thoroughly with soap and water or alcohol-based hand rub.					

BHTL-013 Skill for Phlebotomy Assistance

Block 1 PRACTICAL MANUAL

UNIT 1 Basic Skills for Phlebotomy Assistance

UNIT 2 Preparation for Sample Collection

UNIT 3 Collection of Blood Sample

UNIT 4 Post Collection Procedures

UNIT 5 Prevention of Infection

Block 2 Check list manual

Block 3 Log book