

# STANDARDIZED PROCEDURE

## BRONCHOSCOPY (Adult,Peds)

### I. Definition

Bronchoscopy is the use of a flexible thin endoscope placed either through an endotracheal tube or via the pharynx of an awake patient giving access to the lumen of the airway. Bronchoscopy can provide diagnostic data and permit therapeutic intervention. Awake Bronchoscopy should be performed in a monitored environment under light sedation with an attending present.

### II. Background Information

**A. Setting:** The setting (inpatient vs outpatient) and population (adults vs pediatrics) for the Advanced Health Practitioner (AHP) is determined by the approval of the privileges requested on the AHP Privilege Request Form. If the procedure is being done on a Pediatric patient, make sure Child Life is involved and use age appropriate language and age appropriate developmental needs with care of children, as appropriate to the situation.

**B. Supervision:** The necessity of this procedure will be determined by the Advanced Health Practitioner in collaboration with the supervising physician or his/her designee. Designee is defined as another attending physician who works directly with the supervising physician and is authorized to supervise the Advanced Health Practitioner.

Direct supervision will not be necessary once competency is determined, as provided for in the procedure. The Advanced Health Practitioner will notify the physician immediately upon being involved in any emergency or resuscitative events or under the following circumstances:

1. Patient decompensation or intolerance to the procedure
2. Bleeding that is not resolved
3. Outcome of the procedure other than expected

### C. Indications:

1. Patients with airway obstruction from foreign body, mucous plugging or tumor mass.
2. Patients unable to clear secretions adequately.
3. Patients with tumors of the lung or esophagus involving the lumen of the airway.

### D. Precautions/Contraindications

Awake Bronchoscopy is a complicated procedure in the awake patient that requires thorough knowledge of pharyngeal and upper airway anatomy. Additionally airway intubation skills are required in the event of an emergent complication. It should not be performed without the direct participation of an attending surgeon.

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### II. Materials

Equipment is available in the Thoracic Bronchoscopy Cart

### III. Bronchoscopy procedure

#### A. Pre-treatment evaluation:

O2 Saturation, blood gas, consent, CXR or CT scan

#### B. Set up (if applicable):

Supine position with head of bed elevated 20-30 degrees

#### C. Patient Preparation:

1. Identify patient with two patient identifiers prior to start of procedure.  
Inform the patient of the treatment plan.
2. Antibiotics are not generally required. Patients are often given light sedation in conjunction with ICU service. 2-4 ml of 4% intra tracheal lidocaine can help with airway reactivity

#### D. Procedure:

1. Ensure that all preprocedure steps are taken and a time out is performed prior to the procedure.
2. For the purposes of AHP training, a bronchoscopy is performed on the sedated and intubated patient. The Lidocaine prevents irritation from the scope to the airways, and can minimize airway reactivity. An adapter is added to the tip of the endotracheal tube that permits entry of the bronchoscope. The trachea and each segmental bronchus are inspected with the bronchoscope. Suction is applied to the bronchoscope to remove mucus or blood within the airway.

#### E. Post-procedure:

Monitor for respiratory compromise, signs of pneumothorax or hemoptysis

#### F. Follow-up treatment:

Follow up CXR is required

#### G. Termination of treatment

Removal of bronchoscope

### V. Documentation

#### A. Documentation is in the electronic medical record

1. Documentation of the pretreatment evaluation and any abnormal physical findings.
2. Record the time out, indication for the procedure, procedure, type and size of instrument used, method used, EBL, the outcome, how the patient tolerated

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the procedure, medications (drug, dose, route, & time) given, complications, and the plan in the note, as well as any teaching and discharge instructions.

3. Documentation that x-ray was obtained, and results noted.

**B. All abnormal or unexpected findings are reviewed** with the supervising physician.

## **VI. Competency Assessment**

### **A. Initial Competence**

1. The Advanced Health Practitioner will be instructed on the efficacy and the indications of this therapy and demonstrate understanding of such.
2. The Advanced Health Practitioner will demonstrate knowledge of the following:
  - a. Medical indication and contraindications of bronchoscopy
  - b. Risks and benefits of the procedure
  - c. Related anatomy and physiology
  - d. Consent process (if applicable)
  - e. Steps in performing the procedure
  - f. Documentation of the procedure
  - g. Ability to interpret results and implications in management.
3. Observe attending surgeon for three procedures, especially observe technique with orienting scope. Assist attending surgeon for five procedures, especially with orienting scope. Perform procedure with direct supervision of attending/supervising surgeon guiding AHP for **three** procedures. Use of Bronchoscopy model (if available) to gain experience in scope manipulation.

### **B. Continued proficiency**

1. The Advanced Health Practitioner will demonstrate competence by successful completion of the initial competency.
2. Each candidate will be initially proctored and signed off by an attending physician. Advanced Health Practitioner must perform this procedure at least **three** times per year. In cases where this minimum is not met, the attending, must again sign off the procedure for the Advanced Health Practitioner. The Advanced Health Practitioner will be signed off after demonstrating 100% accuracy in completing the procedure.
3. Demonstration of continued proficiency shall be monitored through the annual evaluation.
4. A clinical practice outcomes log is to be submitted with each renewal of credentials. It will include the number of procedures performed per year and

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any adverse outcomes. If an adverse outcome occurred, a copy of the procedure note will be submitted.

**VII. RESPONSIBILITY**

Questions about this procedure should be directed to the Chief Nursing and Patient Care Services Officer at 353-4380.

**VIII. HISTORY OF PROCEDURE**

Revised February 2012 by Subcommittee of the Committee for Interdisciplinary Practice

Reviewed February 2012 by the Committee on Interdisciplinary Practice

Prior revision June 2008

Approved February 2012 by the Executive Medical Board and the Governance Advisory Council.

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