

## QUICK REFERENCE FOR CENTRAL VENOUS CATHETERS: DRESSING AND DECLOTTING

Non-tunneled Catheters	DRESSING	DRESSING FREQUENCY  Neutropenic = ANC<500	DECLOTTING USING t-PA	VOLUME of t-PA	ASPIRATION of t-PA
<b>Triple Lumen Catheter (TLC)</b>	<ul style="list-style-type: none"> <li>• Sterile technique, mask</li> <li>• Chlorhexidine gluconate 2% with isopropyl alcohol 70% (Chloraprep)</li> <li>• Sterile vapor transparent dressing (Tegaderm HP, Opsite 3000, or SorbaView)</li> </ul>	<ul style="list-style-type: none"> <li>• Every 72 hours</li> <li>• If gauze is used under tegaderm, then change dressing q 48 hours</li> <li>• Every day if neutropenic or if redness/drainage present</li> <li>• Whenever wet, soiled, or loosened</li> </ul>	<ul style="list-style-type: none"> <li>• CXR first if suspicious of kink or malposition OR if no CXR w/in 1 week</li> <li>• MD order required</li> <li>• For best results: treat all lumens at the same time</li> <li>• May treat one lumen and use other lumen for infusion if needed</li> <li>• Inject as much of 2mg/2ml t-PA dose as possible</li> </ul>	<ul style="list-style-type: none"> <li>• Dose: 2 mg t-PA</li> <li>• Dilute t-PA with 2 ml. preservative free normal saline</li> <li>• Draw t-PA dose 2mg/2ml into a 10 ml syringe and inject gently into catheter lumen</li> </ul>	<ul style="list-style-type: none"> <li>• Attempt aspiration after 2 hours</li> <li>• If unsuccessful, may repeat times one</li> <li>• If not cleared – refer the P&amp;P for t-PA drip, requires MD order.</li> <li>• If not cleared with t-PA drip – a physician may order a dye study and/or contact a Vascular Access Consultant</li> </ul>
<b>Groshong Triple Lumen, (OTG)</b>	<ul style="list-style-type: none"> <li>• Sterile technique, mask</li> <li>• Chlorhexidine gluconate 2% with isopropyl alcohol 70% (Chloraprep)</li> <li>• Sterile vapor transparent dressing (Tegaderm HP, Opsite 3000, or SorbaView)</li> </ul>	<ul style="list-style-type: none"> <li>• Every 72 hours</li> <li>• If gauze is used under tegaderm, then change dressing q 48 hours</li> <li>• Every day if neutropenic or if redness/drainage present</li> <li>• Whenever wet, soiled, or loosened</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<b>Hohn</b>	<ul style="list-style-type: none"> <li>• Sterile technique, mask</li> <li>• Chlorhexidine gluconate 2% with isopropyl alcohol 70% (Chloraprep)</li> <li>• Sterile vapor transparent dressing (Tegaderm HP, Opsite 3000, or SorbaView)</li> </ul>	<ul style="list-style-type: none"> <li>• Every 72 hours</li> <li>• If gauze is used under tegaderm, then change dressing q 48 hours</li> <li>• Every day if neutropenic or if redness/drainage present</li> <li>• Whenever wet, soiled, or loosened</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<b>PICC**</b> <b>**If unsure of type: contact PICC nurse.</b>	<ul style="list-style-type: none"> <li>• Sterile technique, mask</li> <li>• Chlorhexidine gluconate 2% with isopropyl alcohol 70% (Chloraprep)</li> <li>• Sterile vapor transparent dressing (Tegaderm HP, Opsite 3000, or SorbaView)</li> <li>• StatLock anchoring device if not sutured</li> <li>• Steristrips</li> </ul>	<ul style="list-style-type: none"> <li>• Weekly</li> <li>• Whenever wet, soiled, or loosened</li> <li>• Every 48 hours if gauze present, or if patient is immunosuppressed, neutropenic, or diabetic</li> <li>• Every day if redness/drainage present</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<b>Large Bore: Dialysis, Pheresis Catheter</b>	<ul style="list-style-type: none"> <li>• Sterile technique</li> <li>• Patient and RN wear mask</li> <li>• 2% chlorhexidine gluconate with isopropyl alcohol 70% (Chloraprep)</li> <li>• Betadine ointment to exit site</li> <li>• 2X2 sterile gauze with sterile vapor transparent dressing (Tegaderm HP, Opsite 3000, or SorbaView)</li> </ul>	<ul style="list-style-type: none"> <li>• Every 48-72 hours</li> <li>• If gauze is used under tegaderm, then change dressing q 48 hours</li> <li>• Whenever wet, soiled, or loosened</li> <li>• Every day if neutropenic or if redness/drainage present</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Dose: 2mg t-PA</li> <li>• Dilute t-PA with 2.5 ml preservative free normal saline</li> <li>• Draw t-PA dose 2mg/2.5ml into a 10 ml syringe and inject gently into catheter lumen</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>

## QUICK REFERENCE FOR CENTRAL VENOUS CATHETERS: DRAWING BLOOD AND FLUSHING

Non-tunneled Catheters	USE/DESIGN	DISCARD VOLUME BEFORE BLOOD DRAW	NORMAL SALINE FLUSH VOLUME <u>Use 10cc syringe</u>	HEPARIN FLUSH* * Do not use if heparin allergy or Heparin Induced Thrombocytopenia (HIT). See below. <u>Use 10cc syringe</u> ***PPT = positive pressure technique	FLUSH FREQUENCY (for lumens not in use)
<b>Triple Lumen Catheter (TLC)</b>	<ul style="list-style-type: none"> <li>Short term/inpatient</li> <li>Brown: 16 ga, distal, longest, CVPs, rapid fluids, blood products</li> <li>Blue: 18 ga, middle, TPN</li> <li>White: 18 ga, proximal, shortest, blood draws, routine fluids and meds</li> </ul>	<ul style="list-style-type: none"> <li>Two 3ml discard tubes</li> <li>Use proximal, white colored lumen</li> </ul>	<ul style="list-style-type: none"> <li>10 ml normal saline</li> </ul>	<ul style="list-style-type: none"> <li>Inject 1ml of 100Unit/ml heparin flush</li> <li>Inject with ***PPT</li> </ul>	<ul style="list-style-type: none"> <li>Every 8 hours</li> </ul>
<b>Groshong Triple Lumen, (OTG)</b>	<ul style="list-style-type: none"> <li>Short term/in and outpt</li> <li>White and yellow lumens with 3-way Groshong valves, without clamps</li> <li>Red lumen, distal, with clamp, for pressure monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Two 3ml discard tubes</li> <li>Draw blood from the red lumen</li> </ul>	<ul style="list-style-type: none"> <li>10 ml normal saline</li> </ul>	<ul style="list-style-type: none"> <li>White and yellow lumens: no need for heparin flush 10ml normal saline</li> <li>red lumen: 3 ml, 100Unit/ml heparin flush</li> </ul>	<ul style="list-style-type: none"> <li>White and yellow lumens: every week</li> <li>Red lumen: every 24 hours</li> </ul>
<b>Hohn</b>	<ul style="list-style-type: none"> <li>Long term</li> </ul>	<ul style="list-style-type: none"> <li>Two 3ml discard tubes</li> <li>Draw from either lumen</li> </ul>	<ul style="list-style-type: none"> <li>10 ml normal saline</li> </ul>	<ul style="list-style-type: none"> <li>Draw up 3 ml of 100Unit/ml heparin flush inject 2.5 ml with ***PPT</li> </ul>	<ul style="list-style-type: none"> <li>Every other day</li> <li>Switch to every day if problems</li> </ul>
<b>PICC**</b> <b>**If unsure of type: open ended vs. valved catheter contact PICC nurse.</b>	<ul style="list-style-type: none"> <li>Short to long term</li> <li>Placed in antecubital fossa and tip is advanced to distal superior vena cava</li> </ul>	<ul style="list-style-type: none"> <li>Flush with 10 ml normal saline before drawing discard volume</li> <li>If drawing antibiotic peak /trough or monitoring labs for heparin or insulin drips FLUSH all lumens and then draw 6 ml discard using a 10 ml syringe.</li> <li><u>Do not use vacutainer</u>, continue to draw blood using several 10 ml, 5 ml, or 3 ml syringe</li> </ul>	<ul style="list-style-type: none"> <li>10-20 ml normal saline</li> <li>Use 20cc normal saline after blood draw using turbulent (push/pause) technique</li> </ul>	<b>Arrow, Cook (open ended):</b> <ul style="list-style-type: none"> <li>Flush with 10 ml normal saline q 12 hours followed by 2.5ml 100Unit/ml heparin flush</li> <li>Inject with ***PPT</li> </ul> <b>Bard Groshong or Vaxcel with PASV valve (valved catheter)</b> <ul style="list-style-type: none"> <li>No heparin flush –use 10 ml normal saline flush only</li> </ul>	<ul style="list-style-type: none"> <li>Every 12 hours for open ended catheters, each lumen for all PICC catheters</li> <li>Q-day flushing for valved catheters such as the Groshong or Vaxcel with PASV valve</li> </ul>
<b>Large Bore: Dialysis, Pheresis Catheter</b>	<ul style="list-style-type: none"> <li>Short term</li> <li>Hemodialysis &amp; apheresis</li> <li>Arterial lumen: red, proximal &amp; shorter</li> <li>Venous lumen: blue, distal &amp; longer</li> </ul>	<ul style="list-style-type: none"> <li><u>Withdraw heparin flush before use</u></li> <li>Withdraw a 6 ml waste</li> <li>Draw from either lumen</li> </ul>	<ul style="list-style-type: none"> <li><u>Withdraw heparin flush before use</u>, then flush 10 ml normal saline</li> </ul>	<ul style="list-style-type: none"> <li><u>Withdraw heparin flush before use</u></li> <li>Flush with heparin flush 1,000 Unit/ml. Flush volume is equal to the dwell volume of catheter</li> <li>Inject with ***PPT</li> </ul>	<ul style="list-style-type: none"> <li>Every 48-72 hours</li> <li>Switch to daily if catheter problems</li> <li>Keep catheter clamped while not in use</li> </ul>