

Emergency Department Sterile Procedures Protocol

Catheter / Procedure related infections are a major cause of morbidity and mortality in critically ill patients. Good technique at the time of an invasive procedure can reduce the risk of catheter / procedure related infections. This protocol should be used whenever performing a invasive procedure that requires a sterile field. This includes, but is not limited to:

- Central venous access (all routes including femoral)
- Arterial line insertion
- Chest drain
- Pleural aspiration or drainage
- Pericardiocentesis
- Joint aspiration

This applies to **all** staff, including those from other inpatient specialties. Rarely, in extremis, this technique may be modified but this should not be routine.

Equipment required

- An operator and assistant
- Silver trolley – top surface cleaned
- Sterile gown and hand towels
- Appropriate size sterile gloves
- Sterile drapes x3
- Chlorhexidine **2%** solution (not standard 0.5% solution)
- Povidine iodine 10%

The operator should properly handwash and put on sterile gown and gloves.

The assistant should lay out a sterile drape on top of the silver trolley.

All equipment to be used in the procedure should then be put onto the sterile drape either by the operator using sterile gloves or by assistant using no touch technique.

For central venous access or arterial lines, the skin area should be cleaned by the operator using **2% chlorhexidine**. This has been proven superior to iodine alone in reducing line related sepsis.

For other procedures the operator should always clean the skin area with Povidine iodine. Povidine iodine can also be used in addition to Chlorhexidine for line insertion.