

**TRUST CLINICAL POLICY**  
**VENEPUNCTURE/PHLEBOTOMY POLICY**

<b>APPROVING COMMITTEE(S)</b>	Chair's Action Clinical Policies Group	Date approved:	18/07/2014
<b>EFFECTIVE FROM</b>	Date of approval		
<b>DISTRIBUTION</b>	All medical, nursing and AHPs in Barts Health Trust		
<b>RELATED DOCUMENTS</b>	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		
<b>STANDARDS</b>	NMC, RCN, NICE The Royal Marsden		
<b>OWNER</b>	NMATH		
<b>AUTHOR/FURTHER INFORMATION</b>	NMATH		
<b>SUPERCEDED DOCUMENTS</b>	Newham University Hospital, Barts and the London and Whipps Cross venepuncture policies.		
<b>REVIEW DUE</b>	3 years from date of approval		
<b>KEYWORDS</b>	Venepuncture, phlebotomy		
<b>INTRANET LOCATION(S)</b>	<a href="http://bartshealthintranet/policies/policies.aspx">http://bartshealthintranet/policies/policies.aspx</a>		

<b>CONSULTATION</b>	<i>Barts Health</i>	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

<b>SCOPE OF APPLICATION AND EXEMPTIONS</b>	<p><b>Included in policy:</b>  <i>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.</i></p>
	All Trust staff, working in whatever capacity
	Other staff, students and contractors working within the Trust
	<p><b>Exempted from policy:</b>  <i>The following groups are exempt from this policy</i></p>
	<p>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.</p>

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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

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 anatomy 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 <http://bartshealthintranet/About-Us/Corporate-Directorates/Medical-Directorate/Infection-prevention-and-control/Index.aspx#antt>

**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 venepuncture**

- 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

<u>Action</u>	<u>Rationale</u>
<p>Check blood sample requested .Identify patient and print labels.</p> <p>Gain service user consent and answer any questions and check allergies.Check contraindications to venepuncture</p>	<p>Ensure correct sample is taken from patient</p> <p>This may influence vein choice (Dougherty 2008)</p>
<p>Assemble equipment check expiry dates.Decontaminate hands using soap and water using thirteen step technique  <a href="http://bartshealthintranet/Policies-and-Guidelines/Documents/Policies-Trust-wide/Hand-Hygiene.pdf">http://bartshealthintranet/Policies-and-Guidelines/Documents/Policies-Trust-wide/Hand-Hygiene.pdf</a>)</p>	<p>Prevent risk of infection</p>
<p>Ensure patient is sitting or lying down,exhibit confident friendly manner.</p>	<p>Allow patient to relax and ensure safety during procedure</p>
<p>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.</p>	<p>Ensure comfort and dilate veins by obstructing venous return (Dougherty 2008) If radial pulse is undetectable then tourniquet is too tight (Royal Marsden 2011)</p> <p>Not advised to tap area to dilate veins, however can place in warm water to dilate veins (Dougherty 2008)</p>
<p>Select vein using the criteria (see 5.3) and release tourniquet.</p>	<p>Patient comfort.</p>
<p>Decontaminate hands with alcohol hand rub, apply gloves.Clean area with wipe using cross hatch technique.Do not repalpate.</p>	<p>Maintain asepsis and decrease risk of infection</p>
<p>Allow area to dry for at least 30 seconds and reapply tourniquet.</p>	<p>See Aseptic NonTouchTechnique link</p>
<p>Remove cover from needle and anchor vein a few cm below insertion site.</p>	<p>Facilitate smoother needle entry.</p>

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 Avoid applying pressure on needle	To stabilize device in vein. Prevent puncture occurring 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. Tourniquet 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.



	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



equalities

Organisational impact checklist - must be completed for all new policies



Organisational  
impact assessment

### Appendix 3: Additional guidance and information

- 1 Dougherty, L. (2008) Obtaining Peripheral Venous Access. Intravenous Therapy in Nursing Practice. 2<sup>nd</sup> Edition. Blackwell. Oxford.
- 2 Dougherty L & Lister, S. (2011) The Royal Marsden Manual of Clinical Nursing Procedures. 8<sup>th</sup> 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. 5<sup>th</sup> 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 23<sup>rd</sup> 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
<b>Patient Anxiety</b>	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
<b>Spillage of Blood</b>	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
<b>Lack of Blood Flow</b>	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 inserted too far into the vein	Correct the angle  Withdraw the needle, but if bruising is evident, withdraw needle immediately and apply pressure

<b>Lack of venous access</b>	Multiple use of the same veins	Consider other sites  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