Providence HEALTH CARE	Department: **Respiratory Services**	Date Originated: September 1986 Date Reviewed/Revised: **June 2012**
POLICY & PROCEDURE	Topic: Critical Care – Endotracheal Tube Repositoning and Security Devices (Respiratory Therapy) Number: B-00-12-12018	Related Links: B-00-12-12100

APPLICABLE SITES:

St. Paul's Hospital
Mount Saint Joseph Hospital

POLICY STATEMENT:

Endotracheal tubes must be well secured with the most appropriate security device and be regularly repositioned laterally. Changes of an ETT security device and repositioning of an ETT must be done with 2 people.

GENERAL INFORMATION:

An endotracheal tube which is secured properly helps decrease the risk of unplanned extubation and minimizes tissue trauma which may result from the cuff moving against the tracheal wall. Routine and frequent assessment of the ETT position including condition of the mouth and skin for breakdown must be done at minimum every 4 hours. Lateral repositioning of the ETT should be done at minimum every 24 hours.

OPTIONS FOR SECURING ENDOTRACHEAL TUBES:

1. Anchor Fast:

- Commercially produced oral endotracheal tube fastener
- Must be changed every 5-7 days
- Allows both vertical and lateral repositioning of ETT
- Should not be used with patients who are expected to be intubated for the short term (i.e. less than 3-4 days)
- May not be appropriate for narrow or small faces
- The adhesive portion should not be applied directly over facial hair

2. **Stabiltube:**

   - Commercially produced oral endotracheal tube holder
   - Must be changed every 3 days
   - Allows vertical repositioning of ETT (not lateral)

3. **Twill ties:**

   - Preferred method if adhesive options are contraindicated (tape allergy, facial hair, small or abnormal maxilla, excessively oily skin, sores/rashes or trauma of the face)
   - Must be changed at minimum every 24 hours
   - Allows lateral and vertical repositioning of ETT (during tie change)

4. **Cloth tape:**

   - Secures the ETT close to the face with minimal movement
   - Must be changed at minimum every 24 hours
   - Must be used to secure nasal endotracheal tubes
   - Allows lateral and vertical repositioning of ETT (during tape change)

NOTE: All devices should be changed if any of the following is true:

- ETT is not being held securely in position
- Position of the ETT must be corrected (stabiltube, tapes, ties)
- ETT is causing skin breakdown or ulcerations
- Device is visibly soiled
- The device is due to be changed

EQUIPMENT:

- Appropriate ETT security device
- Tongue depressor
- Suction equipment (oral/tracheal)
- Manual resuscitator and emergency supplies/equipment
- Scissors
- 10/12 mL syringe
- Stethoscope
- Gauze 4x4 pads or damp washcloth
- Assistant

ANCHOR FAST PROCEDURE (change every 5-7 days):

1. Prepare equipment and supplies; ensure emergency airway supplies are available. Consider if an AnchorFast is appropriate for the patient.

2. Verify position of ETT by auscultation and chest x-ray if available. Check flowsheet for documented ETT position at the teeth.

3. While an assistant securely holds the ETT, remove the Anchor Fast device. Laterally reposition the tube as per procedure at the end of this document.

4. Clean and dry face and mouth area, and behind the neck where the neckband will rest against the skin.

   NOTE: Do not use skin gel wipes or other skin preps with the ETT fastener.

5. Remove the release liners from both skin barrier pads.

6. Place the device on the patient:

   a. Center the device on the upper lip so that the nonabsorbent upper lip foam stabilizer is touching the skin.
   b. Apply and maintain pressure to the foam stabilizer so that it's touching the skin firmly.
   c. Position the one-click security clamp approximately ½ inch (approx. 1cm) below the patient's upper lip.
   d. **WHILE MAINTAINING PRESSURE ON THE FOAM STABILIZER**, press the two skin barrier pads against the patient's skin. **THE ADHESIVE PADS SHOULD SIT FIRMLY OVER THE CHEEK BONES and should not rest low on the face.**
   e. Hold the device firmly in place until they adhere well. **This should take approximately 30 seconds**.

7. Apply the adjustable neck strap:

   a. Insert the narrow end of the strap through the plastic loop on the track.
   b. Fasten the narrow end of the strap using the hook and loop closure.
   c. Adjust straps on either side for added comfort and security. **Do not over tighten**.
   d. Allow two fingers width between the strap and the back of the patient's head.

8. Secure the endotracheal tube:

   a. Squeeze the tabs on the sides of the gliding tube shuttle and move the clamp along the track to a location above the tube.
   b. Remove the release liner from the ET tube wrap, exposing the adhesive. Before applying the wrap to the tube, make sure the tube is dry and free of any residue.
   c. Position the tube under the non-slip grippers.
   d. Loop the wrap **TIGHTLY** around the tube, and pull the remaining portion of the wrap through the security clamp.
   e. Secure the wrap by snapping the one-click security clamp shut (an audible click will be heard).

   NOTE: To reposition the tube, squeeze the shuttle tabs on the outer edges and move in either direction along the tube track.

9. Auscultate chest for bilateral air entry and consistency with previous auscultation.

10. Document current position of the tube, including lateral repositioning and which side of the mouth the ETT is at on the Respiratory Flowsheet.

11. Write the due date of the **NEXT** change with your initials on the Flowsheet (i.e. Change Due June 6).

STABILTUBE PROCEDURE (change every 3 days):

1. Prepare equipment and supplies; ensure emergency airway supplies are available.

2. Verify position of ETT by auscultation and chest x-ray if available. Check flowsheet for documented ETT position at the teeth.

3. While an assistant securely holds the ETT, remove the stabiltube. Laterally reposition the tube as per procedure at the end of this document.

4. Clean and dry face and mouth area, and behind the neck where the neckband will rest against the skin. Wipe the skin surface where the adhesive will make contact with an alcohol swab to remove oils. Prepare the skin using the enclosed Skin Prep swab.

5. Remove the release liner from the face-piece of the Stabiltube, exposing the adhesive backing. Secure face-piece firmly to the patient's upper lip and cheek.

6. Ensure the desired tube position at the teeth is correct and place the cable tie around the ETT and then securely tighten the cable. Cut excess length from the cable tie and place supplied blue rubber protective cap on the exposed end of the cable tie.

   NOTE: To reposition the ETT vertically, release the cable tie while securely holding the ETT in place. Make the adjustments to the ETT position and re-tighten the cable.

7. Place Velcro neckband behind patient neck and secure to the face-piece.

8. Auscultate chest for bilateral air entry and consistency with previous auscultation.

9. Document current position of the tube, including lateral repositioning and which side of the mouth the ETT is at on the Respiratory Flowsheet.

10. Write the due date of the **NEXT** change with your initials on the Stabiltube (i.e. Change Due June 6)

TWILL TIE or CLOTH TAPE PROCEDURE (change every 24 hours):

1. Prepare equipment and supplies; ensure emergency airway supplies are available. Refer to B-00-12-12100 for preparation of cloth tapes.

2. Verify position of ETT by auscultation and chest x-ray if available. Check flowsheet for documented ETT position at the teeth.

3. While an assistant securely holds the ETT, remove the soiled ties or tapes. Laterally reposition the tube as per procedure at the end of this document.

4. Clean and dry face and mouth area, and behind the neck where the neckband will rest against the skin. If using tapes, wipe the skin surface with an alcohol swab where the

adhesive will make contact to remove oils.

5. Ensure the desired tube position at the teeth is correct and secure the ETT.

   NOTE: To reposition the ETT vertically or laterally, place new ties or tapes.

6. Auscultate chest for bilateral air entry and consistency with previous auscultation.

7. Document current position of the tube, including lateral repositioning and which side of the mouth the ETT is at on the Respiratory Flowsheet.

LATERAL REPOSITIONING OF AN ORAL ENDOTRACHEAL TUBE:

Oral mucosa and lip irritation by an endotracheal tube in situ may result in mucosal breakdown and tissue necrosis. This complication can be minimized by effective mouth care and routine repositioning of the endotracheal tube from one side of the oral cavity to the other, therefore all oral endotracheal tubes should be laterally repositioned at minimum once every 24 hours. Contraindications to lateral tube repositioning may include:

- Recent oral, tracheal, laryngeal, or maxillary surgery
- Patients with documented difficult airway (Grade IV)
- Ulcerations or skin breakdown at the desired repositioning site
- Stabiltube in place with **NO** evidence of pressure sores are present. This must be documented in the patient record.

EQUIPMENT:

- Mouth care supplies
- Replacement ties or tapes
- Replacement commercial securing device if change is due
- Suction equipment
- Gauze 2x2 or non-adhering dressing

PROCEDURE:

1. Prepare equipment and supplies; ensure emergency airway supplies are available.

2. Wash hands and don gloves – adhere to infection control guidelines.

3. Suction the oral pharynx completely and perform mouth care to the side of the mouth in which the endotracheal tube will be repositioned to.

4. Have an assistant firmly hold the endotracheal tube in place while removing the existing ties, tapes or commercial securing device. Make note of the position of the tube at the teeth.

5. Laterally reposition the endotracheal tube to the opposite of the mouth. A tongue depressor may be required to enable the tube to move over the tongue.

6. Secure endotracheal tube with new ties or tapes.

7. Perform mouth care for the remaining side of the mouth.

8. Auscultate patient for bilateral air entry and consistency with previous auscultation. Make note of the position of the tube at the teeth to ensure it has not migrated.

9. Document current position of the tube, including lateral repositioning and which side of the mouth the ETT is at on the Respiratory Flowsheet.