Nursing Management of Venous Access Devices: Non-tunneled Central Catheters

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Non-tunneled Catheters: Subclavian/Jugular/Femoral Lines

- Also known as:
  - Central Venous Catheter
  - CVC / CVAD

- TYPES
  - Single lumen - SL
  - Double lumen - DL
  - Triple lumen - TL
  - Quadruple lumen
Subclavian/Jugular/Femoral Lines

- **Benefits:**
  - short term central access up to four lumens
  - central access alternative to PICC
  - emergency access

- **Risks/Complications:**
  - Pneumothorax
  - air embolism
  - infection
Subclavian/Jugular/Femoral Lines

- Placement: A sterile procedure at bedside or in the operating room performed by physician or designee
  - Central Line Infection Prevention Checklist must be completed
- Dwell time: based on ongoing clinical evaluation
- Use of lumens
  - Distal lumen: CVP monitoring, blood sampling, viscous fluids, blood products
  - Middle lumen: TPN (if no TPN, can use for blood sampling, meds, and transfusions)
  - Proximal: any fluid or blood product
- Refer to MGH Nursing Policies and Procedures Trove 05-03-01
Non-tunneled Catheter Care and Maintenance: Flushing

Refer to MGH Nursing Policies and Procedures Trove 05-03-06

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<th>Type of Catheter</th>
<th>Routine Flushing</th>
<th>Frequency of Flush</th>
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| Non-tunneled catheters or Multiple Lumen Percutaneous Catheters | **Adults/Adolescents:** Heparin 10 units/ml; flush with 5ml (50 units). | **Intermittent use:** After completion of any infusion or blood sampling.  
  **Maintenance:** every 24 hours when not in use. |
|                                   | **Pedi/Toddlers/Infants:** Heparin 10 units/ml; flush with 2ml (20 units).        | **Intermittent use:** After completion of any infusion or blood sampling.  
  **Maintenance:** every 24 hours when not in use. |
|                                   | **Neonates/NICU:** Heparin 10 units/ml; flush with 1-2ml (10-20 units). Note: The volume of flush should be equal to the catheter volume. | **Intermittent use:** After completion of any infusion or blood sampling.  
  **Maintenance:** every 12-24 hours. |

Intermittent use: After completion of any infusion or blood sampling. 
Maintenance: every 24 hours when not in use.