


<b>Name of Policy:</b>	<b>Use of Disposable Incentive Spirometers</b>	 <p><b>Effective Date:</b> August 4, 1981</p>
<b>Policy Number:</b>	3364-136-04-05	
<b>Department:</b>	Respiratory Care and Neurodiagnostic Services	
<b>Approving Officer:</b>	Director, Respiratory Care	
<b>Responsible Agent:</b>	Director, Respiratory Care	
<b>Scope:</b>	The University of Toledo Medical Center Respiratory Care Department	
<input type="checkbox"/> New policy proposal <input checked="" type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Major revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy		

**(A) Policy Statement**

The Department of Respiratory Care will use disposable incentive spirometers in conjunction with other modes of therapy when ordered by physicians. Nursing Service is the primary care giver for this mode of therapy.

**(B) Purpose of Policy**

To ensure safe and effective use of disposable incentive spirometers in the performance of incentive breathing exercises.

Indications: for incentive spirometry include post-operative patients who are at risk of developing atelectasis, and patients who cannot cough and deep breathe effectively.

The goal of incentive spirometry is to increase alveolar ventilation by returning lung volumes toward normal.

Contraindications: include lack of patient cooperation and effort.

Hazards: of incentive spirometry include hyperventilation and hypocapnea.

**(C) Procedure**

1. After verification of a written physician order for incentive spirometry in conjunction with other respiratory therapies, the practitioner should assemble the appropriate equipment.
2. The practitioner should then identify the patient in accordance with departmental policy #3364-136-01-11 and explain the treatment purpose and procedure to the patient.
3. Aseptic technique should be maintained at all times. The practitioner should assess the patient's respiratory status, including respiratory rate, pulse, and breath sounds. Another assessment should follow the treatment. Patient response to therapy should be noted, (as described in policy #3364-136-03-06A of this manual).
4. Randomly select a lower setting on adjustment at the base of spirometer. Have patient place mouth firmly around mouthpiece and inhale as quickly and deeply as possible, holding the indicator ball at the top of the column as long as possible.

5. If patient can easily hold ball at the level of the volume indicator, increase the volume indicator between exercises until a level is achieved that the patient can hold the ball up for at least 2 seconds. Generally 15 to 20 repetitions per exercise is sufficient, but this may vary with patient's tolerance. Constant encouragement from the practitioner is a must for maximum benefit from spirometry.
6. If the patient is unable to perform the maneuver, the ordering physician should be notified, and an alternative treatment suggested.
7. After the exercise is complete, wipe off mouthpiece and place spirometer in an accessible, clean area near the patient and encourage patient to use it at frequency prescribed.
8. Record the level of the volume indicator, number of repetitions, and patient cooperation and ability to use the device, on the respiratory care treatment sheets.
9. Check with the patient's nurse to make sure she knows the frequency of the exercises and will see to it that the patient performs them.
10. Adverse reactions to therapy.
  - A. The patient should be closely monitored for the occurrence of any increased shortness of breath, nausea/vomiting, dizziness, bronchospasms, cyanosis, chest pain, tachycardia, agitation, or any other undesirable side effects.
  - B. If the patient's response to therapy is adverse, it may be necessary to modify or terminate therapy, monitor the patient for further change in symptoms, contact the patient's nurse and/or physician, and document appropriately (according to policy #3364-136-03-06 of this manual).

References:

Burton GC. Hodgkin JE. Respiratory Care, A Guide to Clinical Practice, 2nd Ed. Lippincott, Philadelphia. 1984:527-528.

<p><b>Approved by:</b></p> <p><i>Lisa Bonamigo, RRT</i> _____ <u>3/14/08</u></p> <p>Lisa Bonamigo          Director, Respiratory Care</p> <p><i>Review/Revision Completed By:</i>  <i>Director, Respiratory Care</i></p>	<p><b>Review/Revision Date:</b></p> <p>8/31/1999          8/22/2001          4/7/2004          3/28/2007</p> <hr/> <p><b>Next Review Date:</b> March 1, 2010</p>
<p><b>Policies Superseded by This Policy:</b></p>	

*It is the responsibility of the reader to verify with the responsible agent that this is the most current version of the policy.*