

## Principals for peripheral intravenous cannula insertion and administration of Primary Care specified intravenous therapies for Registered Nurses.

### Purpose

This document has been developed to assist Registered Nurses (RNs) in Primary Care settings to gain and maintain skills to safely manage peripheral intravenous (IV) cannulation and the associated care requirements for the safe administration of intravenous therapies / treatments.

### Scope

This process is aimed at the Registered Nurse beginning the practice of peripheral IV cannulation and IV therapies or those re-training after an absence from work in this area. Recognition of prior learning will be considered where appropriate.

The RN must be working in a primary care setting that has an identified workforce need for RNs trained in IV cannulation and the safe administration of IV therapies.

The RN must have employer support for this training and have an identified supervisor within the practice. This may be either a General Practitioner (GP) or Nurse Practitioner (NP) or another clinician competent in this skill (note in most practices the supervisor will also be the assessor).

The Nursing Council of New Zealand consider intravenous cannulation to be within standard scope of practice for registered nurses and consequently **do not provide a national competency framework for this skill.**

This document has been developed as a guide only. The user must exercise their own clinical judgement when developing the resources contained within. Any changes or updates to the resources contained within this package remain the responsibility of the individual workplace / organisation using them.

### Related documents

This policy should be read in conjunction with the following CCDHB documents:

- Peripheral Intravenous Cannulation and primary care specific medication administration information package for Primary Care (2016).
- Peripheral intravenous cannula insertion and ongoing care – excluding neonates
- Intravenous (IV) therapies administration and management
- Anaphylaxis (adults) - emergency management by nurses and midwives

## Competency for IV Cannulation and IV therapies

1. Comprehension and completion of a peripheral IV cannulation and administration of IV therapies course or other relevant and recent experience (see Appendix A).
2. Completion of **two** supervised successful IV cannulations (see Appendix C).
3. Completion of **one** IV medication given as a bolus (i.e. cefazolin) and **one** IV therapy given via infusion (i.e. zoledronic acid / IV rehydration) or as required by your practice or organisation. See relevant one point lessons (Appendix B).
4. An activity log should be maintained – recording all insertions (attempts and successes) bolus and infusion administrations with associated outcomes. The log can be used as a tool to review skill maintenance and service quality and can form part of the RN annual performance review and participation in the PDRP process (see appendix D).
5. The workplace supervisor is responsible for assessing competency.

## Maintenance of Competency

Skills should be reviewed annually by an IV competent peer / GP / NP using the IV cannulation practical assessment (Appendix C) or as required by your practice or organisation. This review should include:

- **One** supervised successful cannulation
- **One** supervised IV medicine bolus and / or infusion
- Attendance at an annual CPD IV cannulation refresher course as recommended (see Appendix A)

## Assessing in the workplace

In the interests of public safety, RNs must be competent to practice. Competence is the combination of skills, knowledge, attitudes, values and abilities that underpin effective performance as an RN. Assessments should be comprehensive and not solely based on the observation of clinical procedures or on the RN's communication with health consumers and / or their families. Observation of practice can be of everyday practice, a specially created practice situation, or your knowledge of his / her prior performance. It is strongly recommended that in order to complete the IV cannulation programme requirements, clinical skills learnt must be demonstrated against competencies. It is recommended that practices have a nominated supervisor in the practice to support staff in advancing clinical practice.

## Who can assess?

The primary care nursing workforce may face challenges related to training. This may include limited access to training programmes related to geographical location or resource issues. This means the availability of nurse assessors in practice is reduced. In recognition of these limitations this package has been designed to enable other registered health professionals such as a General Practitioner / Nurse Practitioner / Nurse Lead to assess the nurse as competent in the practice of IV cannulation and IV therapy administration. Health professionals involved in assessing are always governed by the ethical standards of their profession. It is important that the chosen assessor has an understanding of the intended outcomes of the competencies and the indicators in the context(s) in which the nurse is practicing.

The assessor's role is to support nurses to develop in practice and maintain a high standard of nursing care.

# Assessing another nurse – a guide for assessors

## Contextual assessment

- As with all activities in practice, assessments should be undertaken only by those who have sufficient knowledge and understanding of the setting, the competencies and indicators to make a judgement of another's practice.
- Complete a pre-assessment discussion with the nurse to clarify expectations
- Use the appropriate assessment tool IV Cannulation practical assessment (Appendix C).

## Ethical assessment

- Is there mutual respect, rigour and trust in the assessment and documentation feedback process?
- Does the assessor reflect on the ethical implications of the assessment?
- What support is available to assist those nurses undertaking assessments?
- It is not appropriate to complete assessments for close friends or family members.

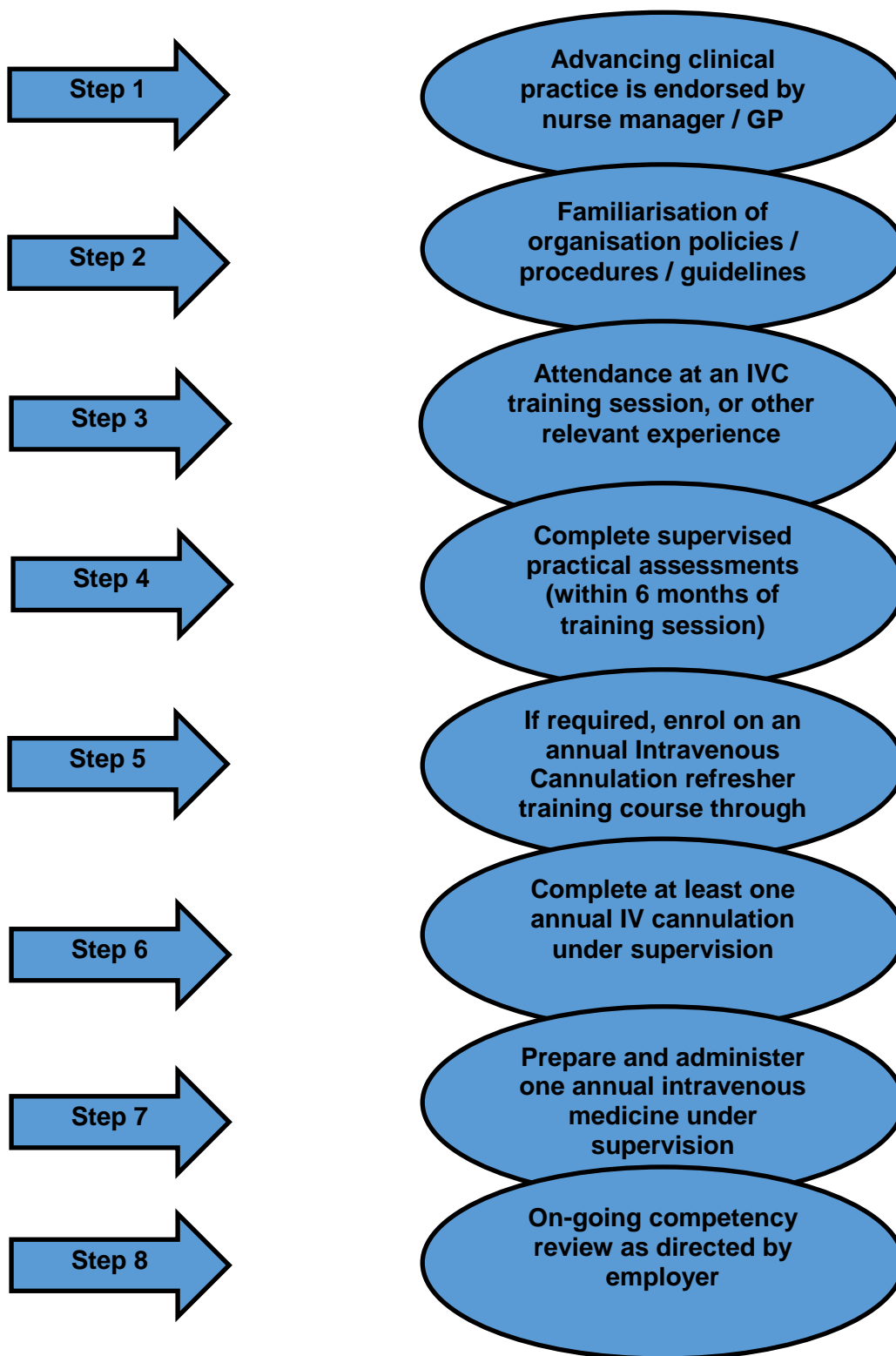
## Accountability: Does the assessor:

- Maintain confidentiality and disclose only through appropriate channels?
- Declare any conflict of interest?
- Report in a timely fashion and maintain standards of documentation?
- Engage in quality improvement of their own performance as an assessor?
- Provide feedback according to best professional practice?

## Aspects to consider

- Does the assessment actually measure what is intended?
- Is the assessment consistently applied across the whole process?
- Would another assessor predict the same results for the same behaviours, knowledge, skills and attributes / attitudes?
- Make sure the environment / context is prepared
- Gather evidence:
  - Direct observation of practice
  - An interview with him / her to ascertain nursing care in different scenarios
  - Evidence provided including self-assessments or examples of practice
  - Reports from other nurses or other health professionals
- At the end of the assessment give feedback (commend, recommend, commend) – explain achievement / identify and discuss areas where competencies are not met; discuss how to achieve competencies; develop a plan for improvement.

# Steps to Intravenous cannulation certification for primary care nurses



# Appendices

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## Appendix A: Where to access training and supervision options

### Wellington Free Ambulance (WFA)

WFA have agreed to provide two IVC training sessions per year. Details are available through the Compass Health Provider Portal or CCDHB Nursing and Midwifery Workforce Development web page, <https://www.ccdhb.org.nz/working-with-us/nursing-and-midwifery-workforce-development/>

### CCDHB – Learning and Development Centre

CCDHB intravenous cannulation courses are held monthly. Applications are welcomed from primary care but priority is given to CCHDB staff.

Who to contact        Declan Fuller  
CCDHB Learning Delivery Centre – Administration  
04 806 2562 | Ext: 82562  
Declan.Fuller@CCDHB.org.nz

Carolyn Kirker  
CCDHB CNS IV and Related Therapies  
0276839357 or Carolyn.Kirker@ccdhb.org.nz

### Practice Team Training – Hire an IV arm

An IV arm is available for hire from CCDHB for \$50 per day.

Who to contact        Carrie Philliskirk,  
CCDHB - Team Leader Simulation & Skills Centre  
DDI 04 806 1591 ext 4591 or 027 285 0988 or  
Carrie.Philliskirk@ccdhb.org.nz

### Annual refresher CPD for IV cannulation and urinary catheterisation

Compass Health have made a commitment to provide an IV cannulation and catheterisation refresher course each year around July. A large component of this CPD will be practical application giving clinicians the opportunity to practice these two skills. Details will be provided on the Compass Health Provider Portal. They will be held in Kapiti, Porirua, Wellington and Wairarapa. Minimum attendance numbers will apply.

Who to contact        Mary Bridge  
Compass Health - CPD Co-ordinator  
04 915 0925 or [Mary.Bridge@compasshealth.org.nz](mailto:Mary.Bridge@compasshealth.org.nz)

### Wellington Accident and Medical Centre

Wellington Accident and Medical Centre provide several IV cannulation refresher courses throughout the year for their staff and welcome other practice nurses to attend.

Who to contact        Delia Pombo  
Nurse Manager, Wellington Accident and Medical Centre  
04 260 6031  
[delia@wamc.co.nz](mailto:delia@wamc.co.nz)






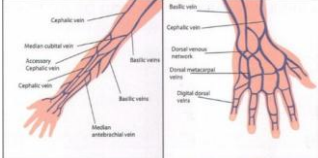



The nurse manager is able to provide supervision for IV cannulation. There are no guarantees that a patient requiring IV cannulation will present at a particular time.

## **Kenepuru Medical Day Unit**

Kenepuru Medical Day Unit schedule clinical appointments for iron or aclasta infusions and chemotherapy making this an ideal opportunity for practice nurses to be assessed for IV Cannulation.



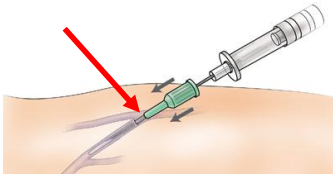






Who to contact           Mikaela Shannon  
Nurse Manager, Inpatients Service  
Level 2, Ward 6, Kenepuru Hospital  
027 801 1103 #6852 ext 7028

# Appendix B: One point lesson – IV Cannulation

		<h2 style="text-align: center;">POAC one point lesson Intravenous Cannulation</h2>			
Responsible	Vanessa Simpson	Date	17/10/16	Version No.	002
<p><b><i>If successful cannulation is not achieved after two attempts, seeking assistance is recommended.</i></b></p>					
1. Patient consent. Five rights (right patient, time, dose, medication, route)	→				
2. Ensure aseptic technique	→				
3. Prepare equipment (tourniquet, alcohol wipes, cannula, leur, syringe, tegaderm, tape)	→				
4. Patient positioned comfortably	→				
5. Select best cannulation site Tip - patient may know the best vein to use - check both arms	→				
6. Select correct cannula size to suit vein (usually 18/20/22g) Not butterfly.	→				
7. Apply tourniquet Ask patient to pump fist Palpate vein and cleanse with alcohol swab	→				
8. Allow the skin to dry	→				



## POAC one point lesson Intravenous Cannulation

Responsible	Date	Version No.
9. Anchor the vein below the site Insert cannula at 10° to 30° - bevel up	→	
10. Flashback indicates access	→	
11. Lower the cannula and gently advance so hub is flush against skin	→	
12. Release tourniquet	→	
13. Place gentle pressure above site. Remove cannula. Discard in sharps	→	
14. Attach and secure leucocath Use tegaderm and / or tape to secure	→	
15. Flush with (5mls) 0.9% normal saline	→	
16. Cannula can be left in situ up to 96hrs (4 days)	→	
15. Consider bandaging if cannula is to be left in place	→	

## Appendix C: IV Cannulation practical assessment

### PRACTICAL ASSESSMENT

#### Insertion Peripheral IV Cannula

Skills List / Competencies		✓ if competency has been met	
The Patient	The candidate	1	2
Identifies the need for peripheral IV cannula	Verifies there is clinical need for IV		
Explanation of procedure	Description of procedure is given to patient and patient consents to having IV inserted		
Identification of patient	Identifies patient as per guidelines in area of practice		
The procedure	The candidate		
Equipment	Gathers all equipment		
Assessment	Selects appropriate sized cannula and vein for intended therapy		
Insertion procedure	Tourniquet is applied / removed with no harm to patient		
	Adheres to standard precautions (wears clean gloves)		
	Cleans insertion site and maintains aseptic area (does not re palpate the vein)		
	Inserts cannula, needle bevel up Maintains aseptic technique during cannula advancement and attachment of injection cap/extension set.		
	Secures IV cannula		
Application of dressing	Applies dressing and secures the cannula well		
Disposal of sharps	Disposes of sharps as per local policy		
Documentation			
Documents insertion	Gauge, insertion site, date, time and signature of insertor		

Comments:

Date of completion	Assessors' Name & Signature	Designation & Contact Details

## Appendix D: IV Cannulation and Infusion Log

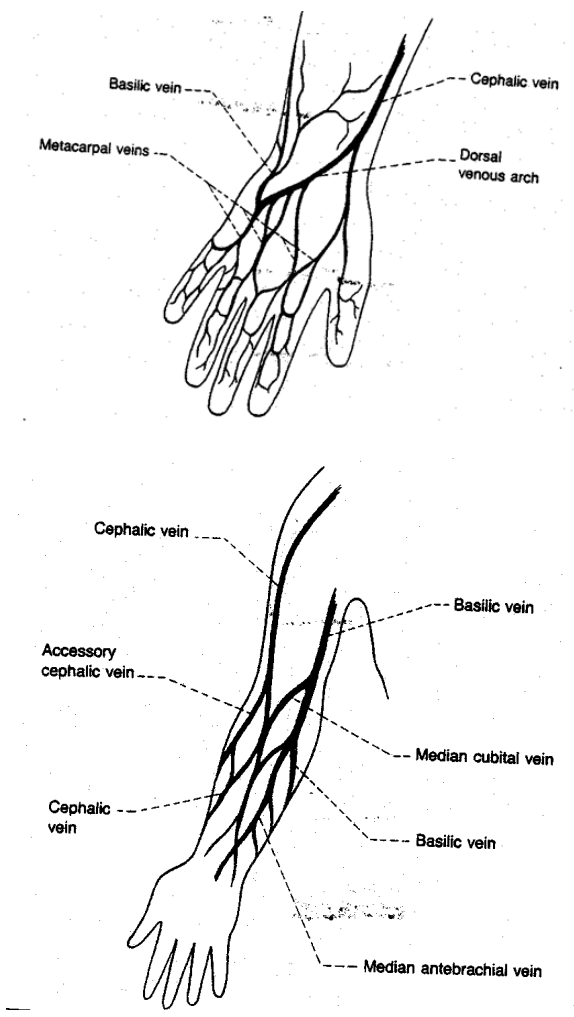
IV Cannulation and Infusion Log				
<b>Name:</b>				
<b>Date:</b>				
<b>Patient name:</b>				
Cannulation				
Indication				
IV access difficulty (see over for score)				
Cannula brand / size				
Insertion site (see over)				
Number of attempts				
Insertion successful? (Y/N)				
If no, why (missed vein, haematoma, nerve injury, arterial puncture)				
Infusion				
Therapy				
Bolus or infusion				
Therapy completed (Y/N)				
If no, why (occlusion, dislodgement, phlebitis, infiltration, other)				
Notes				
(Problems identified, complications, and actions taken)				
RN sign:				
RN witness sign:				

**SUPERFICIAL VEINS OF THE HAND AND FOREARM**

<b>Venous Access Assessment Score:</b> <i>*Score 1 point for each box <input type="checkbox"/> checked</i>		
<b>Diagnosis</b>	<input type="checkbox"/> Sepsis <input type="checkbox"/> Osteomyelitis <input type="checkbox"/> Endocarditis <input type="checkbox"/> Wound infection/cellulitis <input type="checkbox"/> Trauma <input type="checkbox"/> Pancreatitis <input type="checkbox"/> Bowel disorders <input type="checkbox"/> Hyperemesis	
<b>Predisposing conditions</b>	<input type="checkbox"/> Dehydration <input type="checkbox"/> Diabetes <input type="checkbox"/> Steroid dependence <input type="checkbox"/> Obesity <input type="checkbox"/> Drug abuse <input type="checkbox"/> Coagulopathies <input type="checkbox"/> Renal disease <input type="checkbox"/> Heart failure <input type="checkbox"/> Peripheral vascular disease	
<b>Duration of therapy</b>	<input type="checkbox"/> 5 days or more	
<b>Limited venous access</b>	<input type="checkbox"/> Age less than 4 <input type="checkbox"/> Age greater than 70 <input type="checkbox"/> Only 1 extremity available	
<b>Diagnostic Testing</b>	<input type="checkbox"/> Daily labs for 6 days or more <input type="checkbox"/> Serial CT Scans ordered	
<b>Venous considerations</b>	<input type="checkbox"/> > 2 PIV device failures in 24 hours <input type="checkbox"/> > 3 IV attempts in 24 hours <input type="checkbox"/> > 2 PICCs in past 12 months <input type="checkbox"/> Previous chemotherapy	
<b>Add totals:</b>		

**Score of 3 or more**

- patient is a candidate for further clinical assessment. Discuss with medical support.



## Appendix E: IV Cannulation and infusion Policy example template

INTRAVENOUS CANNULATION AND INFUSION IN GENERAL PRACTICE	
Applicable to: [Applicable to Provider/Group]	Issued by: [Type Issued Group] Contact: [Type Contact Designation]

### 1. PURPOSE

To ensure that a safe, effective intravenous cannulation and infusion service is provided to all [organisation] patients.

### 2. SCOPE

All General Practitioners, Nurse Practitioners and Registered Nurses, employed within [Organisation] and are required to provide appropriate Intravenous (IV) cannulation and infusion to patients

### 3. ROLES & RESPONSIBILITIES

All [organisation] employees described in the Scope of this Policy and working within their Scope of Practice (HPCA Act, 2003)) are responsible for providing Intravenous (IV) cannulation and therapy/treatments in a manner that meets all organisational professional and statutory requirements.

In addition –

#### 3.1 The Employer

- Ensures appropriate orientation and education including competency assessment is provided for all those involved in cannulation and the administration of IV therapy/treatments
- Provides job descriptions, policies and guidelines that outline the responsibilities of appropriate clinical staff members in all steps of IV cannulation and treatment
- Provides adequate resources for current best practice therapy/treatment information

#### 3.2 All Prescribers

- Prescribe appropriate IV medication in accordance with The Medicines Act (1981) and Medicine Regulations (1984).
  - Ensuring the prescription is clearly written, typed or computer-generated, that the entry is indelible and dated, that any subsidy coding requirements have been included, and the prescription has been signed by the prescriber.
  - Ensures that the prescription provides clear and unequivocal identification of the client for whom the IV therapy/treatment is intended

- Ensures that the substance to be administered is clearly specific including its form (mini bag) strength, dose, timing, frequency of administration, route of administration, quantity and/or duration of treatment
- Dispense IV medications in accordance with The Medicines Act (1981) and Medicine Regulations (1984).

### **3.3 The Registered Nurse (RN)**

- Is familiar with local workplace policies and guidelines related to which staff can administer injectable drugs, and what training is required
- Ensures that he/she has met all required competencies for IV cannulation and infusion management as set out by local policies
- Report any incident involving IV cannulation and infusion management as per organisational policies
- Performs procedures using the right equipment in accordance to local procedures

### **3.4 Nurse Clinical Leaders**

Ensure all staff are IV certified appropriate to their Scope of Practice and Levels of Practice Competencies as follows:

- Works in partnership with IV Assessors by ensuring they have opportunities to fulfil their role
- Maintains a register of all employees and their IV competencies
- Registers their employees for IV training as required
- Ensures annual renewal of IV competency as per organisational requirement
- 

### **3.5 IV Assessors will: (GP/NP/ Registered Nurse)**

- Provide a teaching and competency assessment service to the nursing staff at [\[organisation\]](#)
- Ensure own competency in the skill they are assessing
- Promotes best practice Meets nursing council requirements for competency assessment:

*www.nursingcouncil.org.nz/Nurses/Continuing-competence/Competence-assessment*  
*Nursing Council of New Zealand. (2011) Guidelines for competence Assessment.*

*Note ;An IV assessor may be required to work across more than one practice at the agreeance of the individual employer*

## **4. POLICY**

### **4.1 IV Therapy Administration- In Practice and Community (Adult only)**

- GP's Nurse Practitioners, and Registered Nurses who have appropriate IV competency are authorised to administer the therapy/treatments according to the organisations IV Authorised List (this may differ from organisation to organisation)

- The patient must be assessed as being a suitable candidate for community IV therapy. 3D Health Pathways and Primary Options Acute Care (POAC) processes are recommended. If the organisation is unable to cannulate and administer IV therapy, referral must be made to an After Hours service and/or District Nursing Service. It is the responsibility of the GP to ensure referral requirements are met as per 3D Health Pathways / POAC.
- The patient/family must be fully informed and educated about their IV access device, medications and any associated risks or complications. Patient/family consent to receive IV therapy in the home must be obtained. The prescribed IV therapy must be individually dispensed for the patient by an authorised prescriber.
- The Registered Nurse must stay with the patient whilst the entire first **dose** of prescribed IV medication is administered and for 20 **minutes** after the administration has completed. The patient must be monitored during this time for any adverse effects, and managed accordingly.
- Ongoing monitoring of the patient will be the responsibility of the designated GP and/or the District Nursing Service
- Adrenaline and oxygen must be available at all times during the administration of medication as per the [organisations] anaphylaxis policy

#### **4.2 Consideration of Risk**


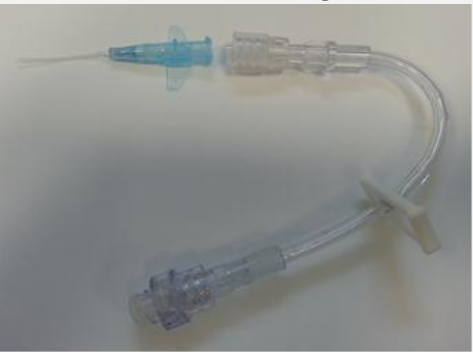

In the event that this Policy is not complied with, the standards of care and outcomes of clients will be compromised. In this instance the incident will require to be reported in accordance to local policies and procedures.

## Appendix F:

### Suggested equipment guide for IV Cannulation, bolus and infusion therapy

- please review appendix 1, page 98 in the Cannulation and primary care specific medication administration for additional equipment use instructions and recommendations.

#### Recommended cannula set up by application table

Cannula set up options – • 1 of the following set ups should be chosen*	Indications/considerations/benefits for configurations
<p><b>Closed IV cannula system with a pre-attached extension set and needleless access bung</b></p> 	<ul style="list-style-type: none"> <li>• can be used for any IV access requirements</li> <li>• allows multiple use and reduced trauma to the insertion site caused by manipulation of the cannula when being accessed</li> <li>• pre-attached extension set limits manipulation and opportunity for system contamination on insertion</li> <li>• the extension set has an integral clamp which allows for the device to be locked under positive pressure and prevent negative reflux of blood into the cannula during syringe disconnection</li> <li>• bloodless system reduces operator blood and body fluid exposure</li> <li>• does not need to be primed prior to insertion.</li> </ul>
<p><b>Straight cannula system with an attachable IV catheter extension set and needleless access bung</b></p> 	<ul style="list-style-type: none"> <li>• can be used for any IV access requirements</li> <li>• allows multiple use and reduced trauma to the insertion site caused by manipulation of the cannula when being accessed</li> <li>• the extension set has an integral clamp which allows for the device to be locked under positive pressure and prevent negative reflux of blood into the cannula during syringe disconnection</li> <li>• requires cannula manipulation and opportunity for system contamination on insertion</li> <li>• blood and body fluid exposure on insertion during connection</li> <li>• needs to be primed prior to insertion.</li> </ul>
<p><b>Straight cannula system with an attachable needleless access bung</b></p> 	<ul style="list-style-type: none"> <li>• recommended for single use requirements only</li> <li>• trauma will occur at the insertion site during manipulation of the cannula when being accessed</li> <li>• inability to lock the device under positive pressure and prevent negative reflux of blood into the cannula during syringe disconnection</li> <li>• requires cannula manipulation and opportunity for system contamination on insertion</li> <li>• blood and body fluid exposure on insertion during connection with needleless access bung.</li> </ul>



*\*Pictures are examples of provider system configurations only and are not being promoted for purchase.*

### Choosing a cannula size:

Always use the smallest size cannula possible to adequately deliver the desired therapy. A smaller cannula will:

- permit a higher blood flow around the cannula thus improving the haemodilution of the fluids and drugs administered
- improve haemodilution and reduce the damaging effect of irritant solutions on the intima of the vein
- reduce mechanical irritation and insertion trauma.

Colour	Size/ Gauge	Common applications	Flow rate
Pink	20G	Patients receiving up to 2-3 liters per day, patients on viscous medication.	55-64 mls/min
Blue	22G	Ideal for any patients requiring a single or multiple access administration i.e. IV antibiotics or Zoledronic acid.	36 mls/min
Yellow	24G	Paediatric patients, neonates, elderly patients with particularly fragile veins.	24 mls/min

## Supplier examples:

### USL Medical

Phone: 0800 658 814

Fax: 0800 830 660

Email: [customerservices@uslmedical.co.nz](mailto:customerservices@uslmedical.co.nz)

Can set up an account or pay via credit card

Product Code	Description	Special instructions for use
<b>Cannulation equipment</b>		
13712	20g Viavalve Safety Catheter	
13713	22g Viavalve Safety Catheter	
13714	24g Viavalve Safety Catheter	
12954	Clearlink extension set with clamp	
2057	Tegaderm IV 1623 6x7cm	
<b>Bolus, flushing and infusion equipment</b>		
2417	Sodium Chloride for injection 10ml	Use 3 items in combination for drawing up saline flush.
11522	Blunt fill needle	
33012	Terumo 10ml Syringe	
10395	Posiflush saline 10ml	Use to flush in place of syringe, needle and saline ampoule combination above.
11466	Sodium Chloride 0.9% IV 100ml single bag	Use for antibiotic infusion as indicated by dose
10906	Codan administration set	Vented infusion set for use with rigid fluid

		containers
1064	Administration Set Sangofix with Safesite	Vented infusion set for use with rigid fluid containers

### Bamford

[www.bamford.co.nz](http://www.bamford.co.nz)

Ph: 0800 226 3673

Product Code	Description
DEF929	IV Injection pads

### EBOS – for BD products

[www.ebos.co.nz](http://www.ebos.co.nz)

Phone 09 415 3267

Product Code	Description	Special instructions for use
<b>Cannulation equipment</b>		
21120283	BD IV Start Pak (includes skin prep and dressing)	Individual items can be used in place of start pack as available. Ensure skin antisepsis as recommended.
21120223	BD Insyte 20g (non-safety)	
21120948	BD Insyte Autoguard BC Shielded IV Catheter 20g (safety)	
21120221	BD Insyte 22g (non-safety)	
21120929	BD Insyte Autoguard BC Shielded IV Catheter 22g (safety)	
21120220	BD Insyte 24g (non-safety)	
21120946	BD Insyte Autoguard BC Shielded IV Catheter 24g (safety)	
21120644	BD Q-Syte Luer Access Split Septum Stand Alone Device	For use with single use cannula requirements.
21120925	BD Q-Syte Extension Set 15cm Small Bore	For use with multiple cannula use requirements.
<b>Bolus, flushing and infusion equipment</b>		
21120061	BD blunt fill needle	Use syringe and needle in combination with saline ampoule for drawing up flush. Blunt needles are also required for antibiotic reconstitution.
21120019	BD Syringe 10ml Luer Lok (Plastipak) (box of 100)	
21120651	BD PosiFlush 10ml Prefilled Syringe	Prefilled saline flush for use in place of syringe, needle and saline ampoule combinations.
21120962	BD Syringe 20ml Luer Lok (Plastipak) (box of 48)	For antibiotic bolus requirements as indicated by dose.
27911267	Baxter Solution Infusion Set 20 drops/ml with Clearlink Injection Site	Non-vented infusion set for use with flexible fluid containers.
29355284	Codan Air Inlet Needle with Non-Wetable Filter 18g x 8cm	For use with non-vented infusion sets if infusing from rigid containers.

# Appendix G:

## Recommended Reading

### Related Legislation

Health Practitioners Competence Assurance Act (2003)

<http://www.legislation.govt.nz/act/public/2003/0048/latest/DLM203312.html>

Medicines Act (1981)

<http://www.legislation.govt.nz/act/public/1981/0118/latest/DLM53790.html>

Medicine Regulations (1984)

<http://www.legislation.govt.nz/regulation/public/1984/0143/latest/DLM95668.html>

Misuse of Drugs Act (1975)

<http://www.legislation.govt.nz/act/public/1975/0116/latest/DLM436101.html>

Misuse of Drugs Regulations (1977)

<http://www.legislation.govt.nz/regulation/public/1977/0037/latest/DLM54840.html>

Nursing Council of New Zealand. (2011) Guidelines for competence Assessment.

<http://www.nursingcouncil.org.nz/Nurses/Continuing-competence/Competence-assessment>

Guidelines for Nurses on the Administration of Medicines (NZNO) 2012

<https://www.cdhb.health.nz/Hospitals-Services/Health-Professionals/IV-Link/Documents/NZNO%20Guidelines%20for%20nurses%20on%20the%20administration%20of%20medicines.pdf>

Peripheral Intravenous Cannulation and primary care specific medication administration information package for Primary Care, (2016).

### CCDHB policy documents:

Peripheral intravenous cannula insertion and ongoing care – excluding neonates

Intravenous (IV) therapies administration and management procedure & policy

Anaphylaxis (adults) - emergency management by nurses and midwives