

ADULT INFUSION PRACTICE GUIDELINES

	Flushing	Dressing Change	Injection Cap Change	Tubing Change	Blood Sampling	Special Considerations	ASSESSMENT AND INTERVENTION
PICC	<ul style="list-style-type: none"> ▶ <u>Use 10ml syringe or larger</u> ▶ Use a pulsating flush ▶ 5-10 ml normal saline ▶ 5ml Heparin 10unit/ml if needed ▶ Flush every 12 hours or after each use. If patient is receiving a continuous infusion it is not necessary to flush every 12 hours. The PICC should be flushed between bag changes with either Heparin or saline. ▶ If patient has a Groshong, Vaxcel or Solo PICC flush with 5-10ml of normal saline after each use or one time per week. 	<ul style="list-style-type: none"> ▶ Aseptic Technique for all dressing changes ▶ Chloraprep is to be used for skin antiseptics. May use alcohol/betadine if sensitive to chloraprep. ▶ Transparent dressing changes every 7 days. ▶ Gauze dressings, appropriate if redness or irritation is noted. Gauze dressing changes 2x/week and pm. 	<ul style="list-style-type: none"> ▶ Every 7 days and pm. ▶ Removed to draw blood. ▶ Signs of blood precipitate cracks, leaks or other defects. ▶ Septum no longer intact. ▶ Cleanse injection cap with alcohol prior to accessing. ▶ Instruct patient to cleanse injection cap like they "are squeezing an orange." 	<ul style="list-style-type: none"> ▶ Daily. ▶ Continuous infusion with each cassette change. ▶ TPN/lipid tubing changed every 24 hours. 	<ul style="list-style-type: none"> ▶ Peripheral lab draws are preferred. May use PICC if unable to draw peripherally. ▶ Recommended for 4.0 FR or greater catheters only. ▶ Do not draw drug levels from PICC unless absolutely necessary. Notify physician and pharmacy if labs are drawn from PICC. ▶ Flush with 10ml saline. ▶ Discard 5ml blood. ▶ Draw labs. ▶ Flush with 10-20ml saline then 5ml Heparin 10unit/ml if needed. 	<ul style="list-style-type: none"> ▶ Do not use accessed arm for BP or phlebotomy. ▶ Patient should be instructed not to lift anything greater than 10 lbs. ▶ Encourage use of arm. ▶ If clamp available, clamp when not in use. ▶ If using securement device it will need changed one time per week or when soiled. ▶ If using a Biopatch or Algidex patch they will need changed with each dressing change. ▶ Never use scissors around the catheter ▶ If using extension tubing it should be changed weekly with dressing change or before blood sampling. 	<ul style="list-style-type: none"> ▶ Monitor upper arm for edema, redness, warmth or cording of vein. Assess upper arm and exit site for complications. ▶ Apply warm moist pack continuously to phlebotic site a minimum of 24 hours. ▶ Cover PICC dressing including the injection cap if patient showers or bathes. ▶ If patient has a midline catheter some infusates cannot be given. Check concentration of Medications. If unsure of the tip location, call the pharmacy provider. ▶ Power PICC's require same care and maintenance as traditional PICC's.
CVC NON-TUNNEL Subclavian Jugular Hohn TUNNEL Groshong Hickman Broviac	<ul style="list-style-type: none"> ▶ <u>Use 10ml syringe or larger.</u> ▶ If required, flush tunneled catheters after each use or at least daily with Heparin 10unit/ml 5ml. ▶ If required, flush non-tunneled catheters with Heparin 10unit/ml 5ml after each use or every 12 hours. ▶ Valved catheters flush with 5-10ml NS weekly or after each use. 	<ul style="list-style-type: none"> ▶ Chloraprep is to be used for skin antiseptics. May use alcohol/betadine if sensitive to chloraprep. ▶ Transparent dressings to all CVC sites. ▶ Gauze dressing may be applied if patient is diaphoretic or bleeding is evident change 2x/wk. ▶ Dressing to tunneled catheters is not required if sutures are removed and site is well healed. ▶ Aseptic Dressing changes 2x/week and pm to non-tunneled catheters. 	<ul style="list-style-type: none"> ▶ Every 7 days and pm. ▶ Removed to draw blood ▶ Signs of blood precipitate cracks, leaks or other defects ▶ Septum no longer intact ▶ Cleanse injection cap with alcohol prior to accessing. ▶ Instruct patient to cleanse injection cap like they "are squeezing an orange." 	<ul style="list-style-type: none"> ▶ Daily ▶ continuous infusion with each cassette change ▶ TPN/Lipid every 24 hours 	<ul style="list-style-type: none"> ▶ Do not draw drug levels via catheter unless necessary ▶ Flush with 10ml saline ▶ Discard 5ml blood ▶ Draw labs ▶ Flush with 10-20ml saline then Heparin as appropriate 	<ul style="list-style-type: none"> ▶ If clamp available, clamp when not in use ▶ Never use a toothed clamp on catheter ▶ Groshong, Hickman, and Broviac catheters can be repaired by an experienced clinician. ▶ Sutures should be removed from a Groshong, Hickman, or Broviac After approximately 2-4 weeks Contact physician for order ▶ If patient is receiving a continuous infusion it is not necessary to flush every 12 hours. The VAD should be flushed between bag changes with either Heparin or saline ▶ Never use scissors around the catheter 	<ul style="list-style-type: none"> ▶ Assess exit site of tunneled and non tunneled catheters each scheduled SNV for redness, edema, or drainage and document appropriately ▶ Use a pulsating flush ▶ You should never be able to visualize the cuff of a tunneled catheter.(It appears to be a cotton swab at the exit site.) If it is visible the catheter has dislodged and may not be a viable catheter. Contact physician. ▶ Dialysis catheters should not be used for venous infusion May be used as last resort only With an order from the Nephrologist ▶ POWER CVC LINES require same care and maintenance as traditional CVC lines.

ADULT INFUSION PRACTICE STANDARDS

	Flushing	Dressing Change	Injection Cap Change	Tubing Change	Blood Sampling	Special Considerations	Nursing Assessment/ Interventions
Implanted Access Device	<ul style="list-style-type: none"> ▶ <u>Use 10ml syringe</u> or larger. ▶ Flush with Heparin 100unit/ml 5ml after each use or one time monthly if not in use ▶ Use pulsating flush ▶ If patient is receiving a continuous infusion it is not necessary to flush every 12 hours but should be flushed between bag changes. 	<ul style="list-style-type: none"> ▶ Aseptic technique should be used for all access and dressing changes ▶ Needle change every 7 days and prn ▶ Chloraprep is to be used for skin antisepsis. May use alcohol/betadine if sensitive to chloraprep ▶ Transparent dressing change with needle change or if it becomes soiled or loose. If dressing is changed site should be cleansed with appropriate skin antisepsis prior to replacing ▶ May use gauze dressing if patient is sensitive to transparent dressing. Change 2x/week 	<ul style="list-style-type: none"> ▶ Routine change with needle change and prn. ▶ Remove to draw blood. ▶ Signs of blood precipitate cracks, leaks or other defects. ▶ Septum no longer intact. ▶ Cleanse injection cap with alcohol prior to accessing. ▶ Instruct patient to "cleanses like they are squeezing an orange" ▶ Cover port dressing including the injection cap if the patient showers or bathes. 	<ul style="list-style-type: none"> ▶ Primary secondary every day continuous With each Cassette change ▶ TPN/Lipid every 24 hours; 	<ul style="list-style-type: none"> ▶ Peripheral lab draws are preferred. If patient has poor venous access may draw from the port. DO not draw Drug levels unless necessary. Notify physician and pharmacy if drawn from port ▶ Flush with 10ml saline. ▶ Discard 5ml blood. ▶ Draw labs. ▶ Flush with at least 10 ml saline followed by Heparin 100unit/ml 5ml 	<ul style="list-style-type: none"> ▶ Always use non-coring needle ▶ If clamp available clamp when not in use ▶ Cover injection cap and dressing if patient showers or bathes ▶ Never use scissors around the catheter 	<ul style="list-style-type: none"> ▶ The only way to assure proper needle placement is with a blood return. If unable to obtain blood return reposition needle if still unable but can flush port with saline the port may need to be declotted with CathFlo. Call physician for an order or direction ▶ If pump alarms can not be justified the needle may be dislodged ▶ Assess port site for edema redness, drainage. Assess neck and chest area for edema and collateral circulation each scheduled SNV. ▶ POWER PORTS require the same care and maintenance as traditional ports. They have 3 raised palpitation areas for facilitate access
Peripheral Venous Catheter	<ul style="list-style-type: none"> ▶ Heparin 10units/ml 2-3ml after each use or every 12 hours 	<ul style="list-style-type: none"> ▶ Chloraprep is to be used for skin antisepsis. May use alcohol/betadine if sensitive to chloraprep ▶ Transparent dressing change whenever the device is changed. ▶ Change when damp, loosened, soiled or when site inspection is necessary. ▶ May dress with gauze if patient is diaphoretic or bleeding. Change gauze dressing 2x/wk 	<ul style="list-style-type: none"> ▶ Every 4 days with restart and prn ▶ If leaving cathlon intact greater then 4 days cleanse site with chloraprep and apply transparent dressing 2x/wk ▶ Cover injection cap and dressing if patient showers or bathes ▶ Cleanse injection cap with alcohol prior to accessing. ▶ Instruct patient to cleanse injection cap like they "are squeezing an orange" 	<ul style="list-style-type: none"> ▶ Primary secondary every day Continuous With Cassette change ▶ TPN/Lipid every 24 hours; date for tubing change 	<ul style="list-style-type: none"> ▶ N/A 	<ul style="list-style-type: none"> ▶ Rotate site every 4 days. ▶ May leave intact 4 days if limited access with a physician order ▶ <u>New cathlon per each attempt</u> ▶ If leaving cathlon intact greater then 4 days cleanse site with chloraprep and apply transparent dressing 2x/wk 	<ul style="list-style-type: none"> ▶ DO NOT PALPATE SITE AFTER CLEANSING UNLESS WEARING STERILE GLOVES

References:

Infusion Nurses Society. (2008). Flushing Protocols.

Infusion Nurses Society. Infusion Nursing Standards of Practice. *Journal of Infusion Nursing*, 2006; 29 (1S)

Centers for Disease Control and Prevention. Guidelines for the prevention of intravascular catheter – related infections. *MMWR (RR-10)*. 2002; 51.

The Missouri Home Infusion Association supports these practice guidelines with the awareness that there are variations in all practices and all guidelines require a physician order.