Insertion of chest drain

Pneumothorax or pleural fluid requiring drainage

Does this need to be done as an emergency? (e.g. tension)

- YES → Insert drain
- NO

Is it outside of normal working hours?

- YES → Does the patient have significant respiratory compromise?
  - YES → DELAY PROCEDURE UNTIL WORKING HOURS.
  - NO → Prepare patient for chest drainage
- NO → Delay procedure until working hours.

Is the drain required for fluid?

- NO → Insert drain
- YES

Is the operator experienced?

- NO → Seek senior help
- YES → Insert drain. Ultrasound guidance strongly recommended.

Requirements for insertion of chest drain

- Written consent
- Clean area to perform procedure
- Competent operator or supervisor
- Nursing staff familiar with drain management.

Equipment required for chest drain insertion

- 1% lignocaine
- Alcohol based skin cleanser x2 coats
- Sterile drapes, gown, gloves
- Needles, syringes, gauze swabs
- Scalpel, suture (0 or 1-0 silk)
- Chest tube kit
- Closed system drain (including water) and tubing
- Dressing
- Clamp.