

# IF YOU CAN'T BREATHE, YOU CAN'T FUNCTION

## Integrating Cardiopulmonary and Postural Control Strategies in the Pediatric Population

Friday-Sunday, November 10-12, 2017  
Lecture, Demonstration and Lab

Instructor

Mary Massery, PT, DPT, DSc  
And Patricia West-Low, PT, MA, DPT, PCS

### ABOUT THE INSTRUCTOR

Dr. Massery received her BS in Physical Therapy from Northwestern University in 1977, her DPT from the University of the Pacific in 2004 and her DSc from Rocky Mountain University in 2011. Her publications and interests focus on linking motor behaviors to breathing and/or postural mechanics in both pediatric and adult patient populations.

Dr. Massery has been invited to give over 800 professional presentations in 49 US states, 9 Canadian provinces, and 13 countries worldwide, including more than 100 presentations at the **American Physical Therapy Association**, and a full day post conference program at the **World Congress of Physical Therapy** in Singapore. Mary has delivered keynote/major addresses on topics such as cystic fibrosis and posture, neuropulmonary deficits, pectus excavatum (chest deformities), and connections between posture & breathing.

Mary has received national awards from the APTA, including its highest clinical award, **The Florence Kendall Practice Award**, honoring "one's outstanding and enduring contributions to the practice of physical therapy." She has been honored as **Outstanding Alumnus of the Year** by each of her 3 alma maters. And in April 2016, she was awarded **Northwestern University's Alumnae Research Achievement Award**. She continues to maintain a private practice, in Chicago, specializing in ventilation and postural dysfunction.

Co-Sponsored by  
Children's Hospital of Wisconsin  
Occupational and Physical Therapy Department & Master's Family Speech and Hearing Center  
Milwaukee, WI



## **COURSE DESCRIPTION**

This course will challenge the practitioner to make a paradigm shift; acknowledging the importance of the cardiopulmonary system as an integral component of postural control. Dr. Mary Massery will present a model of postural control (Soda Pop Can Model) that demonstrates how breathing mechanics are linked to motor and physiologic behaviors. This is the cornerstone for her multi-system clinical approach to the evaluation and treatment of trunk and/or respiratory impairments. She will demonstrate how to integrate the cardiovascular, pulmonary, musculoskeletal, neuromuscular, integumentary and internal organ systems into every evaluation and intervention, as well as how to recognize physiologic causes or consequences that may accompany these motor dysfunctions. Dr. Massery will show the participants how to effectively pair ventilatory strategies with specific movements in order to establish the pulmonary system as an asset rather than a liability. Neuromotor breathing retraining techniques and manual assistive cough techniques will be highlighted in labs as well as other manual interventions. The emphasis of the presentation will be on developing and applying practical quick clinical solutions that are applicable for both pediatric and adult patients in all practice settings.

## **WHO SHOULD ATTEND**

Physical Therapists/Physical Therapy Assistants  
Occupational Therapists/Certified Occupational Therapy Assistants  
Speech Language Pathologists

## **LEARNING OUTCOMES:**

Dr. Massery will show the participants how to effectively pair ventilatory strategies with specific movements in order to establish the pulmonary system as an asset rather than a liability. Neuromotor breathing retraining techniques and manual assisted cough techniques will be highlighted in labs as well as other manual interventions. The emphasis of the presentation will be on developing and applying practical quick clinical solutions that are applicable for both pediatric and adult patients in all practice settings.

Upon successful completion of course, participants will:

1. State how the mechanics of breathing and postural control are interactive and interdependent components of normal movement strategies.
2. Describe the multiple, simultaneous roles of the diaphragm as related to breathing, postural control, gastroesophageal reflux, constipation and venous return.
3. Contrast normal musculoskeletal development of the chest in infants and the concurrent motor skill acquisition to that observed in patients with impaired trunk function resulting from multiple different diagnostic categories.
4. Position patients for optimal cardiopulmonary function (physiological and biomechanical) with simple equipment such as towel rolls and pillows in recumbent and upright positions for use in and out of hospital settings.
5. Optimize patient function by integrating appropriate ventilatory strategies with all movements from low level activities to athletic endeavors.
6. Apply theoretical concepts to multiple clinical cases.
7. Integrate the cardiopulmonary system into a multi-system physical and physiologic evaluation approach to motor dysfunction.
8. Identify numerous different breathing patterns and evaluate their efficiency for use while moving, talking and eating.
9. Evaluate breath support and postural control needs for verbal communication and perform therapeutic techniques to improve respiratory and/or trunk muscle support.
10. Design an airway clearance program targeted to a patient's particular need using the principles of mobilization, expectoration and management.
11. Demonstrate multiple airway clearance techniques and state when each would be applicable for a particular patient.
12. Participate in a live patient demonstration and suggest possible evaluation and treatment ideas based on the course material.
13. Demonstrate the use of thoracic cage/spine exercises and techniques to enhance rib cage and thoracic spine mobility and/or pulmonary function and state how this could lead to improved physical participation and health.
14. Demonstrate pulmonary therapeutic exercise techniques geared toward modifying inefficient breathing patterns and state when each would be applicable for a particular patient.
15. Demonstrate the integration of a multi-system approach to patient's motor deficits by designing an individual evaluation and intervention program for specific clinical problems and share the findings with the class.

## **PROGRAM SCHEDULE: Snacks and Lunch provided on Saturday and Sunday**

### **FRIDAY, September November 10, 2017 (12:30-6:00) ( 4.5 Contact Hours )**

**Location: Children's Hospital Auditorium.**

12:30 REGISTRATION and Introductions

1:00 Lecture: Breathing and Posture: Part 1 Pressure control: (soda pop model)

3:00 BREAK

3:15 Lecture: Breathing and Posture: Part 2 - The Diaphragm

4:30 Break

4:45 Lecture: Breathing and Posture: Part 3: The Vocal Folds

5:30 Lecture: Normal and Abnormal Chest Wall Development and Function)

### **SATURDAY, November 11, 2017 (8:00-5:30) ( 8.0 Contact Hours)**

**Location: Medical College of Wisconsin M1060**

8:00 Mini-Lab: Positioning Strategies: What Can You Do in 90 seconds or Less That Has a Profound and Lasting Effect?

9:30 Lecture: Ventilatory Strategies: Integrating Breathing Strategies with Movement Strategies for Optimal Performance

10:15 BREAK

10:30 Mini-Lab: Ventilatory Strategies

11:15 Lecture: Find the Problem: Pulmonary Assessment from a Multisystem Perspective

12:15 LUNCH

1:15 Lab: Chest Assessment: Focus: Breathing Pattern Assessment and Musculoskeletal Alignment

2:45 BREAK

3:00 Lab(cont): Chest Assessment

3:45 Lab: Facilitating Efficient Breathing Patterns and Building Endurance

4:45 Patient Demonstration (if possible)

### **Sunday, November 12, 2017 (8:00-5:30) ( 8.0 contact hours)**

**Location: Medical College of Wisconsin M1060**

8:00 Recap: Patient Demonstration

8:30 Lab (Cont): Facilitating Efficient Breathing Patterns

9:30 BREAK

9:45 Lab (Cont): Facilitating Efficient Breathing Patterns

11:15 Lecture: Airway Clearance: From Sherlock to Solution

12:15 LUNCH

1:15 Lab: Airway Clearance: Focus on Manual Assistive Cough Techniques

3:00 BREAK

3:15 Mini-Lab: Brief Introduction to Musculoskeletal Restrictions of Thoracic Spine/Rib Cage that Impair Breathing Mechanics (or vice versa)

4:00 Lab: Enhancing Breath Support for Phonation

5:00 Lab: Group Problem Solving: Putting It All Together

**Instructional level: Intermediate and content area is professional.**

**FINANCIAL DISCLOSURE:** Mary Massery is not associated with Children's Hospital of Wisconsin, but will receive an honorarium and travel expenses for teaching this workshop. Mary Massery may sell PT-related DVD's at the course: none of which are required for successful completion of the course; they are completely optional.

**NON-FINANCIAL DISCLOSURE:** Some of the material in the course bibliography includes articles for which Mary Massery was an author or may have done research. Some of the material contained in the publications or research may have shaped or influenced Mary Massery's course material, and may be discussed as part of the course

2.05 CEUs have been approved through ASHA



Children's Hospital of Wisconsin is approved by the Continuing Education Board of the American Speech-Language-Hearing Association (ASHA) to provide continuing education activities in speech-language pathology and audiology. **See course information for number of ASHA CEUs, instructional level and content area.** ASHA CE Provider approval does not imply endorsement of course content, specific products or clinical procedures.

CEUs for this course are being pursued with WPTA and AOTA based on 20.5 contact hours. CEU certificates will be provided upon completion of the full course.

**Online registration** is through maxiSHARE. Mastercard or Visa only

**COST: \$650.00 for entire course**

[https://reg.abcsignup.com/reg/event\\_page.aspx?ek=0012-0013-71234ad1c1fb4b698be39107f936bc8d](https://reg.abcsignup.com/reg/event_page.aspx?ek=0012-0013-71234ad1c1fb4b698be39107f936bc8d)

maxiSHARE.com Phone: 800.444.7747 or 414.266.3428

Cancellation notice will be accepted until October 10, 2017. Full refund minus \$50 administrative fee will be refunded to cancellations received before deadline of October 10, 2017. No refund will be given after October 10, 2017 unless registrant finds a substitute. Substitutions will be accepted after October 15, 2017.

In the highly unlikely event that the course would be need to be cancelled by Children's Hospital of Wisconsin or Mary Massery, a full refund will be given for tuition only, no travel expenses.

Registration includes: all handouts, snacks and lunches on Saturday and Sunday. Registration is limited to 50 people and Early Registration is strongly advised.

Due to practicum format of course please bring a yoga mat or beach towel and wear or bring lab clothing including tank tops or sports bras.

## Directions and parking for Course– Medical College of Wisconsin (MCW)

If you will be joining us from off-campus, be aware zoo interchange [construction](#) could affect your travels.

**Employees:** Use normal parking routines.

To get to the Alumni Center, take the 2<sup>nd</sup> floor skywalk from the Clinics building (across from Starbucks) through the MACC Fund Building (MCW).

**Other Participants:** For free parking options please see key on map below. For day 1 parking (purple arrow) . For Day 2 and 3 (yellow arrow) parking is available in the MCW visitor lot off of 87<sup>th</sup> street, across (east) from the main entrance of the College. Stop at the Visitor Lot booth and call to check in with Public Safety via video intercom.

Stop at the Welcome desk just inside the main entrance for directions to the Alumni Center.

Day 1 Location: #4 on map Children’s Hospital Auditorium 

Day 1 Parking: 

Day 2 and 3 Location: #1 on map MCW Alumni Center 

Day 2 and 3 Parking: 

Children’s Hospital of Wisconsin and Medical College of Wisconsin



**Hotel Information:**

A block of rooms have been blocked for Children's Hospital of Wisconsin Massery Course

Crowne Plaza Milwaukee West  
10499 Innovation Drive  
Wauwatosa, WI 53226  
800.593.5447 or 414.475.9500  
\$109.00/night

*CrownePlaza.com/Wauwatosa*

This hotel is less than 5 minutes from all course locations at Children's Hospital and Medical College of Wisconsin Campus. A free shuttle is available to and from the course.

Questions: Please email Chris Casey at [ccasey@chw.org](mailto:ccasey@chw.org) Chris will also function as the point of contact for any special needs/accommodations or concerns that may be required for individual participants.

**Suggested Pre Readings and DVD**

The following "pre-reading" is highly recommended and can be found at [www.MasseryPT.com](http://www.MasseryPT.com) under "publications":

Massery, M. Breathing and Upright Posture: Simultaneous Needs, in 26th International Seating Symposium, Vancouver, BC. March 11-13, 2010;25-28.

Massery M. The Linda Crane Memorial Lecture: The patient puzzle - piecing it together. *Cardiopulmonary Phys Ther J.*2009;20(2):19-27.

Massery M. Multisystem Consequences of Impaired Breathing Mechanics and/or Postural Control. In: Frownfelter D, Dean E, eds. *Cardiovascular and Pulmonary Physical Therapy Evidence and Practice*, ed. 4. St. Louis, MO: Elsevier Health Sciences; 2006:695-717.

Massery M. Musculoskeletal and neuromuscular interventions: a physical approach to cystic fibrosis. *Journal of the Royal Society of Medicine.* May 2005;98(Supplement 45):55-66.

A DVD on the "RESPIRATORY MANAGEMENT OF THE PATIENT WITH QUADRIPLEGIA" is available for purchase at <http://www.masserypt.com/store.html>