

## Saint John of God Kerry Services

Hospitality - Compassion - Respect



## Guideline for Nurses undertaking VENEPUNCTURE Policy and Procedure

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## **Policy Statement**

It is the policy statement of St John of God Kerry Services that registered nurses undertaking venepuncture must have successfully achieved competence having completed an education programme that is compliant with the HSE guiding framework for the education, training and competence validation in venepuncture and peripheral intravenous cannulation for nurses and midwives (2017). In addition nurses undertaking venepuncture will do so in accordance with the procedural elements as outlined in this policy.

## Purpose

The purpose of this policy is to

- Outline the roles and responsibilities of the clinical line manager, and the registered nurse who undertaking the skill of venepuncture.
- Set out procedures based on best evidence, aligned with the national HSE standardised approach, while safeguarding the resident and guiding the nurse in the performance of venepuncture
- Aid in the preparation and support of the resident.

## Scope

This policy applies to all nurses who have successfully completed the required education, training and competence assessment to carry out venepuncture.

## **Roles and Responsibilities**

## Role and Responsibility of the Clinical Manager

It is the responsibility of the clinical nurse manager of line manager to ensure that nurses who are undertaking venepuncture fulfil the following criteria. Nurses must

• Be registered on the live register of nurses and midwives maintained by An Bord Altranais.



- Be employed in the Saint John of God Kerry Services.
- Be approved in an area where venepuncture is required to enhance service provision.
- Successfully complete the educational preparation and competence assessment provided by this organisation, that is compliant with or equivalent to that outlined in the HSE guiding framework for the education, training and competence validation in venepuncture and peripheral intravenous cannulation for Nurses and Midwives (2017).
- The Nurse must complete a refresher course on Venepuncture yearly on HSE learning and supply certificate to Line Manager and HR.

#### Role and Responsibility of the Registered Nurse.

- Work within their scope of practice scope of practice framework for nurse and midwives, (An Bord Altranais, 2015)
- Comply with local organisational venepuncture policy and procedures therein, when undertaking venepuncture.
- Become competent in the skill of venepuncture and :
  - 1. The Equipment specific to the procedure.
  - 2. The use of blood collection systems used in this organisation
  - The relevant blood collection bottles and related blood test used in this area. The colour of these may vary depending on the laboratory processing the sample.
  - 4. Registered Nurse must take every effort to maintain competence by keeping up to date in developments in practice related to venepuncture.
  - 5. The registered Nurse is responsible for maintaining clear and accurate records of the procedure.
- Be familiar and comply with the organisation's infection prevention and control, health and safety procedures and risk management policies as they apply to venepuncture.



## Role and Responsibility of Non-Nursing Staff

- To monitor for any discomfort following venepuncture
- To observe and report any discomfort to Nursing Staff
- Assist with a resident's and safety comfort before, during and after venepuncture if appropriate.

## Role and Responsibility of the Registered Medical Practitioner

- Requests appropriate blood tests for the resident.
- Reviews blood results and refers the resident for further investigation if required.

## **Vein Selection in Adults**

Choosing the correct vein is important. When selecting the appropriate site of the vein for venepuncture, it is best practice to begin in the most distal aspect of the vein. This allows for further attempts above the selected vein which will not been impeded. When undertaking venepuncture in adults, the specific advantages and disadvantages of potential venepuncture sites must be considered. These are outlined below.

## Median Cubical Vein in the Antecubital Fossa. Advantages:

- Clearly visible and accessible
- Deep veins with rich blood supply
- Easy to palpate
- Well supported by subcutaneous tissue (prevents vein rolling under the needle).
- Accessible to thin people.

#### Disadvantages:

• Brachial Artery and radial nerve in close proximity



# Cephalic and Basilic veins in the forearm Advantages:

- Easy to locate
- Larger veins

#### **Disadvantages:**

- Cannot be used if site is used for arteriovenous fistula
- Not well supported by subcutaneous tissue (vein can roll from needle)
- Brachial artery close to both veins
- Median nerve close to basilica vein
- Radial nerve close to cephalic vein

# Metacarpals veins in the dorsal venous network Advantages:

- Easy accessible, easily visualised and palpable.
- Prominent in obese patients.

#### Disadvantages:

- Difficult to secure
- Skin can be delicate and subcutaneous tissue is diminished (Small veins may only offer small volumes of blood)
- Only suitable for small blood collection set (23G butterfly system)



Clinical assessment should be carried out by the registered nurse prior to the venepuncture procedure. Consideration must be given to the resident's cognitive and mobility needs when selecting a site. A four step approach is outlined as follows:

#### Check:

- Consent to be obtained from the individual before proceeding. If unable to obtain consent a follow up with the GP/Psychiatry is required before proceeding.
- The indication for venepuncture to determine equipment and specific blood bottles to use
- If the resident has fasted as required for specific tests
- The clinical conditions of the resident
- Location and length of the vein
- Condition of the vein(Visual and palpation)
- Area is warm prior to the venepuncture procedure (veins constrict of cold, making the procedure more difficult)
- Allergies to topical anaesthetic agents or plasters
- For needle phobia
- Previous history of blood borne viruses, bleeding disorders or if receiving anticoagulation therapy.

#### Choose:

- Preferred site if documented in Care Plan
- Most distal aspect of the vein
- Non-dominant hand
- Correct location, avoiding arteries and nerves
- Appropriate equipment to undertake the procedure
- Appropriate alcohol wipes



#### Avoid:

- Hard, sclerosed, fibrosed, knotty, thrombosed veins or previous venepuncture sites
- Valves in the vein(if visible or palpable)
- Duplication of the blood tests

#### Do not Use:

- Arm with obvious infection or bruising
- Arm with a fracture
- Arm with arteriovenous (AV) fistula
- Arm affected by a cerebral vascular accident
- Arm affected by lymph oedema or where axillary noted clearance has taken place, for example post mastectomy.

## **Procedural Guideline for the Venepuncture Procedure**

## **Indications for the Procedure**

Venepuncture is the procedure of entering a vein with a needle and is undertaken to:

- Obtain a blood sample for diagnostic purposes using haematological, biochemical and bacteriological analysis
- Monitor levels of blood components.

#### Considerations when undertaking the venepuncture Procedure

Venepuncture is one of the most common invasive procedures and can be traumatic for the resident. It should only be ordered when necessary. A clinical assessment should be undertaken prior to the venepuncture procedure.



Informed consent should be obtained from the resident where possible. If this is not possible then the person's circle of support i.e. staff, family or general practitioner may take a decision in relation to the will and preference of the individual.

On occasions a resident may need to be supported by a staff member to facilitate the withdrawal of blood. Clinical holding maybe required. Please ensure the following is documented.

- Lack of consent documented by GP/Psychiatrist
- This procedure is reflective of the will and preference of the individual.
- Circle of support consent.

#### Equipment:

- Clean Clinical Tray
- Disposable well-fitting non-latex gloves
- Alcohol hand gel
- Tourniquet(non-latex)
- Alcohol wipes
- Sterile cotton wool / sterile gauze
- Elastoplast's /equivalent
- Safety blood collection set and holder e.g. butterfly needle set
- Appropriate blood bottles
- Individual laboratory form
- Sharps bin

#### Procedure:

- 1. Decontaminate hands as per local policy
- 2. Ensure the resident is in a comfortable position- assistance if required
- 3. Check what site the resident normally has blood taken from



- 4. Assembly all the devices necessary for the procedure and ensure that all products are within the expiry date
- 5. De-contaminated hands with alcohol hand gel
- 6. Visualise and palpate veins selecting the most appropriate vein
- 7. Apply the tourniquet 5-6 cm above the intended site for venepuncture do not leave the tourniquet on for more than one minute to insert the needle.
- 8. The tourniquet should be tight enough to impede blood return, but should not impede arterial flow, and arterial pulse should be present below the tourniquet
- 9. Palpate an select the appropriate vein release the tourniquet
- 10. Select the appropriate size blood collection system for the size of the vein, check collecting system for any defects.
- 11. Clear the skin with an alcohol saturated swab in a circular motion, starting from the centre and working your way to the outside. Allow to air dry. Do not re-palpate or touch the cleansed site.
- 12. Don gloves and re- secure the tourniquet.
- 13. Apply traction to the skin below the intended puncture site.
- 14. Ensure the level of the needle is upwards and insert the needle through the skin at an angle of 10-30 degrees to the horizontal. Observe for flash back of blood if using the butterfly system.
- 15. Reduce the angle slightly and secure the tape if necessary
- 16. Carefully release the skin traction
- 17. Withdraw the correct amount of blood in each bottle in the correct order of draw
- 18. When the blood withdrawal is near completion release the tourniquet.
- 19. Withdraw the needle and apply pressure to the site with cotton wool.
- 20. Immediately place the collection equipment in the sharps bin.
- 21. Cover the puncture site with a plaster and leave for at least 1 hour.
- 22. Ensure all bottles are labelled with the resident's name and date of birth.
- 23. Place all correctly labelled bottles into a sealed blood bag with attached form, ensure blood sample is returned to the laboratory to University Hospital Kerry
- 24. Remove gloves, wash hands, documents and record procedure.



25. Clean tray and tidy away all equipment.

#### Documentation:

The registered nurse must be familiar with the documentation required for the venepuncture procedure. A requisition form must accompany blood samples submitted to the laboratory. The requisition form must contain the proper information in order to process the specimen. The essential information required is as follows:

- Surname and first name
- Date of Birth and sex
- Address
- Identification number
- Diagnosis of symptoms
- Doctor's signature
- GP 's Name
- Date of venepuncture procedure
- Indication of blood test's requested
- MRN Number
- Document if a Resident has been on antibiotics recently

#### **Complications:**

Pain is them most common complication of venepuncture and can be caused by any of the following:

- Poor technique
- Using a large gauge venepuncture device
- Hitting an artery, a nerve or a valve in the vein. Using veins in sensitive area.
  Withdraw the device immediately and apply pressure, document fully and seek medical advice if pain continues or resident deteriorates



• Not allowing the alcohol to dry on the skin before commencing venepuncture.

#### Bruising may also be caused by venepuncture if:

- Too steep an angle or over advancement of the needle when entering the vein
- Too large a needle for the vein
- Fragile veins
- Failure to release the tourniquet early enough
- Failure to secure haemostasis after needle removal

Bruising can be reduced by prompt removal of the tourniquet before removal of the needle

#### Safety and Infection Control

#### Always practice standard precautions

#### **Protect yourself:**

- Wear gloves and an apron when handling blood/body fluids
- Change gloves after each resident
- De-contaminate hands between residents using alcohol hand gel
- Dispose of items in appropriate containers
- Dispose of needles immediately into sharp bin
- Do not bend, break, re-cap or re-sheath needles to avoid accidental needle puncture of splashing of contents.

Spillages should be covered, mopped up with paper towels and discarded into the clinical waste bin. The area should then be cleaned with detergent and warm water. If blood spillages contain (eg: blood specimen containers) please see "Local Infection Control Policy" and follow same.



#### Accidental inoculation with a contaminated needle

- Remove your gloves and dispose of them safely
- Squeeze the punctured site to promote bleeding, wash the area with soap and warm running water
- Cover the injury with a dressing
- Record the resident's name
- Report the accident to the unit head/registered nurse in charge.
- Complete the form NIRF/Nims system
- Seek medical advice for follow-up

#### **Protect the Resident**

- Place the blood collection equipment away from the resident
- Practice good hygiene for the resident's protection. When wearing gloves, change them between each resident and wash your hands.

## **Implementation Plan**

The CNM and the Registered Nurse are responsible for the dissemination, implementation and on-going evaluation of this policy in this organisation.

Policy sent to PPPG for approval and distribution.



"A guiding framework for education, training and competence validation in venepuncture and peripheral intravenous cannulation for nurses and midwives" (2017) HSE, Dublin



## SIGNATURE PAGE

I have read, understand and agree to adhere to the attached Policy and Procedure:

Print Name	Signature	Area of Work	Date
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## SIGNATURE PAGE

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