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# Guidelines for the Care and Maintenance of Intravenous Access Devices in Paediatric Patients



**All patients with central venous access are to**

**have a daily full body wash using Octenisan**

**wash (over 3 years of age) or mitts(under 3 years of age) Monday-Friday**

**2% chlorhexidine in 70% alcohol applicators**

**(Chloraprep) can be used for skin preparation on patients from 32 weeks gestation.**

# These guidelines are for general use and do not apply to the very specific lines for patients requiring haemodialysis.

# For further information and guidance for haemodialysis lines please refer to the Advanced Nurse Practitioner for Nephrology



# Care and Maintenance of venous access devices

**\*SURGICAL ANTT MUST BE USED WHEN UNDERTAKING AN EXIT SITE DRESSING CHANGE\***

Exit site dressing changes

If undertaking dressing change a needle free device change should be done at the same time, please refer to page 17

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| **Action** | Rationale |
| **Equipment required**  **Sterile dressing pack with sterile gloves for SURGICAL ANTT**  **Apron**  **Non sterile gloves**  **2% Chlorhexidine in 70% Isopropyl alcohol impregnated applicator**  **Semi- Permeable transparent dressing**  Alcohol hand rub or gel | 1ml and 3ml applicators are available, use applicator volume suitable for area of skin to be decontaminated and patient size, to ensure no pooling of solution  **Chlorhexidine(CHG) dressing for central venous access, CHG not required for midline venous access.** |
| Care of Exit site  * **Dressing changes should be performed on a weekly basis, when dressing is dirty or loose, or when CHG dressing indicates need for changing.** * Before the procedure begins decontaminate hands * A plastic apron should be worn. * Maintain ANTT at all times. * Observe exit site for signs of discolouration/irritation of skin and signs of infection e.g. exudate from exit site, redness, swelling. If you suspect infection, swab the site prior to cleaning and contact the relevant medical team for advice. | **This applies to both central venous access and midlines.**  To prevent infection.  Important to observe and document to support early detection of potential complications at exit site |
| * Explain the procedure to the patient and family. * Ensure that valid consent is gained. | To prevent/reduce patient anxiety. |
| * Ensure working area is clean. * Ensure all equipment is gathered before commencing the procedure and all packaging is intact and in date. | Maintain safety.  To prevent infection and catheter contamination. |
| * Decontaminate hands and apply apron * Following local policy and guidelines for SURGICAL ANTT prepare area, self and equipment ensuring all packaging is intact and in date * On reaching patient decontaminate hands and apply non sterile gloves * Loosen exit site dressing and gently remove from the skin. * Remove gloves, decontaminate hands and apply surgical gloves (for SURGICAL ANTT) | Maintain asepsis and safety.  Reduce risk of infection.  To avoid contamination.  CHG dressings require the gel to be rehydrated with sterile water or saline to aid removal and eliminate risk of skin trauma during dressing removal |

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| * Activate 2% chlorhexidine applicator * Clean around the catheter and exit site with 2%chlorhexidine applicator device using SURGICAL ANTT following manufacturers guidance * Clean down line away from exit site with 2% Chlorhexidine swab * **Allow to dry.** * Loop line (broviac Lines only). * Apply new dressing to exit site using SURGICAL ANTT. * Dispose of waste as per policy * Remove gloves. * Clean reusable equipment, storing as appropriate. Remove apron. * Decontaminate hands. * Reassure patient and ensure comfortable * Document care on patient’s records. | Chlorhexidine-based solutions are recommended (in alcohol) as per policy (DOH 2001,EPIC 3 2014, INS 2024)  Alcohol Chlorhexidine combines the benefits of rapid action and excellent residual activity (DOH 2001,EPIC 3 2016)  Semi-permeable transparent IV dressings are well tolerated by patients (Campbell et al 1999, Treston-Aurand et al 1997, Wille 1993) and are easy to apply and remove (Wille 1997). |

**Maintenance flushes for venous access devices**

***Follow local guidelines for volumes and frequency of 0.9% Sodium Chloride and heparin saline flushing solutions, if multiple lumens all lumens to be treated individually.***

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| **Action** | **Rationale** |
| Equipment Required **Appropriate aseptic field (Blue Tray)**  **Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated wipe**  **Posiflush syringe 0.9% Sodium Chloride for injection**  **Heparin saline flushing solution**  **10ml Syringe**  **Filter needle/straw For glass ampoules**  **Sharps container**  **Alcohol hand rub/gel**  **Plastic Apron**  **Needle free I/V access connector if required (change as per manufacturer’s guidelines)** | 10ml syringes should always be used; smaller syringe sizes may damage the catheter (INS 2024, Hadaway 1998). |
| * Following local policy and guidelines for ANTT prepare area, self and equipment ensuring all packaging is intact and in date * A plastic apron should be worn * Key parts to be protected at all times during the procedure * Decontaminate hands. * Connect needle/ filter straw to the syringe. * **2 nurses to check solutions and volumes against prescription chart** * Draw up appropriate volume of Heparin saline flushing solution (If required, following flushing guidelines) * Protect key parts and place the filled syringes on the aseptic field * On reaching patient apply apron anddecontaminate hands, * Ensure that the patient is comfortable and the catheter is secure. * Ensure easy access to the needle free system. * **2 nurses to check patient identity and prescription charts**. * Expose line and decontaminate hands * Protecting key parts at all times. * Thoroughly disinfect the hub of the needle free system with 2% Chlorhexidine impregnated wipe, rubbing from the top of the needle free connector to the sides. Do this three times using different parts of the wipe, over a period of at least 30 seconds. Paying particular attention to the hub. Allow to dry for 30 seconds. * Attach posiflush and inject using a push/pause action. * Clamp the line **after** removal of the syringe from the positive pressure needle free device to ensure positive pressure is within the lumen of the line. * Remove the syringe and discard. Repeat this procedure using syringe containing Heparin saline flushing solution (if required) * Clean hub of needle free device after use with 2% chlorhexidine impregnated wipe. * NEVER FORCE THE SOLUTION INTO THE CATHETER, this can damage the catheter. * Ensure that the patient is comfortable and the catheter is secure. Dispose of waste as per organisational policy. * Before leaving patient environment remove apron and decontaminate hands. * Clean reusable equipment, storing as appropriate. * Document care in patient’s records. | Maintain asepsis and safety.  Reduce risk of infection.  To avoid contamination.  Maintain asepsis.  Following guidance from NPSA Promoting safer use of injectable medicines (2007)  Chlorhexidine-based solutions are recommended (in alcohol) as per policy (DOH 2001), EPIC 3 (2014),INS (2024)  There is no requirement to routinely withdraw blood and discard it prior to flushing (except prior to blood sampling although the first sample can be used for blood cultures, although patency must be confirmed (INS 2024).  The pulsated flush creates turbulence within the catheter lumen, removing debris from the internal catheter wall (Goodwin & Carlson 1993, Todd 1998).  Positive pressure within the lumen of the catheter should be maintained to prevent reflux of blood (INS 2024). |

## **Blood Sampling from central venous access devices**

***Follow local guidelines for volumes and frequency of 0.9% Sodium Chloride and heparin saline flushing solutions***

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| **Action** | **Rationale** |
| Equipment Required **Appropriate aseptic field (Blue Tray)**  **Syringe labels**  **Blood containers**  **Patient labels for containers**  **Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated wipe**  **2 Posiflush Syringes Heparin saline flushing solution**  **10 ml Syringe x3**  **Filter needles/straws for glass ampoules.**  **Sharps container**  **Alcohol hand rub/gel**  **Plastic apron**  **Non – sterile gloves**  **Needle free I/V access connector if required (change as per manufacturer’s guidelines)** | 10ml syringes should always be used; smaller syringe sizes may damage the catheter (INS 2024, Hadaway 1998). |
| * Following local policy and guidelines for ANTT prepare area, self and equipment * Ensure all equipment is gathered before commencing the procedure and all packaging is intact and in date. * A plastic apron should be worn. * Key parts to be protected at all times during the procedure * Decontaminate hands, put on non sterile gloves * Connect needle/ filter straw to the syringe. * **2 nurses to check solutions and volumes against prescription chart** * Draw up appropriate volume Heparin Saline flushing solution * Each syringe should be labelled with a syringe label informing staff of the contents of the syringe * Protect key parts and place the filled syringes on the aseptic field. * Place new pair of non sterile gloves into aseptic field * On completion of preparation process removegloves and dispose of them as per organisational policy. * On reaching patientapply apron anddecontaminate hands * Ensure that the patient is comfortable and the catheter is secure. * Ensure easy access to the needle free system. * **2 nurses to check patient identity and prescription charts.** * Expose line and decontaminate hands before applying new non sterile gloves * Protecting key parts at all times. * Thoroughly disinfect the hub of the needle free system with 2% Chlorhexidine impregnated wipe, rubbing from the top of the needle free connector to the sides. Do this three times using different parts of the wipe, over a period of 30 seconds. Paying particular attention to the hub. Allow to dry for 30 seconds. * Attach empty 10ml syringe into needle free system and aspirate at least 3 ml of blood from the catheter. If unable to do so attach a posiflush syringe containing 0.9% Sodium Chloride for injection solution to the needle free system gently flush with 1-2mls 0.9% Sodium Chloride for injection (do not use force) then aspirate blood from catheter. Discard used syringes and blood aspirated as per local policy. * Note if taking blood samples from a parenteral nutrition line or for INR sample at least 3 mls of blood should be taken and discarded before taking the sample (check local policy). * Attach an empty 10ml syringe and withdraw amount of blood required for analysis. * Attach new posiflush syringe with 0.9% Sodium Chloride for injection and flush using a push/pause action, * Clamp the line **after** removal of the syringe from the positive pressure needle free device to ensure positive pressure is within the lumen of the line. * Remove the syringe and discard. Repeat this procedure using syringe containing Heparin saline flushing solution. * Clean hub of needle free device after use with 2% chlorhexidine impregnated wipe. * NEVER FORCE THE SOLUTION INTO THE CATHETER, this can damage the catheter. * Ensure that the patient is comfortable and the catheter is secure. * Dispose of waste, as per organisational policy. * Remove gloves * Clean reusable equipment, storing as appropriate. Remove apron. * Decontaminate hands. * Document care in patient’s records. | Maintain asepsis and safety.  Reduce risk of infection  To avoid contamination  Maintain asepsis.  Following guidance from NPSA (2007) Promoting safer use of Injectable Medicines  Chlorhexidine-based solutions are recommended (in alcohol) as per policy (DOH 2001,EPIC 3 2014).  Check catheter patency. Remove any residual solution from catheter  3ml dead space discard is as effective as 5ml in paediatrics (Cole et al, 2007) Check re: oncology patients  The pulsated flush creates turbulence within the catheter lumen, removing debris from the internal catheter wall (Goodwin & Carlson 1993, Todd 1998).  Positive pressure within the lumen of the catheter should be maintained to prevent reflux of blood (INS 2024). |

**Taking of a blood culture from central venous access devices**

***Follow local guidelines for volumes and frequency of 0.9% Sodium Chloride and heparin saline flushing solutions***

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| **Action** | **Rationale** |
| Equipment Required **Appropriate aseptic field (Blue Tray)**  **Syringe labels**  **Blood containers**  **Patient labels for containers**  **2 x Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated wipe**  **Posiflush syringe 0.9% Sodium Chloride for injection x2**  **Heparin saline flushing solution**  **10ml syringe**  **Filter needles/straws for glass ampoules.**  **Sharps container**  **Alcohol hand rub/gel**  **Plastic apron**  **Non –sterile gloves**  **Needle free I/V access connector if required (change as per manufacturer’s guidelines)** | 10ml syringes should always be used; smaller syringe sizes may damage the catheter (INS 2024, Hadaway 1998). |
| * Following local policy and guidelines for ANTT prepare area, self and equipment * Ensure all equipment is gathered before commencing the procedure and all packaging is intact and in date. * A plastic apron should be worn. * Key parts to be protected at all times during the procedure * Decontaminate hands, put on non sterile gloves * Connect needle/ filter straw to the syringe. * **2 nurses to check solutions and volumes against prescription chart** * Draw up appropriate volume of and Heparin Saline flushing solution * Each syringe should be labelled with a syringe label informing staff of the contents of the syringe * Protect key parts and place the filled syringes on the aseptic field. * Place new pair of non sterile gloves into aseptic field * On completion of preparation process removegloves and dispose of them as per organisational policy. * On reaching patientapply apron anddecontaminate hands * Ensure easy access to the needle free system. * **2 nurses to check patient identity and prescription charts.** * Expose line and decontaminate hands before applying new non sterile gloves   protecting key parts at all times.   * Thoroughly disinfect the hub of the needle free system with 2% Chlorhexidine impregnated wipe, rubbing from the top of the needle free connector to the sides. Do this three times using different parts of the wipe, over a period of 30 seconds. Paying particular attention to the hub. Allow to dry for 30 seconds. * Attach empty 10ml syringe into needle free system and aspirate at least 3 ml of blood from the catheter. This is the dead space which can be utilised for a blood culture. * If unable to aspirate blood attach a posiflush syringe containing 0.9% Sodium Chloride for injection solution to the needle free system gently flush with 1-2mls 0.9% Sodium Chloride for injection (do not use force) then aspirate blood from catheter. Discard used syringes and continue as above. Protect the key part of the syringe and place into aseptic field. * If further blood samples are required this is to be done following the guidance in blood sampling from central venous access devices. * Attach posiflush syringe with 0.9% Sodium Chloride for injection and flush using a push/pause action, * Clamp the line **after** removal of the syringe from the positive pressure needle free device to ensure positive pressure is within the lumen of the line. * Remove the syringe and discard. Repeat this procedure using syringe containing Heparin saline flushing solution. * Clean hub of needle free device after use with 2% chlorhexidine impregnated wipe. * Remove the cap from the culture bottle and thoroughly clean the septum, using a vigorous rubbing action, with a new 2% Chlorhexidine impregnated wipe. Do this three times using different parts of the wipe, over a period of 30 seconds. Allow to dry for 30 seconds. * Ensuring key part protection instil the culture sample into the bottle. * Dispose of waste, as per organisational policy. * Remove gloves * Clean reusable equipment, storing as appropriate. Remove apron. * Decontaminate hands. * Send blood culture to laboratory following organisational policy. * Document care in patient’s records. | Maintain asepsis and safety.  Reduce risk of infection  To avoid contamination  Maintain asepsis.  Following guidance from NPSA (2007) Promoting safer use of Injectable Medicines  Chlorhexidine-based solutions are recommended (in alcohol) as per policy (DOH 2001, EPIC 3 2014, INS 2024).  Check catheter patency. Remove any residual solution from catheter  3ml dead space discard is as effective as 5ml in paediatrics (Cole et al, 2007) Check re: oncology patients  The pulsated flush creates turbulence within the catheter lumen, removing debris from the internal catheter wall (Goodwin & Carlson 1993, Todd 1998).  Positive pressure within the lumen of the catheter should be maintained to prevent reflux of blood (INS 2024). |

**Administration of antibiotics/infusion/additives via venous access devices**

**Administer drugs or IV therapy as prescribed using correct diluent and rate of infusion.**

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| **Action** | **Rationale** |
| Equipment Required **Appropriate aseptic field (Blue Tray)**  **Syringe labels**  **Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated wipe**  **Posiflush Syringes x2**  **Heparin saline flushing solution (if required)**  **Filter needle/ filter straws.**  **10ml syringes**  **Sharps container**  **Alcohol hand rub/gel**  Antibiotics/Infusion/additives as prescribed  **Plastic apron**  **Non-sterile gloves, if necessary** | 10ml syringes should always be used; smaller syringe sizes may damage the catheter (INS 2024,Hadaway 1998). |
| * Following local policy and guidelines for ANTT prepare area, self and equipment * Ensure all equipment is gathered before commencing the procedure and all packaging is intact and in date. * A plastic apron should be worn. * Key parts to be protected at all times during the procedure * Decontaminate hands, put on non-sterile gloves, if necessary * Connect needle/ filter straws to the syringes. * **2 nurses to check solutions and volumes against prescription chart.** * Draw up appropriate volume of Heparin saline flushing solution (if required) * Draw up antibiotics according to local policy * Each syringe should be labelled with a syringe label informing staff of the contents of the syringe * Protect key parts and place the filled syringes on the aseptic field. * Place new pair of non sterile gloves into aseptic field, if necessary * On completion of preparation process removegloves and dispose of them as per organisational policy. * On reaching patient **apply apron and** decontaminate hands * Ensure easy access to the needle free system. * **2 nurses to check patient identity and prescription charts.** * Expose line and decontaminate hands, before applying new non sterile gloves, if necessary * Protecting key parts at all times. * Thoroughly disinfect the hub of the needle free system with 2% Chlorhexidine impregnated wipe, rubbing from the top of the needle free connector to the sides. Do this three times using different parts of the wipe, over a period of 30 seconds. Paying particular attention to the hub. Allow to dry for 30 seconds * Attach posiflush syringe with 0.9% Sodium Chloride for injection, aspirate enough blood to colour 0.9% Sodium Chloride for injection solution then inject the flush using a push pause action clamping as the last ml of the solution is instilled into the catheter. Remove the syringe and discard. * Clean hub of needle free device after use with 2% chlorhexidine impregnated wipe. * If unable to aspirate blood from the line refer to algorithm on Persistent withdrawal occlusion * NEVER FORCE THE SOLUTION INTO THE CATHETER, this can easily damage the catheter. * Administer IV antibiotics/infusion/additives as prescribed following local Trust Policy * Flush catheter again using posiflush syringe with appropriate volume of 0.9% Sodium Chloride for injection using a push/pause action, * If it is the final dose of the treatment repeat with Heparin saline flushing solution (if required) clamping as the last ml of solution is instilled into the catheter to maintain catheter patency. * Remove the syringe and discard. * Ensure that the patient is comfortable and the catheter is secure. Dispose of waste as per organisational policy. * Before leaving patient environment remove gloves, if used, and remove apron * Decontaminate hands. * Clean reusable equipment, storing as appropriate.. * Document care in patient’s records. | .  Maintain asepsis and safety.  Reduce risk of infection  To avoid contamination  Maintain asepsis.  Following guidance from NPSA (2007) Promoting safer use of Injectable Medicines  Maintain asepsis.  Chlorhexidine-based solutions are recommended (in alcohol) as per policy (DOH 2001,EPIC 3 2014, INS 2024).  Check patency of vascular access device including aspiration of blood return, absence of any resistance when flushing, absence of pain or discomfort, absence of all VAD complications (INS 2024).  On no account should a vesicant drug or vesicant infusion be administered through a vascular access device where difficulty is experienced in withdrawing blood (Masoorli 2003).  Creates turbulence in catheter, preventing clotting in the catheter.  Maintains positive pressure and prevents backflow of blood into the catheter. |

**Totally Implanted Venous Access Device (TIVAD)**

**\*SURGICAL ANTT MUST BE USED WHEN INSERTING A GRIPPER NEEDLE INTO A PORTACATH\***

**\*\*Gripper (Huber) needles should be changed every 7 days if treatment is ongoing\*\***

**e.g. Port-a-Cath priming and insertion of a gripper needle for flushing.**

**Once the gripper needle is inserted, the guidelines above for central venous access devices are to be applied.**

***Heparin strengths may vary according to the frequency of the flushes required and procedure being undertaken, refer to local policy***

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| **Action** | **Rationale** |
| Equipment Required **Sterile dressing pack with sterile gloves for SURGICAL ANTT**  **Syringe labels**  **10ml syringes**  **Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated applicator for site**  **Chlorhexidine Gluconate 2% in 70% Isopropyl alcohol impregnated swab – for needle free system**  **0.9% Sodium Chloride for injection**  **Heparin saline flushing solution**  **Green needle/Filter straw.**  **Sharps container**  **Alcohol hand rub**  **Non coring needle (e.g. Huber or gripper needle) with needle free system (appropriate size as assessed)**  **Semi permeable dressing and securing device, if receiving therapy other than for flushing**  **Plastic apron** | 1ml and 3ml applicators are available, use applicator volume suitable for area of skin to be decontaminated and patient size, to ensure no pooling of solution  10 ml syringes should always be used. Smaller syringe sizes may damage the catheter (INS 2024,Hadaway 1998) |
| * Assess need for local anaesthetic cream prior to procedure. * Following local policy and guidelines for **SURGICAL** ANTT prepare area, self and equipment * Ensure all equipment is gathered before commencing the procedure and all packaging is intact and in date. * A plastic apron should be worn. * Key parts to be protected at all times during the procedure * Decontaminate hands * Connect needle/ filter straw to the syringe. * **2 nurses to check solutions and volumes against prescription chart** * Draw up appropriate volume of Heparin saline flushing solution * Each syringe should be labelled with a syringe label informing staff of the contents of the syringe * Prime the non-coring needle device including its tubing and needle free device, if being used, syringe with 0.9% Sodium Chloride for injection and clamp extension tube, leaving syringe attached. * Protect key parts and place on aseptic field * Place new pair of surgical gloves into aseptic field * On completion of preparation process removegloves and dispose of them as per organisational policy. * On reaching patient apply apron anddecontaminate hands * **2 nurses to check patient identity and prescription charts.** * Remove anaesthetic cream dressing if used, locate septum of TIVAD by palpation * Decontaminate hands and apply surgical gloves * Clean the skin covering the TIVAD with 2% Chlorhexidine impregnated applicator, allow to dry * Remove needle cover from non-coring needle device. Avoid repalpating the site, insert the non-coring needle at 90-degree angle through the skin into the septum of the TIVAD until the needle comes into contact with the metal backing. * Using the attached syringe containing 0.9% Sodium Chloride for injection, aspirate the line to assess for accurate insertion and inject the flush using a push pause action and discard syringe * Clamp the line **after** removal of the syringe from the positive pressure needle free device to ensure positive pressure is within the lumen of the line. * If there is swelling around the TIVAD site assess for correct needle placement or an inability to aspirate and then flush remove the needle and re-access. * Some TIVAD’s do not aspirate but do flush and can be used as long as there are no contraindications, such as swelling etc. * Following successful 0.9% Sodium Chloride for injection flush, repeat the flushing procedure using the Heparin saline flushing solution. * Clamp the line **after** removal of the syringe from the positive pressure needle free device to ensure positive pressure is within the lumen of the line. * Clean hub of needle free device after use with 2% chlorhexidine impregnated wipe. * If TIVAD was accessed for flushing purposes only, remove the needle and apply pressure over puncture site for a few minutes until bleeding stops. * If Gripper needle is to be left in for treatment purposes, secure and dress with semi-permeable dressing * Ensure that the patient is comfortable * Dispose of waste as per organisational policy. * Remove gloves * Decontaminate hands. * Document care in patient’s records. | Maintain asepsis and safety.  Reduce risk of infection.  To avoid contamination.  To maintain asepsis  Following guidance from NPSA (2007) Promoting safer use of Injectable Medicines  Check patency of vascular access device including aspiration of blood return, absence of any resistance when flushing, absence of pain or discomfort, absence of all VAD complications (INS 2024).  The pulsated flush creates turbulence within the catheter lumen, removing debris from the internal catheter wall (Goodwin & Carlson 1993, Todd 1998).  Positive pressure within the lumen of the catheter should be maintained to prevent reflux of blood (INS 2024).  If treatment is ongoing the gripper needle should be changed every 7 days |

**Changing a Needle-free I/V access Connector**

**This procedure should be carried out in combination with routine line flushing. The frequency of the change of the Needle Free connector is weekly or as determined by the maximum number of uses, with reference to the manufacturer’s guidelines.**

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| **Action** | **Rationale** |
| Equipment Required **Needle-free I/V access connector.** |  |
| In conjunction with line flushing procedure:   * Maintain aseptic technique and protect key parts at all times * Clamp the catheter. * Remove the needle free I/V access connector and discard. * Thoroughly disinfect the catheter hub with 2% Chlorhexidine impregnated wipe, rubbing from the top of the catheter hub to the sides. Do this three times using different parts of the wipe, over a period of 30 seconds. Paying particular attention to the hub. * Allow to dry. * Connect the new and primed needle-free system to the catheter securely. | Reduce the risk of infection, to avoid contamination |

**General Care and Management of Venous Access Devices**

**\*Aseptic non touch technique is to be utilised for all vascular access devices during any intravenous procedure following Trust Policy.**

**\*All venous access devices and dressings should be assessed every hour, or more frequently if necessary, using a cannula site assessment form and recorded, as per organisational policy.**

**\*Dressings should be changed following local guidance, if required, a semi permeable dressing should be used at all times to secure vascular access devices.**

**\*Peripheral lines require a flush of 0.9% Sodium Chloride for injection before and after the administration of medications see local guidance for volumes requires and for frequency and volumes of maintenance flushing.**

**\*Syringes smaller than 5ml should not be used on peripheral cannula as they can exert excessive force and cause trauma.**

**\* 3 way taps are contraindicated for routing IV’s, on vascular access devices.**

**\*Administration sets and filters should be changed following local policy.**

**\*Local guidelines for volumes of 0.9% sodium chloride and volumes and strength of heparin saline flushing solutions for vascular access devices are to be used.**

**\*2% chlorhexidine in 70% alcohol applicators (Chloraprep) can be used for skin preparation on patients from 32 weeks gestation. The application to the skin from 35 weeks gestation - 2months of age should be performed using a dabbing action, not a scrubbing action. From 2 months of age upwards application should be undertaken using the manufacturers guidance. Guidance for both application methods is available on the intranet.**

**\*Posiflush 0.9%Sodium Chloride syringes are to be used for flushes of vascular access devices, they should not be used for drug reconstitution.**

**\*Posiflush 0.9%Sodium Chloride syringes are to be used for STANDARD ANTT ONLY**

**\*If treatment is ongoing through a portacath, the gripper needle should be changed every 7 days.**



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**Document Control Sheet**

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| **Guidelines for the Care and Maintenance of Intravenous Access Devices in Paediatric Patients** | |
| Version: | 7.1 |
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| **Version Control Table** | | | | |
| **Version** | **Date** | **Author** | **Status** | **Comment** |
| 7.1 | April 2024 | Sara Melville | Current | Inclusion of Glove Smart and reference updates |
| 7 | January 2023 | Sara Melville | Archived | Minor updates and reference update |
| 6.3 | January 2023 | Sara Melville | Archived | Extension pending ratification of updated version |
| 6.2 | September 2021 | Sara Melville | Archived | Minor updates |
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| 6 | December 2019 | Sara Melville | Archived |  |
| 5 | July 2019 | Sara Melville | Archived |  |
| 4 | February  2017 | Sara Melville | Archived |  |
| 3 | June 2015 | Sara Melville | Archived |  |
| 2 | February 2012 | Sara Melville | Archived |  |
| 1 | July 2010 | Sara Melville | Archived |  |

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| **Review & Amendment Log**  **Record of changes made to document – Version 7** | | |
| **Page Number** | **Change/s made** | **Reason for change** |
| Various | Minor word changes  References updated. | Scheduled review. In line with current best practice |
| 2 | Inserted: ‘Chlorhexidine(CHG) dressing for central venous access, CHG not required for midline venous access’. | Clarity |
| 2 | Inserted: ‘This applies to both central venous access and midlines’. | Clarity |
| 2 | Updated wording to: ‘Important to observe and document to support early detection of potential complications at exit site’ | Clarity |
| 2 | Updated wording to: ‘CHG dressings require the gel to be rehydrated with sterile water or saline to aid removal and eliminate risk of skin trauma during dressing removal’ | Clarity |