

Peripheral Cannulation

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Purpose

To direct staff in safe cannula insertion, management and care.

Scope

The Peripheral IV cannulation course is open to all Registered Medical Practitioners, Trainee Interns, Registered Nurse /Enrolled Nurse, Midwives, Anaesthetic Technicians, MRI & MRTs, IV Technicians.

Associated documents

- [CDHB Fluid and Medication Management](#)
- Peripheral IV Cannula Resource Book

Certification Requirements for RN, EN, RM, IV and Anaesthetic Technicians

- All Registered Nurses, Enrolled Nurses, Midwives, IV and Anaesthetic Technicians, MRIs and MRTs must be recommended by their CNM/Manager to become certified in peripheral cannulation.

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- Nurses/Midwives, IV technicians must have successfully completed the requirement for Venepuncture Certification prior to requesting endorsement in Cannulation.
- Endorsement requires successful completion of the on line HealthLearn pre course activities, SLP, test and attendance at a Cannulation workshop with additional practical cannulation assessment within their clinical area. This must be completed within 2 months from attending the workshop.
- This is a permanent endorsement. Re endorsement is not required; it is the individuals responsibility to maintain their clinical practice.
- Practical skills assessment will be measured by regular audits.

Peripheral IV Cannulation Requirements

Vein Assessment:

Table 1. Peripheral vein assessment tool.

Grade	Vein quality	Definition of vein quality	Insertion management*
1	Excellent	4-5 palpable/visible veins suitable to cannulate	Cannula may be inserted by trained/ authorised healthcare practitioner
2	Good	2-3 palpable/visible veins suitable to cannulate	Cannula may be inserted by trained/ authorised healthcare practitioner
3	Fair	1-2 palpable/visible veins suitable to cannulate (veins may be small, scarred or difficult to find and require heat packs to aid vasodilation)	Cannula may be inserted by trained/ authorised healthcare practitioner but may require Infrared Viewer or ultrasound
4	Poor	Veins not palpated/visible (requires ultrasound assistance or Infrared Viewer)	Cannula may be inserted by an experienced practitioner [†] in cannulation. Use Infrared Viewer, ultrasound, transillumination or other aids
5	None identifiable	No visible (naked eye or aids) or palpable veins	Peripheral cannulation should not be performed

- Select a suitable vein avoiding points of flexion to minimise complications and maximise dwell time
- Aseptic non touch technique must be used during skin preparation, insertion of the cannula and application of the dressing
- An approved CDHB peripheral IV cannula dressing must be used to dress and secure a cannula
- All peripheral cannula must have an extension set attached at insertion to maximise cannula dwell time

Hospital Exceptions: Due to length of stay - Day Wards, Outpatient Departments, Birthing Suite and patients in ED (use as clinically indicated)

- IV cannula will be replaced as clinically indicated using the VIP score

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- Record insertion, management and removal in Patienttrack
- A green ID label on cannula site is not required
- Where Patienttrack is not available document insertion, management and removal in clinical notes

Insertion and Management Bundles:

ENSURE THESE ESSENTIAL ELEMENTS ARE COMPLETED DURING CANNULA INSERTION

HAND HYGIENE	PERSONAL PROTECTION	ANTT
<ul style="list-style-type: none"> • Do not touch cannula or equipment unless you are compliant with hand hygiene 	<ul style="list-style-type: none"> • Gloves are required when performing procedure • The choice of sterile or non-sterile glove depends on level of expertise 	<ul style="list-style-type: none"> • During insertion ensure key parts of equipment are protected from touch contamination
PROCEDURE	SKIN PREPARATION	DRESSING INTACT
<ul style="list-style-type: none"> • Protect key parts from touch contamination 	<ul style="list-style-type: none"> • Clean skin with chlorhexidine 2% & Alcohol 70% for 30 second and allow to air dry 	<ul style="list-style-type: none"> • Ensure dressing is applied correctly and cannula is stable. Write date on additional dressing strip and place along the side of dressing
FLUSHING	SHARPS SAFETY	DOCUMENTATION /CARE PLAN
<ul style="list-style-type: none"> • Flush cannula with 0.9% sodium chloride. Use a short extension set with needless device to prevent premature cannula failure 	<ul style="list-style-type: none"> • On removal of the stylet dispose into a sharps container. • Do not use needles to access a needless connector 	<ul style="list-style-type: none"> • Document procedure on Patient Track or if not available in clinical notes.

ENSURE THESE ESSENTIAL ELEMENTS ARE COMPLETED DURING CANNULA CARE

HAND HYGIENE	ANTT	DRESSING INTACT
<ul style="list-style-type: none"> • Do not touch cannula or equipment unless you are compliant with hand hygiene 	<ul style="list-style-type: none"> • During any subsequent interaction with cannula • Protect key parts 	<ul style="list-style-type: none"> • Ensure the dressing is intact at all times. • Replace at 5-7 days if VIP score 0. • Clean site, apply new dressing, and consider use of Cavilon skin protectant to assist with dressing adhesion.
VIP SCORE	CANNULA REQUIRED	ACCESSING CANNULA
<ul style="list-style-type: none"> • Visually check the condition of the cannula site using the VIP score as a measure and document results every shift 	<ul style="list-style-type: none"> • Remove cannula when no longer required or when clinically indicated (following assessment using VIP score) • Replace cannula if VIP score indicates and only if ongoing therapy is require 	<ul style="list-style-type: none"> • Use gloves • Clean access device vigorously chlorhexidine 2% & Alcohol 70% wipe, allow to dry before attaching syringes or IV tubing.

CHECKLIST SUMMARY

IN USE	DRESSING	VIP Score
<ul style="list-style-type: none"> • Check if in use each shift • Remove when no longer required 	<ul style="list-style-type: none"> • Check intact • Change every 5-7 days 	<ul style="list-style-type: none"> • Check every shift • Replace at VIP score 2 • If VIP score 5- complete safety 1st

Checking Cannula Status

- Cannula status is to be checked at handover by the nurse handing over and the nurse taking on accountability for care.
- The nurse leading the shift uses My Views in Patienttrack during the shift to monitor care safety:
 - completion of IV assessments as required
 - appropriate care if the VIP score is 2 and supports as necessary.

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Taking blood samples from peripheral cannula

- It is not recommended to use cannulae for blood sampling however if indicated then the blood sample/s may be taken at time of cannula insertion.
- The blue tip vacutainer device is used for this purpose. This is connected to the access device and the blood tube/s inserted in correct order of draw.
- If blood flow is difficult the syringe method may be used. The syringe is then attached to the pink tip transfer device to prevent a needle stick injury occurring during transfer from syringe to blood tube.
- A syringe must never be connected directly to the cannula hub to take blood samples. This increases the potential for infection.

Measurement or Evaluation

Patientrack is to be used by the nurse leading the shift to monitor cannula safety.

Canterbury and West Coast IV Clinical Practice Observations audits.

The Tableau IV cannula dashboard is used at each area and service clinical governance meetings to monitor team performance.

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Procedure Owner	Nurse Consultant Vascular Access Professional Development Unit
Procedure Authoriser	Chief Medical Officer & Executive Director of Nursing
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