Introducing the new Hi-Ox™.

THE ONLY OXYGEN MASK PROVEN
TO DELIVER >80% OXYGEN, EVEN AT 8 LPM

HOME AND HOSPICE CARE

The simple fact is that conventional oxygen masks just can't deliver high FiO_2's to hypoxic patients. The Hi-Ox was developed to solve that problem.

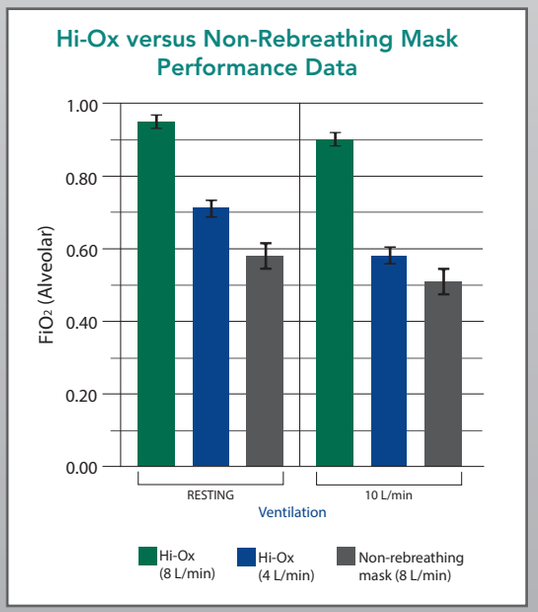
The Hi-Ox delivers higher FiO_2's than ANY mask, at ANY flow. It's the only disposable mask proven to deliver >80% oxygen, even at 8 LPM.

Not a conventional mask, the Hi-Ox is a unique non-rebreathing, sequential dilution mask that delivers high FiO_2's at one-half to one-third the flow of other devices.

Finally, a simple, low-cost solution for Hospice and Homecare patients where oxygen flow requirements or tanks limit mobility or comfort.

The Hi-Ox delivers solutions for Homecare and Hospice patients with high-flow oxygen needs:

- **Discharging high oxygen flow dependent patients**. The Hi-Ox solution enables patients requiring high flow oxygen to be discharged sooner to home or hospice centers, making them treatable with oxygen concentrators.
- **Increases patient comfort.** The Hi-Ox is quieter than high-flow venturi systems.
- **Increases patient mobility and freedom.** The reduced oxygen usage of the Hi-Ox gives patients increased freedom with longer lasting O_2 tanks.
- **Cost savings.** DMEs can save from $150 to more than $8,000 per year, per patient when switching patients from tank oxygen to a concentrator and the Hi-Ox mask.



Data from: M Slessarev, R Somogyi, D Preiss, A Vesely, H Sasano, JA Fisher. Efficiency of oxygen administration: Sequential gas delivery versus "flow into a cone" methods. Crit Care Med; 34:829-834, 2006

Ceretec

Finally, a mask with no limits

THE HI-OX — NEW TECHNOLOGY OXYGEN MASK FOR PATIENTS REQUIRING HIGH OXYGEN CONCENTRATIONS

HOME AND HOSPICE CARE

Changing the lives of patients

The capabilities of the Hi-Ox means that Hospice patients who previously could not be discharged because of the extreme requirements of their disease and their high flow needs, can now be sent home or to a Hospice facility, improving their comfort level for their end-of-life care.

For homecare patients, the Hi-Ox can also add increased freedom for patients who require lower FiO_2's, but need extended duration of an oxygen supply. Using Hi-Ox's sequential dilution feature at extremely low flows to deliver less than 80% oxygen (e.g., >50% at 4 LPM) can double the supply time for any oxygen source, opening possibilities for increased freedom for travel, shopping, doctor visits, etc.

The limitations of conventional oxygen delivery

Conventional oxygen masks just can't deliver a high FiO_2 to hypoxic patients. Just sitting at rest, most adults have a peak inspiratory flow of 30 liters per minute. Add a little exertion from dyspnea where the patient's flow increases, and the limitations of these masks become even more significant.

Unless the flow from the oxygen mask meets the patient's inspiratory flow, 21% room air leaking in from around mask and in through the mask's exhalation holes during inspiration, will dilute the 100% oxygen and the patient won't get the >80% oxygen you want to deliver.

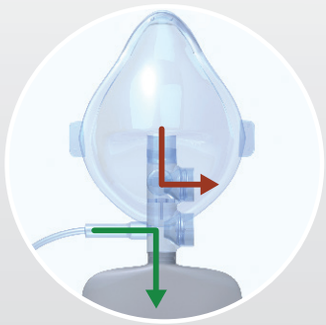
Plugging the holes

The Hi-Ox starts with a soft vinyl facemask that seals to the face and has no holes in the mask for exhalation that would allow room air to enter. Dilution of the inspired oxygen is also limited by a better face seal assured by dual head straps (above and below the ears) and a more anatomic foam lined bridge for the nose that moves the mask down from around the eyes.

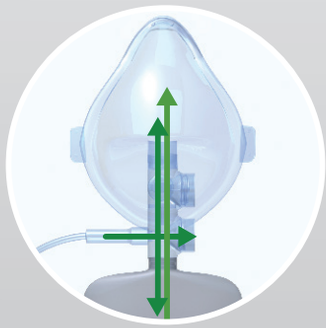
Changing the delivery with sequential dilution

Gas flow is controlled by three low resistance valves. The 3-valve system separates the reservoir bag inspired oxygen from the exhalation path to the room. The Hi-Ox's third sequential dilution valve opens only once the reservoir bag is emptied, so that room air is sequentially added at the end of the inspired breath. Taking advantage of the patient's approximate 150 ml anatomic deadspace, which does not participate in gas exchange, the oxygen concentration of that gas in the airways becomes immaterial to the delivered FiO_2 to the alveoli. This means that high concentrations of oxygen can be delivered at relatively lower flowrates.

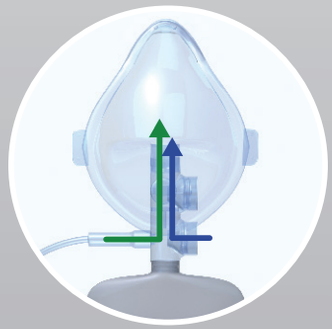
How the Hi-Ox™ and Sequential Dilution Work



During exhalation, the patient's breath flows only out the exhalation valve. There are no holes in the mask for exhaled flow. During this time, the oxygen flow entering the Hi-Ox fills the inspiratory reservoir.



During the patient's inspiration, 100% oxygen entering the Hi-Ox and stored in the reservoir flow up through the inspiratory valve to the facemask without the dilution from holes in conventional masks. The oxygen source also applies closing pressure against the dilution valve.



If the patient's inspiratory demand exceeds the .75-liter reservoir (and the reservoir has emptied), the dilution valve will open and fill the patient's deadspace with room air. Filling non-gas exchange deadspace limits reductions in alveolar oxygen delivery.

Distributed by:

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