



# Atlantic Health System

## Atlantic Rehabilitation

**Mary Massery's**  
**LINKED: Breathing & Postural Control**  
A Pediatric and Adult Course

**Parts 1 & 2**  
**Theory and hands-on labs**  
(Three days: 21.0 Contact Hours)

**Instructor**  
Mary Massery, PT, DPT, DSc and faculty

**Sponsored by**  
Atlantic Health System

**July 26<sup>th</sup> – 28<sup>th</sup>, 2024**

**COURSE DESCRIPTION**

This course, developed by Mary Massery, proposes a new definition of “core stability;” redefining it as the dynamic control of trunk pressures to optimize postural stability (balance). Dr. Massery’s “soda pop can model” links breathing mechanics to postural control using multi-system interactions. The speaker presents novel research demonstrating the role of vocal folds as postural stabilizers, extending the concept of “core stability” from the vocal folds on the top of the trunk to the pelvic floor on the bottom. In Part-1, foundational information and quick interventions will be the focus (positioning and ventilatory strategies). In Part-2, the focus shifts to hands-on techniques: assessing “normal” breathing patterns, and learning neuromotor breathing retraining techniques and manual assistive cough techniques. Multiple clinical cases will be used to cement the concepts. The course is applicable for any pediatric or adult patient (or therapist) who breathes!



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### **PART-1: Friday, 7/26 (8.0 Contact Hours)**

7:30 – 8:00		Registration
8:00 – 8:20	Discussion	Introduction to course topics
8:20 – 9:45	Lecture	Breathing and posture: Pressure control (Soda pop model)
9:45 – 10:00		BREAK
10:00 – 11:30	Lab	Positioning strategies: What can you do in 90 Seconds or less that has a profound and lasting effect?
11:30 – 12:15		Breathing and posture: The diaphragm's many roles
12:15 – 1:15		LUNCH
1:15 - 1:35	Lab	Sneak peek: Ventilatory/movement strategies
1:35 – 3:15	Lecture	Breathing and posture: The internal organs. The vocal folds.
3:15 – 3:30		BREAK
3:30 – 5:10	Lab	Ventilatory/movement strategies: Integrating neuromuscular, musculoskeletal, respiratory and sensory systems
5:10 – 5:30	Lecture	Summary, "Pearls," sleep homework

### **PART-2: Saturday, 7/27 (8.0 Contact Hours)**

7:30 – 8:00		Coffee and ...
8:00 – 8:30	Discussion	Review, synthesis, and Q&A
8:30 – 9:45	Lecture/ Demo	Chest assessment: Focus on musculoskeletal alignment and breathing patterns
9:45 – 10:00		BREAK
10:00 – 11:30	Lab	Assessing breathing patterns and postural implications
11:30 – 12:30		LUNCH
12:30 – 1:15	Lecture	Airway clearance: From Sherlock to solution
1:15 – 2:15	Lab	Facilitating efficient breathing patterns and endurance training: Neuromotor techniques for diaphragm, chest and other breathing patterns
2:15 – 2:30		BREAK
2:30 – 4:00	Lab	Facilitating breathing patterns (continued)
4:00 – 4:30	Lecture/ Demo	Brief introduction to rib cage and trunk musculoskeletal restrictions associated with breathing difficulties – Quick Screening!
4:30 - 5:30	Demo	Patient demonstration (if possible)



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### **PART-2: Sunday, 7/28 (5.0 Contact Hours)**

7:30 – 8:00		Coffee and ...
8:00 – 8:30	Discussion	Review, synthesis, and Q&A
8:30 – 10:00	Lecture/ Discussion	Differential diagnosis: “Find the Problem”
10:00 – 10:15		BREAK
10:15 - 11:30	Lab	Airway clearance lab: Focus on manual assistive cough techniques
11:30 – 12:15		LUNCH
12:15 – 1:30	Lab	Eccentric trunk control: using voice for postural control and vice versa
1:30 - 2:00	Discussion/ Homework	Homework: Putting it all together Course wrap up

#### COURSE OBJECTIVES

##### ***At the conclusion of Part-1 (Day-1), participants should be able to:***

1. Describe how trunk pressures link breathing and postural control using the Soda Pop Can Model.
2. Describe the multiple, simultaneous roles of the diaphragm as related to breathing, postural control, gastroesophageal reflux, constipation, and venous return.
3. Demonstrate the role of the vocal folds in normal postural stability responses (balance) and make the case for using speaking valves for patients with tracheostomies.
4. Position patients for optimal physiological and biomechanical support of breathing with simple equipment (towels, pillows, etc.).
5. Use a ventilatory strategy algorithm presented in class to optimally match breathing with movements from bed mobility to athletic endeavors.
6. Apply concepts to a wide variety of patient populations from infancy to geriatrics.

##### ***At the conclusion of Part-2 (Days 2- 3), participants should be able to:***

7. Use a multi-system approach to evaluating motor impairments.
8. Identify the variations of “normal” breathing patterns and discuss the efficiencies/inefficiencies for individual patient conditions.
9. Evaluate need for, and demonstrate, appropriate neuromotor retraining techniques for patients with ineffective breathing/postural control strategies (health or participation deficits).
10. Participate in a live patient demonstration (if a patient is available) and suggest possible evaluation and treatment ideas based on the course material.
11. Design a targeted airway clearance program using the principles of mobilization, expectoration and oral management.
12. Demonstrate airway clearance techniques, with an emphasis on manual assistive cough techniques, and apply an airway clearance algorithm to specific patient conditions.
13. Identify thoracic cage/spine restrictions as they pertain to breathing mechanics and postural control (a very brief introduction of chest wall restrictions).
14. Evaluate the need for, and demonstrate, neuromotor retraining techniques to improve breath support for voicing and postural control (eccentrics).
15. Suggest immediate ways to incorporate the concepts into therapy activities in your clinical setting.



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## Atlantic Rehabilitation

**Location:** Atlantic Rehabilitation  
242 West Parkway  
Pompton Plains, NJ 07444

**Organizer** Tracy Sentowski, PT, DPT, OCS, MBA  
[Tracy.Sentowski@atlanticealth.org](mailto:Tracy.Sentowski@atlanticealth.org)  
973-831-5347

**Registration Items:**

Part 1 (7/26/24) – Breathing and Postural Control	\$245.00
Part 2 (7/27/24-7/28/24) – Breathing and Postural Control (for enrollees who have already attended the Part 1)	\$475.00
Parts 1 & 2 Combined (7/26/24-7/28/24)	\$650.00

**Physical Therapy Continuing education approved in NJ.**

**LINKED: Breathing & Postural Control Part 1; 8 CEUS (Approval # 2310-75)**

**LINKED: Breathing & Postural Control Part 2; 13 CEUs (Approval # 2312-01)**



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## Atlantic Rehabilitation

### Enrollment Form:

Name: \_\_\_\_\_

Email Address: \_\_\_\_\_

Company/Organization: \_\_\_\_\_

Address: \_\_\_\_\_

Primary Telephone: \_\_\_\_\_

### Event Registration

- LINKED Part 1 (7/26/24)
- LINKED Part 2 (7/27/24-7/28/24)
- LINKED Parts 1 and 2 (7/26/24-7/28/24)

### Checks payable to “Chilton Medical Center”

Mail to:

Chilton Medical Center  
97 West Parkway  
Pompton Plains, NJ 07444  
Attn: Physical Therapy Department