

# Preventing infections when inserting and maintaining a CVC

## Patient who needs a central vascular catheter (CVC)

### When inserting a CVC

#### Ensure that:

- surgical scrub is performed immediately before donning maximal sterile barrier precautions (i.e., gloves and gown)
- maximal sterile barrier precautions are used; including headwear, mask, sterile gown, and sterile gloves for healthcare workers
- maximal sterile barrier precautions are used by applying a sterile body drape
- aseptic technique is maintained throughout insertion of CVCs
- a single-use 2% chlorhexidine in 70% isopropyl alcohol is used for skin preparation of the insertion site and allowed to dry, before CVC insertion\*
- the subclavian site is used if possible or internal jugular vein (femoral site should be avoided whenever possible)
- a sterile transparent, semi-permeable dressing is used to cover the catheter site
- chlorhexidine-impregnated sponge or gel dressing to cover the catheter site is considered

### When maintaining an inserted CVC and accessing the insertion site and line

#### Ensure that:

- the need for the CVC in situ is reviewed and recorded today (on a daily basis)
- the CVC dressing is intact
- the CVC dressing has been changed in the last seven days
- a single-use 2% chlorhexidine gluconate in 70% isopropyl alcohol is used for cleaning the insertion site during dressing changes\*
- hand hygiene is performed immediately before accessing the line/site (WHO Moment 2)
- a single-use antiseptic containing 70% isopropyl alcohol is used to clean the access hub prior to accessing – rub the access hub for at least 15 secs (“scrub the hub”)

#### Practice points

Documenting date and time of catheter insertion is an important step to achieve timely line removal.

The use of personal protective equipment (PPE) including gloves is important in all procedures where blood and body fluid risk exists.

The featured recommendation on hand hygiene does not detract from other times when hand hygiene is recommended and will be monitored against (namely the 5 Moments for Hand Hygiene).

The featured recommendations do not aim to cover emergency situations, which require clinical judgement for patient care actions.

For further information on the background to these recommendations and the literature reviews that informed these please visit <http://www.hps.scot.nhs.uk> as well as referring to your local teams and policies.

Also see NHS Education for Scotland <http://www.nes.scot.nhs.uk> and Healthcare Improvement Scotland <http://www.healthcareimprovementscotland.org/home.aspx> for additional information on education and patient safety improvement. Also refer to the Standard Infection Control Precautions Section of the National Infection Prevention and Control Manual <http://www.hps.scot.nhs.uk/haic/ic/nationalinfectionpreventionandcontrolmanual.aspx>.