

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

Integrating Cardiopulmonary and Postural Control Strategies
in the Paediatric Population

Instructor:

Mary Massery, PT, DPT, DSc
and Faculty

Sponsored by:



October 26th - 28th, 2018

COURSE DESCRIPTION:

This course is geared towards paediatric physiotherapists, occupational therapists and speech language therapists.

This course will challenge the practitioner to make a paradigm shift: connecting breathing mechanics and postural control with management of trunk pressures. Through her model of postural control (Soda Pop Can Model), the speaker will link breathing mechanics with motor and physiologic behaviors (a multi-system perspective). She will present 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. Numerous interventions will be presented that use positioning and ventilatory strategies to optimize motor performance. Neuromotor breathing retraining techniques and manual assistive cough techniques will be the focus of treatment labs. Multiple patient cases will be presented throughout the course. The emphasis of the course will be on developing practical, quick clinical solutions for paediatric patients in all practice settings.

Some segments of this course may be taught by affiliated faculty under Dr. Massery's on-site supervision.

COURSE LOCATION:

This lecture and lab course will take place at the John McGivney Children's Centre (JMCC) in Windsor, Ontario, Canada. Windsor is approximately 3 ½ hours from Toronto and JMCC is a five minute drive across the Ambassador Bridge from Detroit, Michigan. Windsor has an airport and a train station. The Detroit Metro Airport is a half-hour drive away.

COURSE OBJECTIVES:

At the conclusion of 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. Contrast normal infant chest wall development to those with impaired breathing mechanics.
5. Position patients for optimal physiological and biomechanical support of breathing with simple equipment (towels, pillows, etc.).
6. Use a ventilatory strategy algorithm presented in class to optimally match breathing with movements from bed mobility to athletic endeavors.

At the conclusion of Days 2- 3, participants should be able to:

7. Perform a multi-system (physical and physiologic) evaluation of 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 a heavy emphasis on manual assistive cough techniques, and apply an airway clearance algorithm to specific patients.
13. Identify thoracic cage/spine restrictions as they pertain to breathing mechanics and postural control (a very brief introduction to musculoskeletal issues).
14. Evaluate need for, and demonstrate, neuromotor retraining techniques to improve breath support for voicing.
15. Suggest means for incorporating the course material into therapy activities in your clinical setting immediately.

Friday

Open Enrollment

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| 8:00 - 8:30 | Registration and light breakfast |
| 8:30 - 10:30 | <u>Lecture:</u> Breathing and posture: Part 1 - Pressure control (Soda pop model) |
| 10:30 - 10:45 | Break (refreshments will be provided) |
| 10:45 - 12:00 | <u>Lecture:</u> Breathing and posture: Part 2 - The diaphragm |
| 12:00 - 1:00 | Lunch (provided) |
| 1:00 - 2:00 | <u>Lecture:</u> Breathing and posture: Part 3 - The vocal folds |
| 2:00 - 2:30 | <u>Lecture:</u> Normal and abnormal chest wall development and function |
| 2:30 - 2:45 | Break (refreshments/light snacks provided) |
| 2:45 - 4:00 | <u>Mini-lab:</u> Positioning strategies: What can you do in 90 Seconds or less that has a profound and lasting effect? |
| 4:00 - 5:30 | <u>Mini-lab:</u> Ventilatory or movement strategies: Integrating neuromuscular, musculoskeletal, respiratory and sensory systems |

Saturday

Limited Enrollment

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| 8:00 - 8:30 | Coffee and light breakfast |
| 8:30 - 10:00 | <u>Lecture/Demonstration:</u> Chest assessment: Focus on musculoskeletal alignment and breathing patterns |
| 10:00 - 10:15 | Break (refreshments/light snacks provided) |
| 10:15 - 12:00 | <u>Lab:</u> Assessing breathing patterns and postural implications |
| 12:00 - 1:00 | Lunch (provided) |
| 1:00 - 1:30 | <u>Lab:</u> Chest assessment (continued) |
| 1:30 - 2:30 | <u>Lab:</u> Facilitating efficient breathing patterns and endurance training: Neuromotor techniques for diaphragm, chest and other breathing patterns |
| 2:30 - 2:45 | Break (refreshments/light snacks provided) |
| 2:45 - 4:45 | <u>Lab:</u> Facilitating breathing patterns (continued) |
| 4:45 - 5:30 | <u>Patient demonstration</u> (if possible) |

Sunday

Limited Enrollment

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| 8:00 - 8:30 | Coffee and light breakfast |
| 8:30 – 9:30 | <u>Lecture/Discussion</u> : recap patient demo using “Find the Problem” Chart |
| 9:30 – 10:15 | <u>Lecture</u> : Airway clearance: From Sherlock to solution |
| 10:15 - 10:30 | Break (refreshments/light snacks provided) |
| 10:30 – 12:00 | <u>Lab</u> : Airway clearance: Focus on manual assistive cough techniques |
| 12:00 - 12:45 | Lunch (provided) |
| 12:45 – 1:30 | <u>Mini-lab</u> : Brief introduction to musculoskeletal restrictions of thoracic spine / rib cage that impair breathing mechanics (or vice versa) |
| 1:30 – 2:30 | <u>Lab</u> : Enhancing breath support for phonation |
| 2:30 - 3:00 | <u>Lab</u> : Group problem solving: Putting it all together |

REGISTRATION INFORMATION:

Registration will open April 1, 2018 and is expected to fill quickly. A completed registration form and payment in full (cheque, VISA or Mastercard) must be received to secure a spot. Post-dated cheques will not be accepted. Registration will be confirmed via email, at which time further information regarding the course will be provided. There are no refunds for cancellations unless your spot can be filled.

COURSE FEES:

Day 1 lecture format only: \$250 (Canadian funds)

Day 1, 2, 3 lecture + labs: \$750 (Canadian funds)

Course fees include the course, course notes, a light breakfast, lunch and refreshments/light snacks.

Please make cheques payable to: John McGivney Children’s Centre

Registration form and cheques should be mailed to:

John McGivney Children’s Centre
Attention: Kristin Mosser
3945 Matchette Road
Windsor, Ontario N9C 4C2

Please direct any questions about the **course** to:

Kristin Mosser, Senior Physiotherapist
519-252-7281 ext 566
kristin.mosser@jmccentre.ca

Anne Girard, Director of Physiotherapy
519-252-7281 ext 529
anne.girard@jmccentre.ca

Please direct any questions related to **payment** to:

Branka Milidrag
519-252-7281 ext 272
Branka.milidrag@jmccentre.ca

For further information re: Mary's course, please refer to her website: www.MasseryPT.com

AREA ACCOMODATIONS:

JMCC is located within 2 km of several hotel and restaurants. Google maps can assist you with your searches.

Some options include:

Hotels:

- Holiday Inn Hotel & Suites Windsor Ambassador Bridge (restaurant on site)
- Hampton Inn & Suites by Hilton Windsor
- Comfort Inn & Suites Ambassador Bridge



SPEAKER'S BIOGRAPHY
Mary Massery, PT, DPT, DSc

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 900 professional presentations in 50 US states, 9 Canadian provinces, and 15 countries worldwide, including more than 100 presentations for 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 and 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 2016, she was awarded *Northwestern University's Alumnae Research Achievement Award*. Mary continues to maintain a private practice in Chicago, specializing in breathing and postural dysfunction.

REGISTRATION FORM

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October 26-28, 2018

Day 1 only: \$250 Cdn.

Day 1 – 3: \$750 Cdn.

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| Name: | |
| Profession: | |
| Place of Employment: | |
| Address: | |
| City: | |
| Province: | |
| Telephone: | |
| Email: | |

For credit card payments:

| | |
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| Cardholder Name: | |
| Card # | |
| Expiry Date: | |

Credit card payments/registration forms can be faxed to:
519-252-5873,

Attn: Kristin Mosser

Please make cheques payable to: John McGivney Children's Centre
(No refunds for cancellations unless your spot can be filled)