

# BASICS OF MECHANICAL VENTILATION

## FREE ONLINE COURSE



**Date:** April 14–17, 2020

**Time:** 6:00 pm – 7:30 pm

**Presented by:**

Interdepartmental Division of Critical Care Medicine (IDCCM)/ Critical Care Canada Forum (CCCF)/  
Centre of Excellence in Mechanical Ventilation (CoEMV)

### Day 1 (April 14)

**Speaker 1: Laurent Brochard**

Basic principles of Pressures and Volumes under Mechanical Ventilation (How you control and interpret the pressures or the volumes generated) (30 min + 15 min QA)

**Speaker 2: Lorenzo Del Sorbo**

Basic principles of gas exchange under Mechanical Ventilation (How you control PaO<sub>2</sub> and PaCO<sub>2</sub>) (30 min + 15 min QA)

### Day 2 (April 15)

**Speaker 1: Niall Ferguson**

Basic Modes of Ventilation (Volume control, flow settings, pressure control, PEEP, trigger and assisted modes) (20 min + 10 min QA)

**Speaker 2: Ewan Goligher**

Risks and Complications of Mechanical Ventilation (VILI, hemodynamic effects, infections, diaphragm dysfunction) (20 min + 10 min QA)

**Speaker 3: Thomas Piraino**

How I set a Ventilator (I have to entirely set the machine) and what I monitor (including waveforms) (20 min + 10 min QA)

## Day 3 (April 16)

### Speaker 1: Niall Ferguson

Basic principles of Assisted Ventilation (Assist control and trigger, pressure support and monitoring) (30 min + 15 min QA)

### Speaker 2: Thomas Piraino

Trouble-shooting = pressure and alarms (secretions, bronchospasm, pneumo, atelectasis, leak, malfunction, settings of alarms) (30 min + 15 min QA)

## Day 4 (April 17)

### Speaker 1: Laurent Brochard

Trouble-shooting= patient-ventilator interaction (sedation and drive, comfort, excessive assistance, insufficient assistance) (30 min + 15 min QA)

### Speaker 2: Ewan Goligher

When is my patient ready to be liberated from the ventilator? (general criteria, doing a spontaneous breathing trial, decision for extubation, risks) (30 min + 15 min QA)

Thank you,

Laurent Brochard, Niall Ferguson, Ewan Goligher  
IDCCM/CCCF/CoEMV

<https://www.criticalcare.utoronto.ca/> <https://criticalcarecanada.com/>  
<https://mechanicalventilation.ca/> <https://coemv.ca/>



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