

# SAVING IV<sup>E</sup>S

The Saving IV's campaign was written to support the High Impact Intervention ongoing IV care bundle.s from the DoH. We request that all clinical staff involved in the care of patients with an IV device sign up to the ten essential steps described below. This guidance should be read in conjunction with local and national policy. Direct any questions to your local Saving IV's champion.

## Clean

Clean hands before and after any interaction with the IV device, associated equipment or direct (skin to skin) contact with patient

## ANTT

Identify critical parts and wear examination gloves.  
Protect critical parts from touch contamination

## Appropriate

Ensure the vascular access device is clinically required.  
Match type of vascular access device to clinical need

## Skin

Clean the skin for 30 seconds with 2% chlorhexidine gluconate in 70% isopropyl alcohol and allow to dry

## Dressing

Carefully attach an IV dressing with strips to the device.  
Date the dressing and change if loose or contaminated

## Scrub

Scrub the hub with 2% chlorhexidine gluconate in 70% isopropyl alcohol and allow to dry before accessing

## Avoid

Avoid contamination of the administration set & hub  
Do not allow administration sets to hang unattached

## VIP

Monitor VIP score at least daily. Record result and remove if  
VIP score is 2 or more

## Removal

Remove device if no clinical need.  
Replace cannulae and administration sets at 72 hours

## Document

Plan and evaluate your patients IV care  
Document insertion, care during use and removal

## Saving IV's Support File

- Identify all staff who work on your ward/department
  - List the staff who provide IV care
  - Include medical and nursing students
- Work through this file with each staff member
- Ask staff to sign the Saving IV's poster

# SAVING LIVES

## Clean

Clean hands before and after any interaction with the IV device, associated equipment, or direct (skin to skin) contact with the patient.

- Ensure that staff are aware of the risk of inadvertent hand/glove contamination.
- Advise staff to monitor skills closely to identify potential for hand/glove contamination.
- Ensure staff identify when hand hygiene should be completed:
  - At any point when hands are contaminated
  - Prior to collecting equipment
  - Prior to opening packaging
  - Before and after direct contact with patients skin
  - Following the opening of packages
  - Immediately prior to the application of gloves
  - Immediately upon disposal of equipment
- The six hand hygiene points are:



Palm-to-palm



Palm over back of the hand  
with interlocking fingers.  
Swap hands



Palm-to-palm,  
interlocking fingers



Rubbing of backs of  
fingers into palms



Rotational rubbing of thumb  
clasped over opposite palm,  
swap hands



Rotational rubbing of  
fingers into palms,  
swap hands

# SAVING LIVES

## ANTT

Identify critical parts and wear examination gloves.  
Protect critical parts from touch contamination.

- The principles of Aseptic Non-Touch Technique (ANTT) are:
  - **A**lways wash hands effectively.
  - **N**on-touch-technique is used at all times to protect critical-parts.
  - **T**ouch non-critical parts with confidence
  - **T**ake appropriate infective precautions.
- Critical parts include the patients cleansed skin, the catheter material and hub; the adhesive of the dressing (not an exhaustive list).
- Protect critical parts from the beginning to end of procedure.
- Prepare and transport equipment protecting critical parts.
- Complete the procedure protecting critical parts.
- Compare the difference below!



# SAVING LIVES

## Appropriate

Ensure the vascular access device is clinically required.  
Match type of vascular access device to clinical need.

- Peripheral cannulae are suitable for short term intravenous use.
- The maximum dwell time of peripheral cannulae is 72 hours.
- For medium to long-term vascular access consider alternative devices such as:
  - Midlines
  - Peripherally Insert Central Catheters (PICC)
  - Acute central venous catheters
  - Tunnelled central venous catheters
  - Implanted ports
- The use of these devices are dependent upon length and volume/speed of therapy and potential for irritation and the chemical composition of the prescribed medication.

# SAVING LIVES

## Skin

Clean the skin for 30 seconds with 2% chlorhexidine gluconate in 70% isopropyl alcohol and allow to dry.

- Using a back and forth motion, completely prep the area for thirty seconds.
- Allow the prepped area to dry naturally.
- Do not re-palpate the cleansed area.

# SAVING LIVES

## Dressing

Carefully attach an IV dressing with strips to the device.  
Date the dressing and change if loose or contaminated.

- Secure cannulae wings with the sterile strips in the dressing.
- Handle the dressing carefully - do not contaminate the insertion site or the adhesive during application.
- Apply the date strip to identify date cannula inserted.
- Check dressing at least every shift – replace if loose or contaminated.
- Document findings/actions with regard to the condition of the dressing.
- If dressing fails to stick consider using a barrier film (e.g. sterile Cavilon stick) to provide additional adhesion.

# SAVING LIVES

## Scrub

Scrub the hub with 2% chlorhexidine gluconate in 70% isopropyl alcohol and allow to dry before accessing.

- The MHRA have identified that clinical staff sometimes fail to clean IV connectors prior to use.
- They remind staff that needle-free connectors are cleaned before and after use.
- 'Scrub the hub' with 2% chlorhexidine gluconate in 70% isopropyl alcohol and allow to dry naturally before accessing.
- With a new wipe 'scrub the hub' after use.

# SAVING LIVES

## Avoid

Avoid contamination of the administration set and hub.  
Do not allow administration sets to hang unattached.

- Handle all IV devices with respect and care.
- Maintain the sterility of spikes and connectors during the preparation and administration of fluids and medication.
- Transport the set carefully and avoid touch contamination of the luer connector.
- Scrub the hub before connection – allow to dry.
- Disconnected administration sets pose an infection risk – do not disconnect infusions unless clinically required.
- Disconnected infusion sets must not be left to hang then reattached – a new set will be required.

# SAVING LIVES

## VIP

Monitor VIP score at least daily.  
Record result and remove if VIP score is 2 or more.

- The Visual Infusion Phlebitis (VIP) score is an evaluation tool for monitoring the condition of peripheral cannulae – it allows cannula removal at the earliest possible signs of infusion phlebitis.
- The cannula must be checked at least every shift.

- The subsequent score and action taken (if any) must be documented.

- Also observe cannula site:

- When bolus injections are administered
- IV flow rates are checked or altered
- Solution containers are changed

Phlebitis Score	
<p>All patients with an intravenous access device should have the IV site checked every shift for signs of infusion phlebitis. The subsequent score and action(s) taken (if any) must be documented on the cannula record form.</p>	<p>The cannula site must also be observed:</p> <ul style="list-style-type: none"> <li>When bolus injections are administered</li> <li>IV flow rates are checked or altered</li> <li>When solution containers are changed</li> </ul>
<p>IV site appears healthy</p>	<p>0 No signs of phlebitis <b>OBSERVE CANNULA</b></p>
<p>One of the following signs is evident:</p> <ul style="list-style-type: none"> <li>Slight pain near IV site OR</li> <li>Slight redness near IV site</li> </ul>	<p>1 Possibly first signs of phlebitis <b>OBSERVE CANNULA</b></p>
<p>TWO of the following are evident:</p> <ul style="list-style-type: none"> <li>Pain at IV site</li> <li>Redness</li> <li>Swelling</li> </ul>	<p>2 Early stage of phlebitis <b>RESITE CANNULA</b></p>
<p>ALL of the following signs are evident:</p> <ul style="list-style-type: none"> <li>Pain along path of cannula</li> <li>Redness around site</li> <li>Swelling</li> </ul>	<p>3 Medium stage of phlebitis <b>RESITE CANNULA CONSIDER TREATMENT</b></p>
<p>ALL of the following signs are evident and extensive:</p> <ul style="list-style-type: none"> <li>Pain along path of cannula</li> <li>Redness around site</li> <li>Swelling</li> <li>Palpable venous cord</li> </ul>	<p>4 Advanced stage of phlebitis or the start of thrombophlebitis <b>RESITE CANNULA CONSIDER TREATMENT</b></p>
<p>ALL of the following signs are evident and extensive:</p> <ul style="list-style-type: none"> <li>Pain along path of cannula</li> <li>Redness around site</li> <li>Swelling</li> <li>Palpable venous cord</li> <li>Pyrexia</li> </ul>	<p>5 Advanced stage thrombophlebitis <b>INITIATE TREATMENT RESITE CANNULA</b></p>

With permission from Andrew Jackson - Consultant Nurse, Intravenous Therapy in Care, The Rotherham NHS Foundation Trust (Adapted from Jackson, 1998)

**BRAUN**  
SHARING EXPERTISE

# SAVING LIVES

## Removal

Remove device if no clinical need.  
Replace cannulae and administration sets at 72 hours.

- The clinical need for a cannula must be checked every shift.
- If a cannula is not in use it must be removed.
- Confusion may exist over 'just-in-case' cannulae – these types of cannulae must only be inserted if a probable clinical need exists that may warrant emergency intravenous access in the subsequent twelve hours e.g. patient with chest pain.
- However, these cannulae must be managed carefully. Flushes must be prescribed to ensure the device remains patent and twelve hourly checks implemented to check that the device is still clinically required. If not required removal will be necessary.
- Cannula must not be inserted simply to obtain blood samples and left 'just-in-case' without any clinical need.
- Consideration of routine replacement of cannulae must be planned for 72 hours.
- Cannula removal must be documented.
- Solution administration sets must be changed at 72 hours.
- Parenteral nutrition sets are changed 24 hourly.
- Blood component sets are changed within 12 hours.

# SAVING LIVES

## Document

Plan and evaluate your patients IV care.  
Document insertion, care during use and removal.

- Document cannula insertion and removal.
- It is vital that IV care is integrated into the everyday care that your patient receives.
- Review the need and appropriateness of the cannula every twelve hours – patients on medium to long term intravenous treatments may benefit from alternative devices such as midlines and PICC's.
- Care planning will ensure the appropriateness and the quality of the vascular access device throughout a patients treatment.
- Plan to complete the VIP at least every shift.
- Evaluate care based upon the results and plan future care.
- Consider routine cannula replacement at 72 hours – if the cannula is left in place beyond 72 hours document the reason for continued use and continue to record the VIP score every shift.