TRACHEAL SUCTION

**Goal:** to keep the tracheostomy tube free of thick mucus and secretions. Suctioning the tracheostomy tube removes mucus and secretions that are not able to be cleared by coughing.

A strong cough is the BEST suction:

- Moving, sitting up or even changing positions will assist a cough
- While a cough is the best suction, a suction machine will help clear the secretions that accumulate in the tracheostomy tube
  - Additional supplies include suction catheters and saline
    - The suction catheter used should be the largest size that easily fits into the tracheostomy tube

*Humidification and adequate fluids help maintain thinner secretions that are easily coughed and cleared from the tracheostomy tube or removed with suction*

**Signs that tracheal suction is needed:**

- Visible mucus that cannot be cleared from tracheostomy tube with a cough
- If you can hear or see secretions
- Pulse oximeter desaturations, difficulty breathing or pale/blue color around mouth or fingernails
- Whistling noise from tracheostomy tube
  - This noise may mean the tracheostomy tube is coated with thick secretions
- Difficulty breathing, gasping or grunting in infants
- If the child vomits
- If you think the tracheostomy tube is blocked or partially blocked

(continued)
TRACHEAL SUCTION (continued)

Suction Techniques:

■ Shallow:
  • Insert a suction catheter or little sucker™ to the depth of the tracheostomy tube connector, apply suction and withdraw catheter or little sucker™ within 5 seconds
  • Perform this suction technique if the child is able to clear airway with a cough but unable to clear the tracheostomy tube connector

■ Pre-measured:
  • Use the obturator (or inner cannula if applicable) to “pre-measure” the depth of the catheter to be inserted into the tracheostomy tube
  • Pass the suction catheter to pre-measured depth, apply suction and withdraw catheter within 5 seconds
  • Perform this suction technique:
    – Every time suctioning beyond shallow is needed
    – Every morning and at bedtime with few drops of saline

■ Deep suction (ONLY perform in an emergency):
  • Pass the suction catheter until you meet resistance, pull back slightly, apply suction and withdraw catheter within 5 seconds
  • Perform this suction technique ONLY in an emergency
    – This technique causes trauma to the airway

Saline drops

■ When to use
  • With pre-measured suctioning in the morning and before bed
  • During the day as needed if secretions are thick
    – Tip: If secretions are thick – increase the time on warm mist humidification