

## COURSE

**An Introduction to Mechanical Ventilation** is a one day medical education program intended to provide an insight into the fundamentals of mechanical ventilation support. Taught by a PA-C, EMT-P, the curriculum is tailored for medical practitioners to enhance their knowledge or advance their skills in the management of patients requiring mechanical ventilation. The material is targeted toward MDs, NPs, PAs, RNs, EMT-Ps and other interested healthcare providers.

## PURPOSE

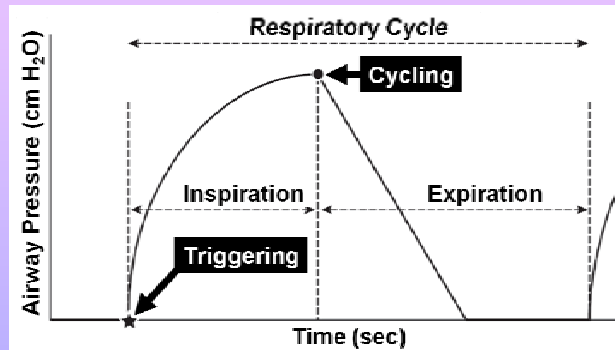
To better prepare the non-respiratory focused medical practitioner to function more efficiently and effectively when managing a patient requiring mechanical ventilation

## COURSE OBJECTIVES

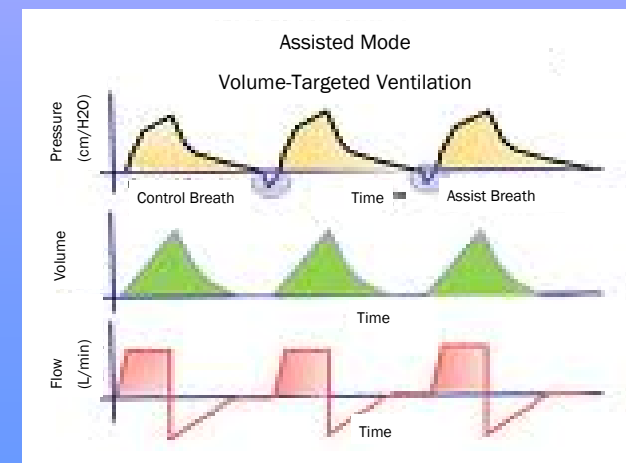
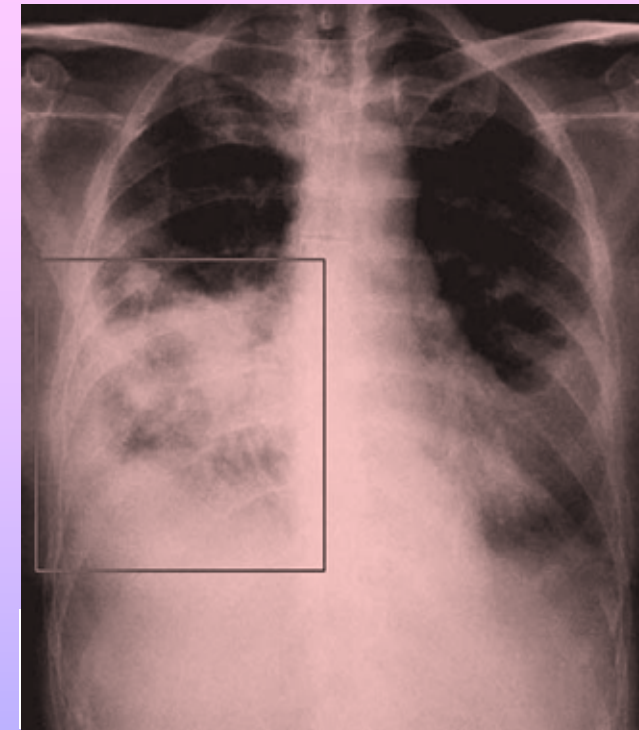
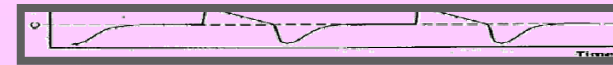
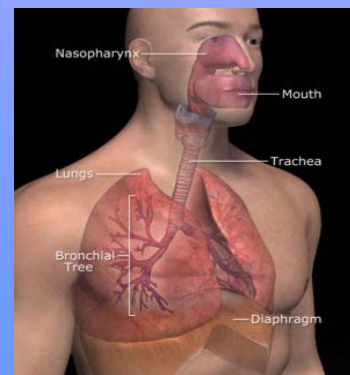
- Review of respiratory anatomy and physiology
- Discuss the physics of gas exchange
- Define respiratory pathophysiologic conditions and their implications
- Discuss common mathematic calculations applied to the physical principles of gas
- Outline the criteria for the application of mechanical ventilation support
- Review of the various modes of mechanical ventilation
- Identify airway pressure and flow settings
- Review the guidelines for initial mechanical ventilator settings and specific modes
- Present criteria for altering mechanical ventilator settings or modes
- Discuss oxygenation vs. ventilation concepts
- Review of the monitoring requirements
- Discuss the common pharmacologic support useful with ventilated patients
- Identify conditions which may induce barometric/ volumetric complications
- Discuss principles and applications of ventilator support weaning

## LECTURE TOPICS

Respiratory Anatomy and Physiology  
Physics of Gas Exchange  
Recognition of Respiratory Failure  
Applications of Mathematic Calculations  
Modes of Mechanical Ventilation and Set Up  
Complications and Considerations  
Selected Pharmacologic Management  
Selected Scenarios In Mechanical Ventilation



Participants will receive a Mechanical Ventilation Quick Reference Guide on CD containing highlighted information pertaining to mechanical ventilation modes and set-up, pressure wave forms, concerns and complications, mathematical calculations and pharmacologic management. Sessions begin promptly at 7:45am. Students should arrive at 7:15am for registration and a complimentary continental breakfast. A catered lunch will be provided on site. Course concludes at 5:00pm. A guided tour of the Boston MedFlight facility will also be available during the noon lunch break for those who would like to learn more about our program.



## COURSE REGISTRATION

**New!** Register on-line [www.bostonmedflight.org](http://www.bostonmedflight.org)

Name (as it appears on your driver's license) \_\_\_\_\_

Primary Specialty  MD  RN  PA  EMT-P

Other \_\_\_\_\_

Mailing Address \_\_\_\_\_

Daytime Phone \_\_\_\_\_

Email \_\_\_\_\_

Birth date (required for security gate) \_\_\_\_\_

Site Affiliation \_\_\_\_\_

Please select which day you would like to attend:

April 17, 2012

Sept 6, 2012

## TUITION AND DEADLINES

Registration deadline: One week prior to course.  
Class size is limited .

Tuition for the course: \$150.00

NEAA Members \$125.00

Includes course, CD, continental breakfast and catered lunch

Please include payment with your registration

Make check payable to:

Boston MedFlight

Robins Street Hangar 1727

Hanscom Air Force Base

Bedford, MA 01730

**Please indicate the payment is for Mechanical Ventilation Course**

\*\*\*Boston MedFlight is located on an active military installation. Registration is required one week prior to course to ensure that visitors have access to the base. Directions for getting to the MedFlight facility will be emailed once registration and payment have been received .

# 2012 Schedule

Register Online [www.bostonmedflight.org](http://www.bostonmedflight.org)

April 17

September 6

8:00am-5:00pm

Also available!



The Picture of Health: A Review of Radiologic Images

Annual Critical Care Conference Nov 9, 2012

Boston MedFlight Merchandise

Visit our website for details and online registration

[www.bostonmedflight.org](http://www.bostonmedflight.org)

Does your organization have a specific educational training need? Contact us to see what

Boston MedFlight can offer.

781-863-2213

## WHY SHOULD I ATTEND?

*Once reserved for the intensive care unit, mechanical ventilators are now common in the hospital step-down units, emergency departments, and in paramedic ambulances.*

*This program will provide a solid foundation for the diverse group of nurses and paramedics who are increasingly expected to manage patients receiving mechanical ventilation.*

### Directions

**From Rte. 95/128:**

**Take EXIT 30B (Rte. 2A west). Follow Rte. 2A west for 2 miles, then follow signs for Hanscom Air Force Base. Turn right onto Hanscom Drive and proceed to the visitors center. Stop at the guard shack for a mandatory drivers license ID check by base security. Be sure to have your car registration with you. Allow extra time for check-in, expect delays. Motorcycles are prohibited by base security. All out of state drivers must present proof of insurance.**

7.25 Contact Hours have been provided by the Air & Surface Transport Nurses Association. ASTNA is an approved provider for the California Board of Registered Nursing CEP 13575

MA OEMS approved for 8 continuing education hours



Your Life. Our Mission.

**Boston MedFlight** (BMF) is a CAMTS accredited Critical Care Transport service. BMF's mission is to link those most critically ill and injured patients with the life saving resources they need. The service is available 24 hours a day and seven days a week.

As a **not for profit** organization, BMF transports patients regardless of their ability to pay. MedFlight is financially supported in part by a consortium of Boston hospitals including Beth Israel Deaconess Medical Center, Boston Medical Center, Brigham and Women's Hospital, Children's Hospital, Massachusetts General Hospital, and Tufts Medical Center. Since 1985, Boston MedFlight has played an integral role as part of the Massachusetts EMS system and the community hospitals of New England.

[www.bostonmedflight.org](http://www.bostonmedflight.org)

***Boston MedFlight Your Life. Our Mission.***



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# An Introduction to Mechanical Ventilation



# 2012

Hanscom Air Force Base

Bedford, MA 01730

