



AN INFORMATIONAL RESOURCE FOR PROVIDERS OF AND SUPPLIERS TO EMS

NEW GUIDELINE 2005 SETTINGS in CAREvent® 2005s

In response to the new AHA and ERC 2005 Guidelines for CPR and ECC O-Two Medical Technologies Inc. has implemented enhancements to its **CAREvent®** line of automatic resuscitators, to meet their requirements on ventilation.

There are four key issues and recommendations highlighted in the 2005 "Guidelines" that have been addressed by the new **CAREvent® 2005s** models, namely

- **CONTROLLING EXCESSIVE VENTILATION**
- **A 30:2 (Compression:Ventilation) ratio**
- **LOWER TIDAL VOLUMES (500 ml. for a normal adult)**
- **REDUCE VENTILATION FREQUENCIES (8-10 BPM for CPR with an advanced airway and 10-12 BPM for adults and 12-20 for children for ventilating without compressions)**

CONTROLLING EXCESSIVE VENTILATION:



CAREvent®s are time/volume cycled devices - the only type of automatic ventilator recommended in the "Guidelines" for use during CPR. They deliver controlled ventilations (constant frequency, tidal volume, flow rate, inspiratory pressure and inspiratory time) plus have a built in audible pressure relief system to inhibit over inflation. These desirable patient management

protocols are not available on a bag-valve-mask.

The European Resuscitation Guidelines stated the below as one advantage of a time/volume cycled automatic resuscitator over a BVM:

"Once set, they provide a constant tidal volume, respiratory rate and minute ventilation; thus, they may help avoid excessive ventilation" - ERC Guidelines 2005

30:2 Compression:Breath Ratio During BLS-CPR:

In order to allow sufficient time to deliver 30 compressions in between two short breaths (prior to an advanced airway), a delayed cycling feature of 20 seconds has been incorporated into the manual override button of each **CAREvent®**. After the first automatic breath, a short second breath can be delivered with the manual override which also triggers a 20 second delay in the delivery of the next automatic breath (enough time for 30 compressions).

Lower Tidal Volumes and Ventilation Rates:

The below changes have been made to the **CAREvent®** breath frequencies and tidal volumes, in line with the new “Guideline 2005” recommendations. To further simplify adult CPR (the most common), an “*Adult CPR*” setting has been added that will deliver 500 ml. of oxygen at 10 BPM.

CAREvent® ALS 2005

New Tidal Volumes (Vt): 150 – 600 ml
New Frequencies: 10 - 20 BPM
New Delayed Cycling: 20 sec (30 compressions)
New Automatic Flowrate: 9 – 18 Lpm

CAREvent® BLS 2005

New Tidal Volumes (Vt): 150 – 600 ml
New Frequencies: 10 – 20 BPM
New Delayed Cycling: 20 sec (30 compressions)
New Automatic Flowrate: 9 – 18 Lpm

CAREvent® EMT 2005

Tidal Volumes (Vt): 150 – 600 ml
Frequencies: 10 – 20 BPM
New Delayed Cycling: 20 sec (30 compressions)
Automatic Flowrate: 9 – 18 Lpm

CAREvent® CA 2005

New Tidal Volume (Vt): 600 ml
New Frequency: 10 BPM
New Delayed Cycling: 20 sec (30 compressions)
New Automatic Flowrate: 18 Lpm

CAREvent® ALS+ 2005

New Tidal Volumes (Vt): 100 – 650 ml
New Frequencies: 10 - 20 BPM
New Delayed Cycling: 20 sec (30 comp.)
New Automatic Flowrate: 6 – 19.5 Lpm

New: CPAP option (0-20 cmH₂O)

As with previous “Guideline 2000” models, each **CAREvent**[®] continues to offer the below advantages over a regular bag-mask:

- Breath by breath consistency in delivered tidal volume and frequency
- Free hands and personnel to manage other tasks (one person CPR is possible)
- Reduce the risk of excessive ventilation
- Simplify a rescuers job in delivering “Guideline” ventilation

CAREvent[®] automatic resuscitators eliminate the guess work on how hard, how often and how long to squeeze a “bag”. Rescuers can focus on the patient’s needs versus monitoring and timing their own “bagging” performance.

To obtain more product details visit www.otwo.com to view our product demonstration videos.

Street Sense is published by O-Two Medical Technologies Inc., innovators in resuscitation since 1971 (mouth-to-mouth barriers, BVMs to a full line of automatic ventilators/resuscitators).

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