

 <p style="text-align: center;"><b>DIVISION OF ADULT INSTITUTIONS</b></p> <p style="text-align: center;"><b>POLICY AND PROCEDURES</b></p>	<b>DAI Policy #:</b> 500.30.63	<b>Page</b> 1 of 4
	<b>Original Effective Date:</b> 03/03/14	<b>New Effective Date:</b> 08/31/20
	<b>Supersedes:</b> 500.30.63	<b>Dated:</b> 02/15/17
	<b>Administrator's Approval:</b> Makda Fessahaye, Administrator	
<b>Required Posting or Restricted:</b>		
<input checked="" type="checkbox"/> Inmate <input checked="" type="checkbox"/> All Staff <input type="checkbox"/> Restricted		
<b>Chapter:</b> 500 Health Services		
<b>Subject:</b> Spirometry		

**POLICY**

All Division of Adult Institution facilities shall ensure patients have access to medically necessary spirometry testing, when symptomatic with reactive airway disease and ordered by an Advanced Care Provider. Spirometry testing shall be provided by a trained licensed nurse or Respiratory Therapist.

**REFERENCES**

Wisconsin Statutes s. 302.38 – Medical care of prisoner

**DEFINITIONS, ACRONYMS AND FORMS**

Advanced Care Provider (ACP) – Provider with prescriptive authority.

FEV1 – Forced Expiratory Volume in one second

FVC – Forced Vital Capacity

HSU – Health Services Unit

MDI – Metered dose inhaler

Spirometry – Test used to diagnose asthma, chronic obstructive pulmonary disease and certain other conditions that affect breathing. Spirometry may also be used to check how well your lungs are working once you're being treated for a chronic lung condition. It measures how much air you can inhale and exhale and how fast you can exhale.

**PROCEDURE****I. Equipment and Services**

- A. All facilities shall have access to a laptop computer designated for spirometry.
- B. Essential supplies shall be available including:
  1. Nose clips.
  2. Mouth pieces.
  3. Printer and paper.
  4. Bronchodilator albuterol inhaler.
  5. Disposable single use spacer.

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## **II. Performing Spirometry Evaluation**

- A. The ACP shall write an order for spirometry. Order shall be written as either spirometry or pre- and post-spirometry.
  
- B. If pre- and post- is ordered the following shall be completed:
  1. The nurse shall instruct the patient not to use any inhaler for 12 hours prior to testing for best results.
  2. Have patient come to HSU and bring their rescue inhaler with them if they have one.
    - a. HSU will provide a MDI albuterol inhaler with a disposable spacer if one is not issued.
    - b. After use of a HSU MDI albuterol inhaler, wipe down MDI albuterol inhaler with alcohol and throw away disposable spacer between use.
  3. Evaluate patient to make sure they are capable of performing the test. Do not complete the test if the patient is significantly wheezing or short of breath or has other signs of respiratory distress.
  4. If able to continue, inform patient that the test is intended to see how well they are breathing.
  5. Instruct the patient to sit straight up in a chair with their feet flat on the ground. They may stand if they prefer, but a chair shall be in front or near the patient.
  6. Instruct patient that this test can be completed in as little as three attempts or as many as eight, depending on effort.
  7. Demonstrate proper breathing technique and coach throughout the process as follows:
    - a. Put the mouth piece in the mouth and make sure that lips are sealed around the mouth piece.
    - b. Take two normal breaths and on the third breath take a deep breath in as big as they can and blow out as hard and fast as they can and wait until the machine beeps or six seconds followed by a deep breath in.
  8. Repeat this process three times or up to eight times.
    - a. Two tests that are reproducible are required.
    - b. This means there should be no more than 150mls difference between the FVC and FEV1 of the best effort tests.
  9. If a pre- and post- is ordered, have patient take four puffs of an albuterol inhaler and wait for 10-15 minutes and repeat steps 5-8 above.
  10. Print results, The DOC ACP shall authenticate results of testing.
  11. If patient becomes dizzy or coughs throughout the procedure and cannot do an adequate test document in Progress Notes that patient was unable to complete the test. Print the incomplete test results, the DOC ACP shall review, and authenticate the results as above and reschedule testing for another time, if ordered by ACP.

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**Bureau of Health Services:** \_\_\_\_\_ **Date Signed:** \_\_\_\_\_  
Michael Rivers, Director of Nursing Administration

\_\_\_\_\_ **Date Signed:** \_\_\_\_\_  
Paul Bekx, MD, Medical Director

\_\_\_\_\_ **Date Signed:** \_\_\_\_\_  
Mary Muse, Nursing Director

**Administrator's Approval:** \_\_\_\_\_ **Date Signed:** \_\_\_\_\_  
Makda Fessahaye, Administrator

Error! Not a valid link.**DIVISION OF ADULT INSTITUTIONS FACILITY  
IMPLEMENTATION PROCEDURES**

<b>Facility:</b> Name		
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<b>Chapter:</b> 500 Health Services		
<b>Subject:</b> Spirometry		
<b>Will Implement</b> <input type="checkbox"/> As written <input type="checkbox"/> With below procedures for facility implementation		
<b>Warden's/Center Superintendent's Approval:</b>		

**REFERENCES**

**DEFINITIONS, ACRONYMS AND FORMS**

**FACILITY PROCEDURE**

- I.
  - A.
  - B.
    - 1.
    - 2.
      - a.
      - b.
      - c.
    - 3.
  - C.

II.

III.

**RESPONSIBILITY**

I. Staff

II. Inmate

III. Other