

NHS Trust

TRUST CLINICAL POLICY

VENEPUNCTURE/PHLEBOTOMY POLICY

APPROVING COMMITTEE(S)	Chair's Action Clinical Policies Group	Date approved:	18/07/2014
EFFECTIVE FROM	Date of approval		
DISTRIBUTION	All medical, nursing Trust	g and AHPs ir	n Barts Health
RELATED DOCUMENTS	Infection Control Principles and Responsibilities Safe Use, Handling and Disposal of Sharps Clinical waste policy Standard Precautions – Use of Personal Equipment -Infection Control Policy. Patient Identification Policy		
STANDARDS	NMC, RCN, NICE The Royal Marsden		
OWNER	NMATH		
AUTHOR/FURTHER INFORMATION	NMATH		
SUPERCEDED DOCUMENTS	Newham University London and Whipp policies.		
REVIEW DUE	3 years from date of approval		
KEYWORDS	Venepuncture, phlebotomy		
INTRANET LOCATION(S)	http://bartshealthint	ranet/policies	/policies.aspx

CONSULTATION	Barts Health	Assistant Chief Nurse CAG Directors of Nursing Associate Director of Nursing NMATH team Infection Control Simulation Team Microbiology Team Anaesthetic Team Haematology Team Site managers Senior Nurses/Matrons Sickle Cell Nurse Specialist Occupational Health Haematology Consultant Maternity Services Radiology Phlebotomy Services Community Health Team Ward Managers
	External Partner(s)	BD Diagnostics



OF APPLICATION AND EXEMPTIONS	Included in policy: For the groups listed below, failure to follow the policy may result in investigation and management action which may include formal action in line with the Trust's disciplinary or capability procedures for Trust employees, and other action in relation to organisations contracted to the Trust, which may result in the termination of a contract, assignment, placement, secondment or honorary arrangement.
	All Trust staff, working in whatever capacity
PL 1P1	Other staff, students and contractors working within the Trust
OF AF EXEN	Exempted from policy: The following groups are exempt from this policy
SCOPE C	This policy applies to all Trust staff. This policy does not apply to workers provided by independent contractors providing a contract for service to the Trust or any other workers. Those working for CHL and its Service Providers are not expected to comply with this policy.



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VENEPUNCTURE POLICY

1 INTRODUCTION

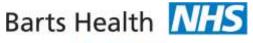
- 1.1 Venepuncture is used in Barts Health Trust as a clinical and diagnostic aid in patient management. The purpose of this policy is to provide all relevant staff with the correct standards required to safely and effectively withdraw and collect blood from patients.
- 1.2 All staff involved in this procedure must have undertaken the necessary training and assessment. Individual skills assessment is essential as every practitioner is accountable for their practice.
- 1.3 This policy applies to the venepuncture of adults (aged 16 and over)
- 1.4 This policy applies to all designated Healthcare Professionals (HPs) working in the Trust.These include:
 - Nurses
 - Doctors
 - Medical Students
 - Midwives
 - Student Midwives
 - Midwifery Assistant Practitioners (MAPs)
 - Healthcare Support Workers (HCSWs)
 - Phlebotomists
 - Clinical Assistant Practitioners (CAPs)

2 DEFINITIONS

Venepuncture	The procedure of entering a vein with a needle (Weller 2009)
Phlebotomy	The surgical opening of a vein to remove blood (Martin and McFearn 2008)

3 TRAINING IMPLICATIONS

- 3.1 The HP must undertake a training programme recognised by the Trust which incorporates theory, simulated practice and supervised clinical practice.
- 3.2 All HPs need to complete a period of supervised practice and achieve the agreed competencies for venepuncture. All staff practising phlebotomy in the Trust need to attend a study day. If evidence of competency prior to working



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with the Trust can be provided then attendance on the study day is still required and a minimum of one supervised practical assessment is advised.

4 LEGAL AND PROFESSIONAL ISSUES

- 4.1 HPs must have knowledge of
 - Relevant antatomy and physiology
 - Criteria for choosing vein and correct device to use
 - Identifying potential problems and prevention of problems
 - Health and safety of the procedure and correct disposal of equipment
 - How to gain service user consent and have knowledge of the legal requirement of consent.
- 4.2 All HPs must attend Barts Health venepuncture training to gain the knowledge specific to venepuncture.

5 PROCESSES

- 5.1 Equipment needed:
 - Blue tray
 - Sterile single use BD Vacutainer Blood Collection needle or Winged Blood Collection set and Single Use holder
 - Clean non sterile appropriately sized gloves and apron
 - Alcohol hand rub
 - Sharps bin
 - Single use tourniquet
 - Wipe with 2% chlorhexidine and 70% alcohol
 - Required blood bottles (appendix 7 for guidelines)
 - Blood request form or electronic printed labels
 - Gauze and hypoallergenic clean tape.
- 5.2 Please see link below Aseptic Non Touch Technique (ANTT) Video for general principles <u>http://bartshealthintranet/About-Us/Corporate-Directorates/Medical-Directorate/Infection-prevention-and-control/Index.aspx#antt</u>



Choice of vein

- 5.3 This policy relates to venepuncture of the superficial veins of the upper limbs.They are numerous and accessible. These include median cubital veins, the cephalic vein and basilic vein.The metacarpal veins may be used for venepuncture after the anticubital veins have been assessed and considered inappropriate.Further explanation of these areas are given during the study day.
- 5.4 Avoid performing venepuncture on sites where there is:
 - Evidence of venous fibrosis
 - Evidence of haematoma/oedema formation
 - Evidence of localised infection/inflammation
 - Fistulae or vascular grafts
 - Any vascular device or a site above an infusion of any sort.
 - Metacarpal veins in patients with poor skin turgor or diminished subcutaneous tissue
 - The affected side of the body in patients who have had breast surgery with axillary node clearance or lymphoedema
 - Areas of joint flexion
 - Limbs with fractures
 - Affected side of previous CVA

Failed attempts to perform venepucture

5.5 If a haematoma forms during venepuncture withdraw the needle immediately & apply pressure. If the practitioner is unable to bleed the patient after two attempts they must summon a more experienced practitioner to take over. Multiple, unsuccessful attempts are distressing for the patient and limit future vascular access.

Taking blood cultures

5.6 This policy does not offer appropriate guidance for taking blood cultures. Please refer to the Trust Blood Culture Guidelines.



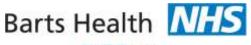
6 PROCEDURE OF VENEPUNCTURE

Action	Rationale
Check blood sample requested .Identify patient and print labels.	Ensure correct sample is taken from patient
Gain service user consent and answer any questions and check allergies.Check contraindications to venepuncture	This may influence vein choice (Dougherty 2008)
Assemble equipment check expiry dates.Decontaminate hands using soap and water using thirteen step technique <u>http://bartshealthintranet/Policies-and-</u> <u>Guidelines/Documents/Policies-Trust-wide/Hand-</u> <u>Hygiene.pdf</u>)	Prevent risk of infection
Ensure patient is sitting or lying down, exhibit confident friendly manner.	Allow patient to relax and ensure safety during procedure
Put chosen limb on pillow and apply tourniquet to area approximately 7-8 cm proximally to chosen area. Apply tourniquet for no longer than one minute.	Ensure comfort and dilate veins by obstructing venous return (Dougherty 2008) If radial pulse is undetectable then tourniget is too tight (Royal Marsden 2011)
	Not advised to tap area to dilate veins, however can place in warm water to dilate veins (Dougherty 2008)
Select vein using the criteria (see 5.3) and release tourniquet.	Patient comfort.
Decontaminte hands with alcohol hand rub, apply gloves.Clean area with wipe using cross hatch technique.Do not repalpate.	Maintain asepsis and decrease risk of infection
Allow area to dry for at least 30 seconds and reapply tourniquet.	See Aseptic NonTouchTechnique link
Remove cover from needle and anchor vein a few cm below insertion site.	Facilitate smoother needle entry.

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Insert needle approximately 15 degree angle. This may change according to vein size.	Facilitate pain free and successful venepuncture
Decrease angle of needle as soon as flash back seen in the winged device or when puncture to vein wall is felt.	Prevent vein wall damage by advancing needle too early
Advance needle slightly	To stabilize device in vein.
Avoid applying pressure on needle	Prevent puncture occuring through vein wall.
Insert relevant tubes in correct order (appendix 7) into vacuumed plastic holder system until required level.Remove bottles, gently invert bottles.	Avoid spurious results and to help blood sample mix with additives.
Release tourniquet.Tourniqet should not be placed on limb longer than one minute.	Avoid haemoconcentration and subsequent inaccurate results.
Withdraw needle and activate safety device. Apply gauze and plaster over site when needle fully removed.	Sharps safety and avoid pain, stem bleeding and avoid bruising.
Dispose of sharp in sharps bin.	Prevent needle stick injury.
Label bottles by patient's side.	Ensure correct labelling
Dispose of all equipment according to Trust policy	Prevent contamination from clinical waste
Ensure samples are available for collection and document in patient's notes	Samples sent promptly
Ensure patient is comfortable following the procedure	Patient comfort

7 DUTIES AND RESPONSIBILITIES

Chief Executive	Ensure mechanisms are in place for implementation of policy
CAG DON	Ensure CAG is compliant with policy and monitor of needle stick injuries
Ward Managers and Clinical Area Managers	Current policy available in clinical area Staff receive and complete training
	Staff receive competency assessment.



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	Make staff aware of need for Datix reports if necessary.
All Staff Undertaking Venepuncture	Ensure training has been completed and competency assessed before attempting venepuncture
NMATH Team	Education and training
Infection Control	Monitoring and auditing of infection control issues

8 MONITORING THE EFFECTIVENESS OF THIS POLICY

Issue being monitored	Monitoring method	Responsibility	Frequency	Reviewed by and actions arising followed up by
Number of Needle Stick Injuries Sustained During Venepuncture	Datix via Safety Net	CAG Director of Nursing	Monthly	CAG Director of Nursing
Hospital Acquired Infections	Datix via Safety Net	Infection Control Team	Monthly	Infection Control Team
Staff Competence	Attend study day and complete competencies within three months of attendance	Line Manager Matron and Senior nurse	One Off Attendance	Line Manager
Monitoring of Competency	Yearly Appraisal	Line Manager	Yearly	Line Manager

END



Appendix 1: Change Log

Change Log – Venepuncture Policy		
Substantive changes since previous version	Reason for Change	Author & Group(s) approving change(s)
The inaugural Barts Health Venepuncture Policy	Trust Merger	NMATH Team

Appendix 2: Impact assessments

Equalities impact checklist - must be completed for all new policies



Organisational impact checklist - must be completed for all new policies



Appendix 3: Additional guidance and information

- 1 Dougherty, L. (2008) Obtaining Peripheral Venous Access. Intravenous Therapy in Nursing Practice. 2nd Edition. Blackwell. Oxford.
- 2 Dougherty L & Lister,S. (2011) The Royal Marsden Manual of Clinical Nursing Procedures. 8th Edition. Wiley-Blackwell
- 3 General Medical Council (2012) Continuing Professional Development. Guidance for all Doctors.General Medical Council.
- 4 Martin, E and Mcferran T (2008) A Dictionary of Nursing. 5th Edition. Oxford University Press
- 5 Nursing and Midwifery Council (2011). The Prep Handbook. London NMC.
- 6 Venepuncture in Adults (2012) Newham University Hospital.
- 7 Weller, B. F. and Royal College of Nursing (2009) Baillieres Nurses Dictionary 23rd edition. Elsevier, Edinburgh



Appendix 4: Venepuncture Competencies Workbook Please click link to access the Venepuncture Competencies Workbook

Appendix 5: Clinical Biochemistry User Handbook Please click link to access the Clinical Biochemistry Handbook

Appendix 6: Pathology Intranet Guidance Please click link to access the Pathology Guidance

Appendix 7: Tube Guide and Order of Draw

Please click link to access the Tube Guide and Order of Draw

Appendix 8: Trouble Shooting

Issue	Reason	Problem Solving Solution
Patient Anxiety	History of trauma	Reduce the chance of a traumatic venepuncture. Try all techniques to ensure comfort and success.
		Be confident and friendly to patient Listen to the patient's fears and explain what the procedure involves.
	Anxiety/ phobia of needles	Provide reassurance and explain procedure fully.
	Syncope episode	Lie the patient down, with their head slightly tilted down and call for assistance
Spillage of Blood	Damaged/faulty equipment	Ensure equipment is checked prior to use
		Report and remove batch
	Reverse vacuum	Employ use of vacuumed plastic blood collection system.
		Remove blood tube from plastic tube holder before removing needle
		Ensure blood is handled and transported correctly
Lack of Blood Flow	Presence of valves	Palpate to locate if valves are present
		Withdraw needle slightly removing tip away



	from valve
Spasm of vein	Mechanical irritation. Unable to prevent
	Massage above the vein or apply heat
Venous collapse	Chose veins with a larger lumen and try smaller device.
	Release tourniquet, let veins refill and then
	tighten tourniquet again
Small vein	Avoid small veins.
	May require another venepuncture
Lack of blood flow	Chose veins with large lumens where possible
	Apply heat above the vein
Through puncture where the needle was	Correct the angle
inserted too far into the	Withdraw the needle, but if bruising is
vein	evident, withdraw needle immediately and apply pressure

Lack venous	of	Multiple use of the same veins	Consider other sites
access			Do not attempt the procedure unless experienced
		Peripherally shutdown	Keep environment warm
			Put patient's arm in warm water
		Dehydration	Try to hydrate patient where appropriate
		Hardened veins (due to scarring and thrombosis)	Venepuncture will be unsuccessful so avoid these veins
		Bad technique/poor choice of vein or device	Ensure correct device and technique are used