



RespiSim[®] Virtual Ventilator Use Cases

USE CASE 1: Fully Instructor-led Training

- Instructor demonstrates the disease state interactions on the Virtual Ventilator for a remote or in-person audience
- Instructor controls the patient settings via the RepsiSim[®] Software and displays the Virtual Ventilator for learners via projector, whiteboard, zoom, etc.

USE CASE 2: Interactive In-person Training

- Instructor leads a hands-on experience with learners in-person
- Instructor controls the patient settings via the RepsiSim[®] Software
- Learners have access to an instance of the Virtual Ventilator from their own device
- Changes made to the Virtual Ventilator by instructor or individual learners will reflect on all devices on the same network

USE CASE 3: Interactive Remote Training

- Instructor demonstrates the disease state interactions on the Virtual Ventilator for a remote or in-person audience
- Instructor controls the patient settings via the RepsiSim[®] Software and displays the Virtual Ventilator for learners via projector, whiteboard, zoom, etc.
- Remote audience votes or provides recommendations on which changes to make to the settings on the Virtual Ventilator
- Instructor makes recommended changes to the Virtual Ventilator and learners observe the results

USE CASE 4: Learner Self Study

- Learners complete assignments at their own pace as directed by the instructor, or as a way of voluntarily practicing key concepts
- Learner chooses patient models via the RespiSim[®] Software and makes changes to the Virtual Ventilator on the same device

Frequently Asked Questions

Which real-life ventilator capabilities can the Virtual Ventilator perform?

RespiSim Virtual Ventilator is built to mimic the use of a real ventilator on a real patient. The interactions are powered by the technology that drives the ASL 5000[®] Breathing Simulator. When using RespiSim[®] Virtual Ventilator, users should expect to see the same interactions as they would on a real ventilator. Instructors can demonstrate the ways in which various patient disease states (ARDS, COPD, etc.) interact with the ventilator, including patients who are breathing spontaneously. The Virtual Ventilator interface includes access to 3 basic modes of ventilation: A/C Volume, A/C Pressure, and CPAP. A future release will add the ability for users to calculate plateau pressure and AutoPEEP by performing inspiratory and expiratory hold maneuvers as well as a Loop view for displaying waveform data.

What Equipment Do I Need?

Equipment Set-up Option #1:

- One PC is used to run both the main RespiSim[®] Software user interface as well as the Virtual Ventilator application
- Instructor controls patient settings from main RespiSim[®] Software user interface
- Extended display allows instructor to show the Virtual Ventilator and/or Patient Monitor windows to a group of learners (in person or virtually)
- No router or network connection necessary

Equipment Set-up Option #2:

- One PC is used by instructor to control patient settings via the main RespiSim[®] Software user interface
- One or more PCs are used separately by learners to control the Virtual Ventilator application
- All devices must be on the same network
- Router can be purchased from IngMar, or you can use your own network

Optional: Patient Monitor application can be running on either instructor or learner PCs

The Virtual Ventilator is also part of our new RespiSim eLearning subscription which includes e-learning courses developed by Cleveland Clinic. [Click here](#) to learn more.