







VASCULAR ACCESS DEVICES: EVIDENCE-BASED CLINICAL PRACTICE GUIDELINES








Flushing and locking of central venous access devices (CVAD) & peripheral intravenous cannulas (PIVC)

CNSA recommends **flushing** and **locking** with the same solution: **0.9% sodium chloride**

CVAD

-  **Solution:** 0.9% sodium chloride
-  **Volume:** 10-20 mL* adults, double lumen volume paediatrics
-  **Syringe:** 10 or 20mL barrel syringe
-  **Technique:** pulsatile technique, complete with appropriate clamp-disconnection sequence for type of NC, stop before end of syringe or use manufactured prefilled syringe
-  **Lumens:** every lumen
-  **Frequency:**
 - Inpatient:** lumens in use: not required, unused lumens: patency assessment each shift including flush / lock with 20 mL sodium chloride
 - Outpatients:** Every visit with patency assessment

PIVC

-  **Solution:** 0.9% sodium chloride
-  **Volume:** 3-5 mL* adults, volume appropriate for paediatrics
-  **Syringe:** 10 or 20mL barrel syringe
-  **Technique:** slow and steady
- #dontrushyourflush**
-  **Frequency:** once per shift if not infusing.
Remove if not being used within 24 hours



*Increase volume post medication, blood etc.

What type of needleless connector do you use?

NEGATIVE			POSITIVE			NEUTRAL					BI-DIRECTIONAL			
														
BD Q-Syte™	BD SmartSite™	B Braun Safeflow®	B Braun Ultrasite®	BD MaxPlus™	B Braun Caresite®	BD MaxZero™	ICU Medical Microclave®	Cardinal Health Kendal®	Baxter One-Link®	ICU Medical Nanoclave®	B Braun InVision Plus®	Vygon Bionector TKO®	ICU Medical Neutron®	Nexus TKO-6P®

Clamp the catheter or tubing (TIVAD / PIVC extension tubing) **PRIOR** to finishing the flush then disconnect the syringe

Clamp the catheter or tubing (TIVAD / PIVC extension tubing) **AFTER** finishing the flush and disconnection of the syringe

No specific clamping sequence at the end of flushing or locking is required

For every PIVC or CVAD. Every time. Every patient.



More detailed information:

<https://www.cnsa.org.au/practiceresources/vascular-access-resources/>



Infographic kindly sponsored by unrestricted educational grant from Teleflex Medical Australia & New Zealand.

Abbreviations: **CVAD:** Central venous access device, **PIVC:** Peripheral intravenous cannula, **NC:** Needleless connector

