

**PARKLAND HEALTH & HOSPITAL SYSTEM
LEADERSHIP & ORGANIZATIONAL DEVELOPMENT**

**COMPETENCY VALIDATION
CHEST TUBE DRAINAGE PRE-INSERTION AND CHEST TUBE MAINTENANCE**

Name: _____ ID#: _____

Unit: _____ Date: _____

Chest Drainage Pre-insertion Checklist	1 st Attempt (P or F)	2 nd Attempt (P or F)	Comments
1. Confirm: (may verbalize) <ul style="list-style-type: none"> • Provider order • Right patient • Consent • Mark site as appropriate (if provider leaves after giving order and then returns for the procedure) 			
2. Confirm patient has patent IV line or saline lock (may verbalize)			
3. Collect Sterile Procedure Supplies <ul style="list-style-type: none"> • Sterile gown(s) • Sterile gloves • Sterile towels (2 packs) 			
4. Collect PPE <ul style="list-style-type: none"> • Hat • Mask • Non-sterile gloves 			
5. Collect patient prep supplies <ul style="list-style-type: none"> • Sterile 4x 4's (3packets) • Chorhexidine prep or Betadine • Lidocaine (1 or 2%) • 3 cc syringe (for Lidocaine)-goes onto sterile field • 18 g needle- goes onto sterile field • 23 or 25 syringe- goes onto sterile field 			
6. Collect Chest Drainage supplies <ul style="list-style-type: none"> • Chest tube -size per provider's order, e.g. 28, 32, 36 • Chest Tube tray –sterile tray from Sterile Processing (kept in Pyxis in some units, or may need to order) • Pleur-evac drainage system • Working wall suction • Suction connection tubing • Suture (2.0 silk on straight needle or per provider order) 			
7. Explain procedure to patient or patient's family as possible (may verbalize)			

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<p>8. Set-up Pleur-evac</p> <ul style="list-style-type: none"> • Maintain sterility of distal end of patient tubing • Inject 20cc sterile saline or sterile water into injection port of Pleur-evac, fill to fill line in air leak detector chamber • States Sahara Pleur-evac system is a dry suction system • Connect suction tubing to wall suction regulator and to Pleur-evac suction port • Suction regulator on wall to be set on continuous and high <ul style="list-style-type: none"> -confirm adequate wall suction by visualizing orange hat in Pleur-evac window - confirm ordered amount of chest tube suction on Pleur-evac dial (Pleur-evac pre-set to 20 cm suction) 			
<p>**NOTE: To complete Chest Drainage Competency proceed to the Chest Drainage Maintenance Checklist.</p>			
Chest Drainage Set-up/Maintenance	1st Attempt (P or F)	2nd Attempt (P or F)	Comments
1. Verify Provider's Order. Complete Time Out procedural form, and discuss pain management options with Provider.			
2. Check to make sure suction is available and functioning. Gather equipment, wash your hand, explain procedure to patient or family as indicated			
3. State indications for chest tubes: To evacuate air and/or fluid from pleural space or mediastinum, to prevent air and/or fluid from re-accumulating in the pleural space or mediastinum, to reestablish and maintain normal intrathoracic pressure and to restore normal mechanics of breathing.			
4. Set up the Sahara Pleur-evac (dry suction system) per manufacturer's instructions. (This can be done ahead of time as long as the distal end of the patient tube that will be connected to the chest tube remains sterile.)			
5. Nurse states that the Sahara Pleur-evac system is a dry suction system.			
6. Identify the following items on the system: Suction dial, Suction Indicator, Negative Pressure Indicator, Patient Air Leak Meter, Positive Pressure Relief Valve, Filtered High Negativity Relief Valve, Collection Chamber, Sampling Port			
7. State how the nurse will know appropriate suction is applied to unit: Orange float in window.			
8. State proper position of drainage tubes for maintenance and/or in the incidence of traveling with a patient: No dependent loops, kinks or pressure on tubing. The suction port must be left open to air when traveling. The patient will be to water seal. Don't forget to reconnect when returning to unit.			
9. State that we never clamp the chest tube other than very briefly to change out the system.			

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<p>10. State appropriate documentation following a chest tube insertion: patient's tolerance of procedure, MD performing procedure, size of chest tube, amount of suction, drainage description, location of chest tube, subcutaneous air, dressing applied and dressing condition.</p>			
<p>11. State when to notify the MD: greater than 200ml drainage for two hours, a sudden ceasing of drainage or chest tube accidentally removed.</p>			
<p>12. State nursing action in the event of accidental removal of chest tube: Cover with an occlusive dressing and tape on 3 sides. This will create a flutter-type valve effect. Air is prevented from entering as the patient breaths in, but air can escape through the open end of the dressing during exhalation</p>			
<p>13. State steps to troubleshoot an air leak: First check connections to make sure they are secure, squeeze the chest tube with fingers close to the insertion site, to occlude the tube momentarily. Check the air leak meter. If bubbling stops, the air is leaking from inside the patient or entering the patient at the insertion site and draining through the tube. If bubbling persists the leak is distal to the point where the tube is occluded. Continue to assess for leak making way to system. If unable to find reason for leak, replace system.</p>			
<p>14. Change chest tube dressing when soiled or as ordered by MD. When securing connections make sure to keep connector visible.</p>			
<p>15. DO NOT STRIP CHEST TUBES. DO NOT CLAMP CHEST TUBES.</p>			

The completion of this form validates the above nurse's competency for this skill.

#1 Pass / Fail Competency Validator Signature: _____

#2 Pass / Fail Competency Validator Signature: _____