

Transitioning to the Trilogy100:

IVUN Educational Conference Call

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The PLV-100, 102 volume ventilator was developed by LIFECARE International in the mid-1980s. The company was purchased in 1996 by Respironics, Inc., which is now part of Philips, the “sense and simplicity” company. With the development of new equipment, the company announced in November 2009 the “manufacturing discontinuation of the PLV-100, PLV-102b and the PLV-102 portable ventilators as of 12/31/2009.” The notice states that they will make all reasonable efforts to provide service until 12/31/2014.

With this in mind, IVUN scheduled a series of educational conference calls to provide information from manufacturers and health care professionals. The first call in September was with Cheryl Needham, Philips Respironics, who spoke about switching to the Trilogy, a multi-mode ventilator manufactured by Philips.

Needham compared the Trilogy to the PLV noting these new key features not available on the PLVs:

- Both passive (single connection and the user passively exhales) and active (multiple connection and the user has to “actively” move the valve to get air) circuit configurations.
- Bias flow of 10LPM during expiration. This means that air is constantly in the tubing and taking a breath could be easier. If you don’t take a deep breath to trigger the machine, you can tap into this air. The bias flow feature will feel really different to many ventilator users.
- Internal PEEP (positive end expiratory pressure), so there are no accessory parts; PEEP can be turned on or off.
- Leak compensation (makes sure the volume set is the amount received) and triggering available with passive circuit (not active).
- Auto-Trak sensitivity automatically adjusts triggering and cycling to fit

the user’s breathing pattern (only available with the passive circuit).

- AVAPS (average volume assured pressure support) is available. When using volume it may take more or less pressure at times to maintain the needed volume. When using pressure, the volume may change to maintain the wanted pressure. AVAPS makes these adjustments automatically.
- It has a sigh (periodic hyperinflation) just like the PLV-102.

Trilogy, which can be used invasively or noninvasively, is lighter (11 pounds) and can act as a volume, pressure or bi-level device. It has several modes, is blower driven, has an oxygen valve connector, has a three-hour internal battery and a three-hour detachable one, and is FAA cleared for flying. It can also be attached to an external battery if required.

Individuals when transitioning should take the following into consideration.

- Leak compensation (passive circuit only) and bias flow will make the delivery of air “feel different” than the PLV’s.
- Current settings may need to be modified, especially if switching to a passive circuit.
- Follow any transition protocol established by physician and DME. May not be able to set exact settings



Philips Respironics’
Trilogy100

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on both devices; be prepared to spend time making adjustments. So, obtain necessary approval from physician to adjust settings as needed.

■ Be patient. Everyone will respond differently.

Needham's advice was to start with the setup that most closely resembles your current situation.

Since the PLVs had an active circuit, users should start with the active circuit configuration.

It is suggested that users should start with flow triggering and not Auto-Trak.

One of the most helpful settings when trying to make the transition from the PLV, is the wave form pattern.

The ramp gives a breath and then slowly ramps it down on exhalation. The square wave brings in the breath and stays there for a while and then allows the air to decrease. The PLV has what is called a decelerating wave form and it is closest to the ramp form on the Trilogy. If the breath of the Trilogy "feels different," try using the ramp form.

Additional friendly features of the Trilogy include an audio pause button to silence alarms for one minute, a button to black out the screen at night, a keypad lock so settings aren't inadvertently changed and a dual prescription feature that allows for saving two setting preferences so one can switch from day to night settings easily. The device also has a removable air path in case of a communicable disease – it can be switched out. There are some settable alarms that can be disabled.

Needham finished with an example of transition steps to switch from the PLV-100, first using an active circuit and then a passive one. Details of each step are outlined in a PowerPoint presentation, which is available as a pdf at www.ventusers.org/edu/PhilipsIVUNwebinar.pdf.

In our next issue, we will summarize the October conference call with Cyndy Miller, RRT, Respiratory & Monitoring Solutions, Covidien, Costa Mesa Facility. ▲



Do you have suggestions for other topics? If so, please send them to info@ventusers.org.

Upcoming Educational Conference Calls

IVUN's series of hour-long educational sessions via telephone are continuing. The call is free, but reservations are required, and available space will be first-come, first-served. To reserve your place to participate in the call, send an email to info@ventusers.org or call 314-534-0475.

Wednesday, November 28, 2012 at 1:00 CT

More Options for Switching from Older Vents with an experienced respiratory therapist from the Respiratory Technologies – Ventilation division of CareFusion.

Third week in January 2013

Tell Me about a Trach Before I Need One with Linda K. Dean, RRT, Educational Consultant and Clinical Specialist, Passy-Muir, Inc.

Third week in February 2013

How Do I Know When I Need a Trach? With professional to be announced. ▲