

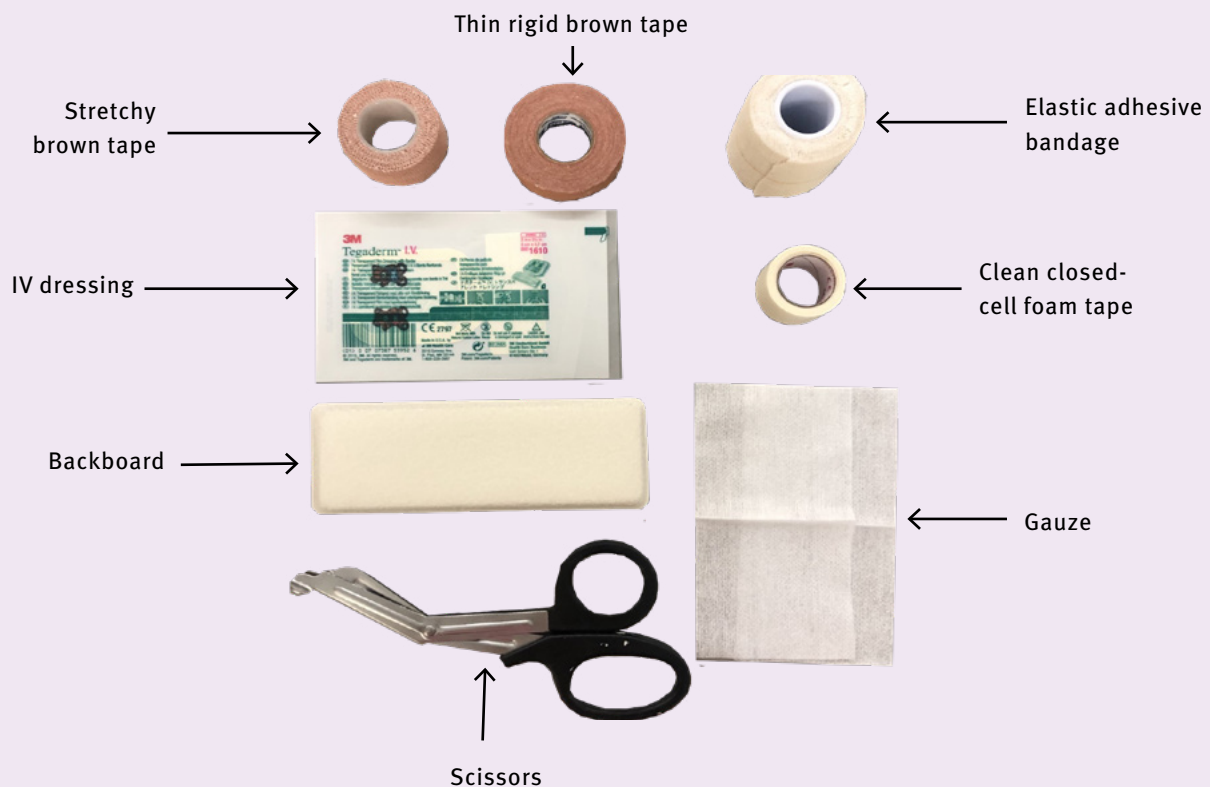
# Peripheral Intravenous Cannula (PIVC) Taping

Infants and children presenting to the emergency department will often require the insertion of a PIVC. Taping a PIVC correctly is an important skill, as it ensures adequate securement and the prevention of cannula-related pressure injuries. Please note, taping techniques may vary slightly from site to site - check with your educator to learn about local taping practices. The site of first preference for cannulation is the forearm, as it reduces movement of the cannula and does not require splinting, therefore reducing risk to the patient. However, if urgent vascular access is required, other temporary, less ideal sites are acceptable. This skill sheet will describe taping for multiple anatomical sites for PIVCs.

## 1

### GATHER EQUIPMENT

Gather equipment and place on a clean surface. Specific equipment required will vary depending on the site of cannulation. Brands may vary between health services. The following are examples for use.



### ALERT

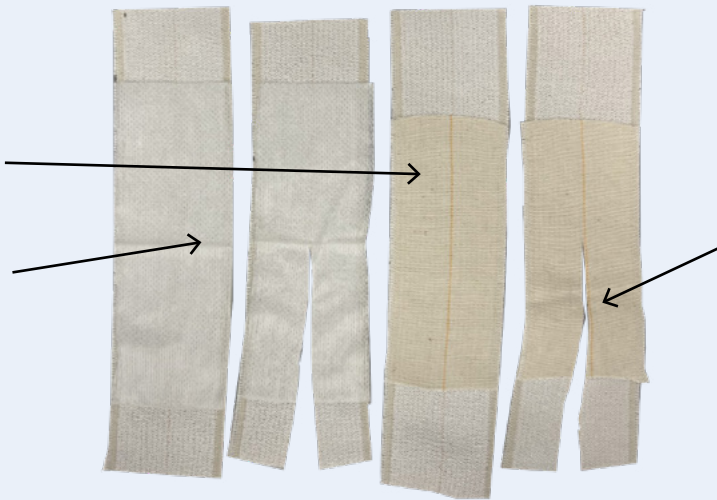
Always check for allergies prior to using adhesives.



**2a** PREPARE

After attending to hand hygiene, ensure that tapes are cut to reflect the size of the child to ensure firm and secure taping. Below are some examples of how tapes may be prepared.

It is important that the sticky side of the elastic adhesive bandage that will come into contact with the child's skin is covered. This is to prevent skin irritation. Options for this include gauze or the non-adhesive side of the elastic adhesive itself.



Cutting "trouser legs" into the tapes can be helpful to create easy access for hourly PIVC site inspections.



**ALERT**

Ensure taping does not compromise circulation to limbs. PIVC can cause pressure areas and care should be taken to prevent this.

**Tape selection rationale**

<p><b>Closed cell foam tape (eg. Microfoam™)</b></p>	<p>Provides cushioning between the hard plastic of the device and the patient's skin. Sterile foam is preferred where available.</p>
<p><b>Elastic adhesive bandage (eg. Tensoplast™)</b></p>	<p>Enables firm securement with some stretch to assist in preventing pressure areas and compromise to circulation.</p>
<p><b>Thin rigid brown tape</b></p>	<p>Provides firm securement for extension and 3-way tap, preventing movement of the PIVC device.</p>
<p><b>Stretchy brown tape (eg. Leukoplast® Elastic)</b></p>	<p>Can be helpful for securing fingers and toes to the backboard in neonates who can wriggle their fingers out from under the white stretchy tape.</p>



2b

## PREPARE

Ensure equipment in step 1 is ready to use.



3

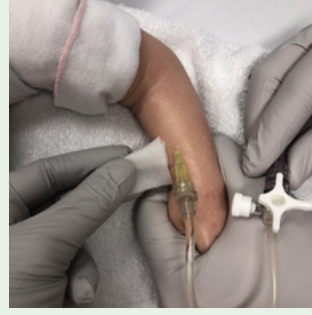
Attend to hand hygiene and don gloves.



4

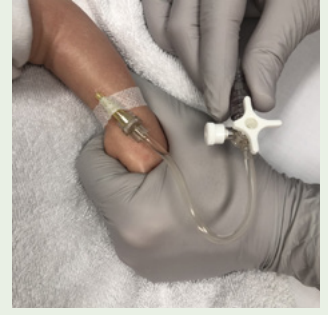
## PROCEDURE

Once the PIVC is insitu, use gauze squares to ensure skin surrounding cannula is clean and dry. Skin protection wipes can also be utilised.



5

Place a strip of tape across cannula hub insitu. Pinch the tape around the cannula hub to ensure it is firm but not causing too much pressure.



6

Secure the cannula with a second strip of tape.



7

Place closed-cell foam tape under the hub, to prevent pressure injury.



8

Cover securing tapes with IV cannula dressing whilst ensuring the insertion site remains visible.



9

Cover PIVC and dressing with a stretchy fabric tubular bandage, being mindful of possible pressure areas when applying.



## Tips

- Ensure a seamless process by having all staff required and all equipment set up and prepared pre-procedure.
- Where possible, use playful distraction techniques e.g. bubbles, photos or music from a caregiver's phone.
- Consider the use of sucrose in infants, to minimise procedural discomfort. A medical order is required, and parental consent must be sought prior to use.
- Where a forearm cannula is not able to be placed, ensure that a backboard is used to reduce movement and prevent occlusion.
- Ensure that manufacturer instructions are followed when using the particular brands and styles of products in your health service.
- Methods of taping may vary between health services. Please refer to local policies and procedures in addition to this skill sheet.





## Securing a PIVC in the hand

Place splint with foam facing the skin under the hand and wrist. Use pre-prepared splinting board tapes to attach the splinting. Keep the thumb free for patient to use. Ensure that fingers are firmly secured, but not so tight as to cause pressure areas. Ensure that the cannula site can be easily accessed for regular assessment. Use some brown tape to keep extension from moving. Be aware of potential pressure areas when placing this tape.

Neonate and infant:

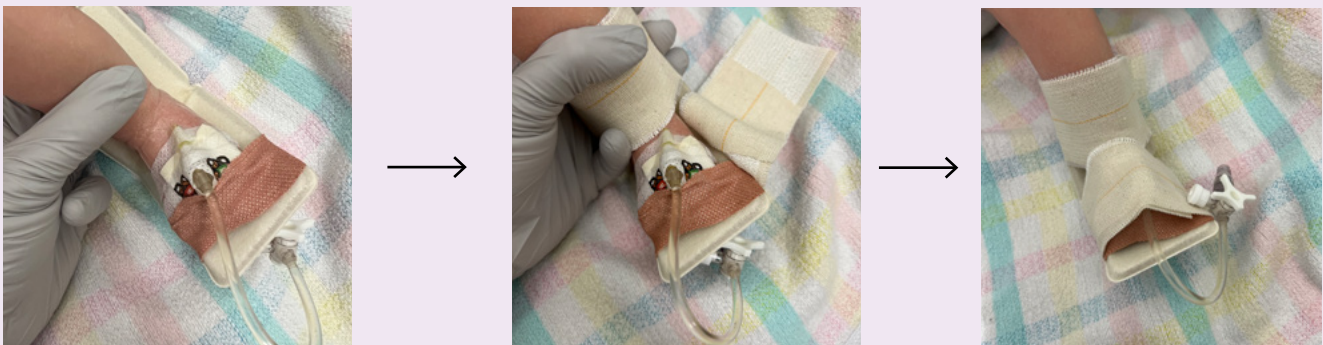


Child:



## Securing a PIVC in the foot

Prepare your splint prior to cannula insertion by moulding it to fit the foot and heel as seen in the picture below. Use adhesive tape to secure toes. Be mindful not to create pressure areas with taping.



## Securing a PIVC in the antecubital fossa

Antecubital fossa cannulas should be used as a last resort. They are appropriate in emergencies where immediate IV access is required for investigations and treatment to commence.

Place the splint with the foam side facing the skin under the elbow. Use two pre-prepared tapes to attach the splinting. Gently apply a third pre-prepared tape across the cannula insertion site. Ensure that the cannula site can be easily accessed for regular assessment.



### For further information:

[Procedure: Peripheral Intravenous Cannula \(PIVC\) Insertion](#)

[Video: Core Intravenous Cannula Insertion](#)

[Management of Peripheral Intravenous Catheters Clinical Care Standard - Australian Commission on Safety and Quality in Health Care](#)

### References:

This Queensland Paediatric Emergency Skill Sheet was developed by the Emergency Care of Children working group (funded by the Queensland Emergency Department Strategic Advisory Panel) with the help of the following resources:

Australian Commission on Safety and Quality in Health Care. (2021). Management of Peripheral Intravenous Catheters Clinical Care Standard. [https://www.safetyandquality.gov.au/sites/default/files/2021-05/management\\_of\\_peripheral\\_intravenous\\_catheters\\_clinical\\_care\\_standard\\_-\\_accessible\\_pdf.pdf](https://www.safetyandquality.gov.au/sites/default/files/2021-05/management_of_peripheral_intravenous_catheters_clinical_care_standard_-_accessible_pdf.pdf)

Children's Health Queensland. (2016, March 8). Peripheral Intravenous Cannula (PIVC) Insertion. [https://qheps.health.qld.gov.au/\\_data/assets/pdf\\_file/0029/706565/proc\\_03456.pdf](https://qheps.health.qld.gov.au/_data/assets/pdf_file/0029/706565/proc_03456.pdf)



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- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management.

- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary.
- Ensuring informed consent is obtained prior to delivering care.
- Meeting all legislative requirements and professional standards.
- Applying standard precautions, and additional precautions as necessary, when delivering care.
- Documenting all care in accordance with mandatory and local requirements.

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