TRACHEOSTOMY SUCTIONING

Purpose: Suctioning of a tracheostomy tube is performed to remove mucus that collects in your artificial airway. Artificial airways bypass the normal coughing mechanism of the patient. Suctioning of the tracheostomy tube is one of the most important aspects of your care.

Types: There are two basic types of catheters used for tracheostomy suctioning: un-sleeved and sleeved. The un-sleeved catheter is a plastic or rubber flexible tube that has an opening at the top. This port is closed with your thumb to activate the suction pressure. Un-sleeved catheters should be disposed after every use. The sleeved type resembles the un-sleeved type with an added protective sheath around the catheter. This sheath moves out of the way when the catheter is inserted into the airway. The sleeved-type can be reused for an entire day if properly used. Catheters come in different sizes measured in the French (Fr) scale; the larger the number, the larger the catheter's internal diameter. Catheters should be sized to not take up more than 50% of the internal diameter of the airway; most adults use a 14 Fr catheter.

Use: Suctioning should only be done when an assessment of the patient establishes the need for the procedure. Some of the indicators that suctioning may be necessary are coarse breath sounds, noisy breathing, increased or decreased heart rate, and increased or decreased blood pressure. Patients with artificial airways can still voluntarily cough up secretions. When suctioning is necessary, all the equipment must be gathered and be ready for use. Your hands should be washed. Eye protection is also recommended. It is NOT recommended to instill Normal Saline into the airway to loosen secretions. The patient should be provided with more oxygen immediately prior to suction; this may minimize the potential for low oxygen levels caused by the suctioning.

Turn on the suction unit and make sure the vacuum pressure is set to 80 – 120 mmHg; Discount Drug Mart Professional Medical Equipment and Services may adjust this down for children or the elderly. Apply your sterile gloves and assemble the suction catheter or kit. A small amount of sterile water may be used to clear the catheter of secretions. All items are

sterile so they should not be touched unless you are wearing sterile gloves. Your dominant hand should remain sterile throughout the entire procedure. With your non-dominant hand, pick up the connection tubing and attach the catheter. Cover the suction port on the catheter to make sure it is working – then release.

After making sure the patient has been hyperoxygenated, insert the catheter into the airway. Try to keep the catheter in the airway. Advance the catheter until resistance is felt, then pull back 1 inch. Cover the suction port on the catheter and rotate the catheter between your thumb and index finger as you slowly pull the catheter out. Suction is only applied when the catheter is being pulled out and should be no longer than 10 – 15 seconds. Use a maximum of two suction passes. Catheters can be cleared with sterile water. After 5 minutes the oxygen percentage can be returned to the prescribed level.

Upon completion of upper airway suctioning dispose of gloves and catheter. If the suction catheter is sleeved, insert the catheter into a protective bag until it is needed again.

For those patients on mechanical ventilation, a swivel adapter can be added to the ventilator tubing that has a port for suctioning built in.

Accessories: Suction kits may also be available to you. Contact Discount Drug Mart Professional Medical Equipment and Services for additional details and insurance coverages.

Maintenance: Your suction unit must be maintained as per the manufacturer's operating instructions. Suction containers can be dumped into the toilet and contents flushed. Discuss with your Discount Drug Mart Professional Medical Equipment and Services, the requirements for changing the suction and connection tubing.

Related Care: Additional strategies to aid in secretions removal are appropriate hydration, adequate humidification of inhaled gases, coughing and deep breathing, frequent position changes, chest physiotherapy and bronchodilation medications.

There can be many complications from suctioning. The patient should be monitored carefully during and after suctioning. If any adverse conditions occur during suctioning, the procedure should be immediately stopped.

This educational handout and all associated training has been reviewed and approved by:

Jeffrey Allen Black RCP, RRT **State of Ohio License # RCP.7218**