



Phlebotomy and Cannulation
Educational workbook

Accountability, Professional Standards and the Law

Accountability applies to all healthcare workers, including Healthcare Assistants (HCAs), nurses, Allied Health Professionals and clinical support staff. You do not need to be registered to be held accountable. If you perform a clinical procedure, you are responsible for your actions under both civil and criminal law.

The section below explores your accountability, professional standards and the law that applies to clinical practice.

1.1 Complete the 'Four Pillars of Accountability'.

	Professional	Employer	Civil Law	Criminal Law
Who are you accountable to?				
An example				

1.2 Explain the key legal principles below. Try and apply them to your own clinical practice.

Duty of Care	
Negligence	
Trespass to the Person	
Vicarious Liability	
Competence / Scope of Practice	

1.3 Name four pieces of legislation or professional standards that apply to your practice.

1	2
3	4

1.4 Briefly explain what the "Duty of Candour" means in relation to an incident where a patient suffers an adverse event during a V&C procedure.

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Consent and Capacity

Valid consent must be obtained before every clinical procedure. This applies to all healthcare workers - not just registered staff. Performing a procedure without valid consent, even if no harm results, may constitute battery under civil law.

The section below explores your understanding of consent, mental capacity and the law that protects patients' rights.

2.1 What makes consent valid. List all three requirements.

1	2	3
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2.2 Explain the different types of consent.

	Definition	Example
Implied		
Expressed		

2.3 Explain each of the following key principles relating to capacity.

Mental Capacity	
Two Stage Capacity Test	

2.4 An elderly patient appears confused and does not respond clearly when you explain the procedure. How do you assess whether they have capacity? What are your next steps?

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2.5 Briefly explain what a "Best Interests" decision is under the Mental Capacity Act, and who is ultimately responsible for this.

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Infection Prevention and Control

Healthcare-associated infections (HAIs) are a significant patient safety risk. Every person performing an invasive procedure has a legal and professional duty to minimise infection risk. Effective infection control is not optional - it is a core clinical responsibility.

The section below explores your understanding of infection prevention principles as they apply to phlebotomy and cannulation.

3.1 What are Standard Infection Control Precautions (SICPs)? List four that apply to phlebotomy and cannulation.

1	2
3	4

3.2 The WHO 5 Moments of Hand Hygiene define when hand hygiene must be performed. Complete the table below.

1
2
3
4
5

3.3 Name and identify one of the following. *Think about the process of aseptic non-touch technique (ANTT).*

Key Part	
Key Site	

3.4 You have cleaned the venepuncture site and are about to insert the needle when you accidentally re-palpate the vein with an ungloved finger. What must you do before proceeding?

3.5 Why is it clinically important to allow site cleaning solution to completely air-dry naturally?

Sharps Safety and Exposure Incidents

Sharps injuries are one of the most common occupational injuries in healthcare. They carry the risk of transmission of blood-borne viruses and must be prevented through safe practice, appropriate equipment and correct disposal. Every healthcare worker has a legal duty to follow sharps safety procedures.

The section below explores your understanding of sharps safety and what to do in the event of an exposure incident.

4.1 Answer the following questions about sharps safety.

When and how should a used needle be disposed of?	
Who is legally responsible for disposing of sharps?	
Where should a sharps bin be located?	
When using a safety-engineered device at what exact point should the safety mechanism be activated?	
Under what circumstances is it acceptable to manually re-cap or re-sheath a used needle?	

4.2 Following a sharp or needlestick injury place these in the correct order.

	Attend Occupational Health or A&E for risk assessment
	Wash the area thoroughly with soap and running water
	Complete a Datix / incident report
	Encourage free bleeding — do not suck the wound
	Inform your line manager immediately
	Cover with a waterproof dressing

4.3 Identify three risks of not following the correct sharps procedure.

1
2
3

Blood Bottles and Labelling

Correct sample collection, order of draw and accurate labelling are critical to patient safety. Errors at this stage can result in misdiagnosis, delayed treatment or - in the most serious cases - patient harm. Wrong Blood in Tube (WBIT) is classified as a Never Event by NHS England.

The section below explores your knowledge of blood tubes, their correct use and the standards required for safe sample labelling.

5.1 Blood Bottle Identification *Based on BD - tube colours can vary slightly between manufacturers.*

	Additive	Tests
Light Blue		
Red		
Gold / Yellow		
Purple / Lavender		
Green		
Pink		
Grey		

5.2 Why is the "Order of Draw" important?

5.3 Number the bottles in the correct order.

	Citrate		EDTA
	Serum		Fluoride Oxalate
	Blood Culture		Blood Gas

5.4 List all the information that must appear on a blood sample label.

1	4
2	5
3	6

5.5 At what point must the label be completed, and where must this take place?

Peripheral Venous Cannulation

Unlike venepuncture, which is a transient "in-and-out" procedure, a peripheral cannula is an indwelling device that remains in the patient's venous system. This significantly increases the risk of localized and systemic infection, vessel damage, and fluid complications. Safe insertion, correct device selection, and ongoing maintenance are vital to patient safety.

The section below explores your understanding of cannula selection, site contraindications, and post-insertion care.

6.1 Complete the information below.

Gauge	Colour	Flow Rate	Use
	Orange		
	Grey		
	Green		
	Pink		
	Blue		
	Yellow		

6.2 Give four reasons why you would avoid cannulating a specific site?

1	2
3	4

6.3 Complete the Visual Infusion Phlebitis (VIP) Score chart below.

VIPS Score	Clinical Sign	Action
0		
1		
2		
3		
4		
5		

6.4 Define the following terms and outline any steps you need to take.

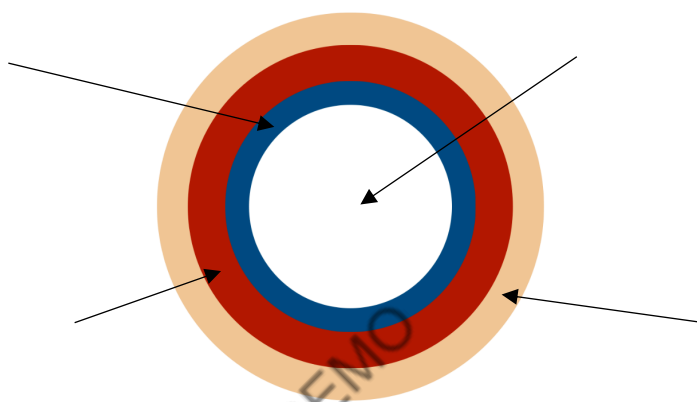
Extravasation	
Hematoma	
Phlebitis	
Thromboembolism	

Anatomy and Physiology

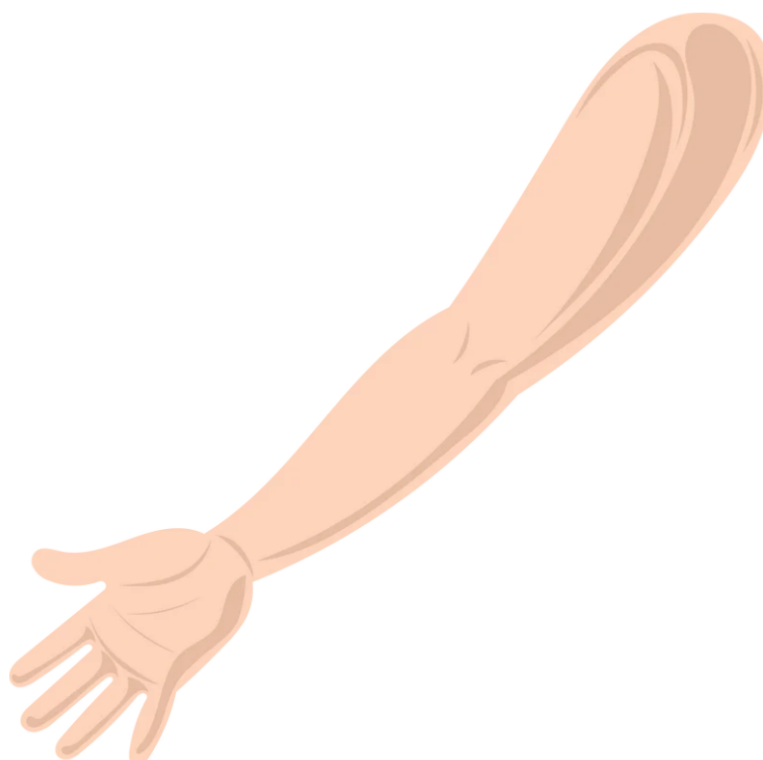
A sound understanding of anatomy is essential for safe venepuncture and cannulation. Knowing the structure of blood vessels and the location of veins, arteries and nerves reduces the risk of complications and improves procedural success.

7.1 What the difference between a vein and an artery? *Think about the type of blood, direction of travel and if it can be used for cannulation or venepuncture.*

7.2 Label the four parts of a blood vessel and describe their function. *Think about the three layers that make up a vessel.*



7.3 Draw and label the veins and arteries in the hand and arm. *Draw in the veins in blue and the arteries in red.*



Clinical Skills Day

If outcomes cannot be met on the clinical skills day they can be completed in clinical practice by an authorised trainer.

Outcome	Self-Assessment	Clinical Trainer
Has demonstrated a working knowledge of infection prevention and control and how it applies to both Venepuncture and Cannulation (including SICPs, ANTT, and Hand Hygiene).		
Has demonstrated the safe handling, activation of safety devices, and correct disposal of medical sharps in accordance with current health and safety regulations.		
Has demonstrated the correct procedure for positive patient identification (PPID) by verifying the patient's full name, date of birth, and unique identification number against the request form and wristband, using active questioning where possible.		
Is able to differentiate between veins and arteries, identify appropriate anatomical sites in the upper limb, and recognize high-risk structures to avoid.		
Can safely and correctly apply a tourniquet, accurately palpating and selecting an appropriate vein while remaining mindful of the safe maximum time limit to prevent hemoconcentration or patient discomfort.		
Has demonstrated the correct technical execution of needle insertion, including stabilizing the vein with skin traction, inserting the needle at the correct anatomical angle, and accurately identifying and responding to blood "flashback."		
Has demonstrated the correct "Order of Draw" for blood sample collection and understands the strict standards required for bedside sample labelling.		
Can select the appropriate cannula gauge based on patient assessment and clinical indications, and understands how to apply the Visual Infusion Phlebitis (VIP) score for ongoing monitoring.		
Has successfully performed both venepuncture and peripheral intravenous cannulation techniques safely and aseptically within a controlled, simulated environment.		
Can safely secure a peripheral cannula using an appropriate sterile transparent dressing, correctly flush the device to ensure patency using a pulsatile technique, and cleanly disconnect the giving set or extension line without contamination.		

Clinical Trainer Notes

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