

Life Support Training Center

Middle East Critical Care Assembly

Adult Mechanical Ventilation

ACADEMIC AFFAIRS

Course Name: Adult Mechanical Ventilation Workshop (AMV)

Accreditation: Accredited by Middle East Critical Care Assembly /Saudi Arabia

12 CME points accredited from Jordan medical Association.

Workshop Description:

A Two day Course on Adult mechanical ventilation workshop that focus mainly on interactive workshops, hands on sessions with simulation and case studies; to augment lectures reviewing fundamentals of this life sustaining technology.

The course will deliver key messages that will guide the clinician towards evidence based application of mechanical ventilation for adult patients. In addition, a variety of different devices will be available to allow participants to practice and apply novel approaches and various feedback loops

Workshop Objectives

- 1. Define hypoxemic and ventilatory respiratory failure.
- 2. Understand the basic principles, indications, and complications of mechanical ventilation.
- 3. Understand principles of basic and advanced modes of mechanical ventilation.
- 4. Understand the different techniques of non-invasive mechanical ventilation.
- 5. Discuss basic principles of mechanical ventilation related to different disease processes.
- 6. Interpret basic flow, volume and pressure scalars and loops obtained from the mechanical ventilator.
- 7. Understand basic monitoring on Mechanical ventilation.
- 8. Understands the practice best weaning modes and weaning processes.

Targeted Audience

- All Clinicians working in adult intensive care units and dealing directly with ventilated patient's
- Internal medicine, anesthesia, surgery and emergency residents.
- Nurses, respiratory therapists and anesthesia technicians in training or practitioners



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Course Duration & Frequency:

- Approximately 17 hours
- 1 courses every year or upon request

Completion criteria to receipt the MCCA Certificate:

 At the end of the course, Participants are required to sit for written posttest. Adult Mechanical Ventilation Providers certificate is issued to all participants who pass the posttest.

Student Materials:

Adult Mechanical Ventilation Manual

Course Program

| <u>Day I</u> | | <u>Day 2</u> | |
|--|-----------------------------|----------------------------------|------------------|
| <u>Lectures</u> | <u>Workshops</u> | <u>Lectures</u> | <u>Workshops</u> |
| Principles of Mechanical | | Clinical Practice of | |
| Ventilation | | Mechanical Ventilation | |
| Respiratory Failure and Indication of MV | Airways | MV in ARDS | CMV |
| Principles of Mechanical Ventilation | SIMV | MV in Severe Airflow Obstruction | NIV |
| Oxygenation and Ventilation Monitoring during MV | CPAP/PS | Weaning | BiVent |
| | Interface- Ventilator setup | | PRVC |
| Monitoring and | | Nonconventional MV | |
| Complications of | | | |
| Mechanical Ventilation | | | |
| Assessment of Ventilator | Control variables | High-Flow Therapy | RC |



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| Graphics | | | |
|--|---|-----------------|--------------------|
| Pulmonary Complications of MV | Phase Variables | HFOV Theory | PV Tool |
| Airway and Other Complications of Mechanical Ventilation | Scalars and loops | HFOV Practice | Interactive Cases1 |
| | Detecting Abnormalities from Scalars and Loops: | | Interactive Cases2 |
| <u>Pretest</u> | | <u>Posttest</u> | |