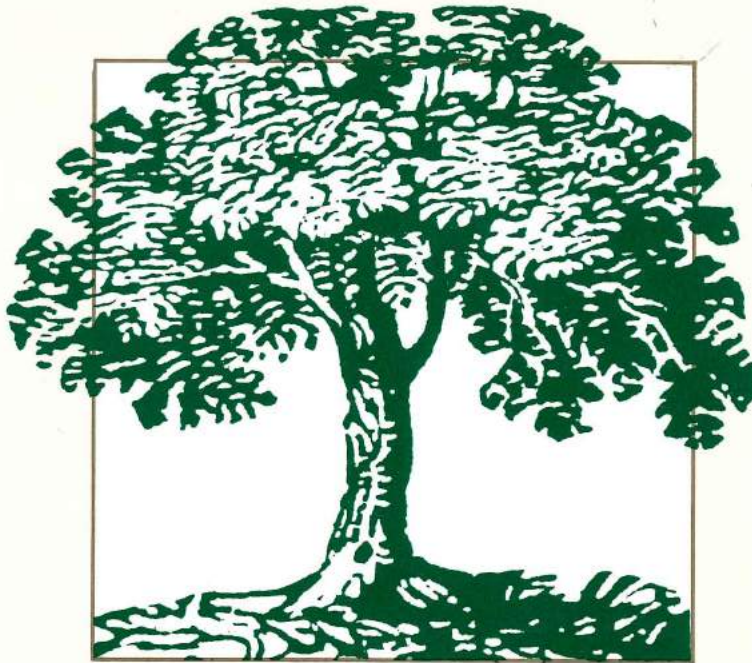

Directory of Sources for Ventilation Face Masks



Edited by Bud Blitzer for
International Ventilator Users Network (I.V.U.N.)
Published by
Gazette International Networking Institute (G.I.N.I.)

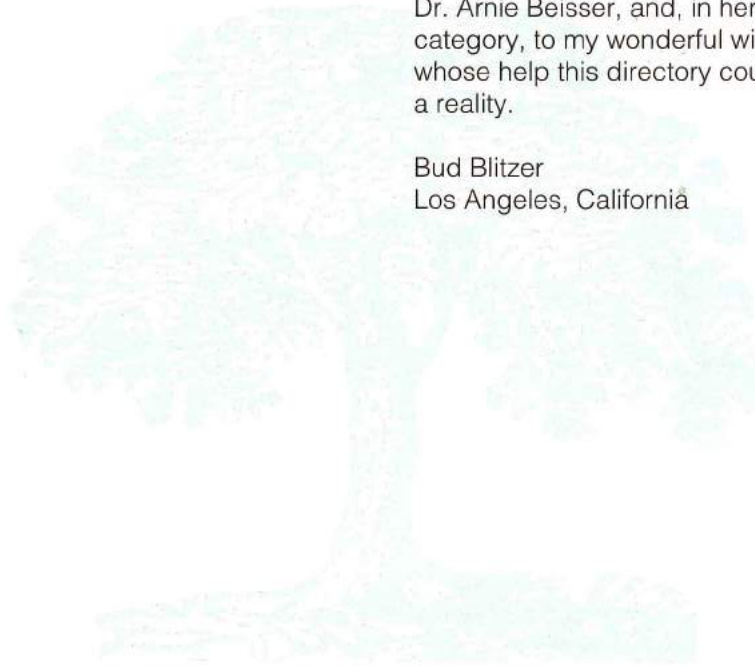
Dedication

This Directory is dedicated to the memory of Gini Laurie, who inspired so many of us to overlook what we were missing, and to make the most of what we had.

Acknowledgments

My thanks to all the "Mask Makers" who contributed to this directory, to Vladimir Paperny, who took time from his busy graphic design practice to help me produce it, to Dr. John Bach, Ira Holland and Pat Handke who were so generous in giving their advice, to my close friend, medical adviser, and fellow "poliac," Dr. Arnie Beisser, and, in her own special category, to my wonderful wife Dalia, without whose help this directory could not have become a reality.

Bud Blitzer
Los Angeles, California



Introduction

As the advantages of non-invasive Intermittent Positive Pressure Ventilation (IPPV) become better known, there is a growing need for more information about patient-ventilator interfaces (face masks): what types are available (oral or nasal), how one makes a selection, where and how to buy it, etc. This directory is an attempt to organize that information into a more convenient and usable form, and to help users match product features to their individual needs.

All equipment should be selected with the help of a competent medical adviser, as appropriate pulmonary function tests may be required. Nothing in this directory is intended as an endorsement of any of the equipment listed.

The following background will be helpful in using the directory:

IPPV vs. CPAP

All face masks are not made for the same purpose. Most have been designed to fill the requirements of people who can breathe normally as they sleep, but who have obstructive sleep apnea, and need supplementary air flowing into their lungs to keep their airway passages open. This is called Continuous Positive Airway Pressure (CPAP). People using CPAP systems usually require air delivered at lower pressures than people in need of IPPV during sleep. Accordingly, commercially available CPAP masks often prove unsatisfactory or require modification for ventilation applications, because they are not designed to deliver the higher air pressures necessary for assisted ventilation. They are, however, more readily available, require no facial impressions, and cost far less than their custom-formed IPPV counterparts. This makes them ideal for trial by first-time users for evaluation of the concept. Occasionally they work so well, that no further search need be made.

Masks listed in this directory are labeled CPAP or IPPV, to help a prospective user avoid becoming discouraged from trying IPPV masks, if an initial try with a CPAP mask proves unsatisfactory.

Mask selection criteria

Many factors should be considered when selecting a mask for ventilation. These include sensitivity of the skin to surface sores, user's ability to put on, adjust, or remove the mask, comfort, cost, travel convenience, availability, useful life, appearance, and cleaning procedure. Comments on each mask are made with some of these factors in mind. It is suggested, however, that people considering the use of this equipment contact other people who have been using it for some months for the same purpose, to get first-hand information.

Backup systems

As with all ventilation schemes, a backup system should be available in the event of equipment failure or illness. This is even more important when using a face mask, as facial sores, dental problems, severe nasal congestion, and mask breakdown must be added to the list of contingencies for which one should be prepared.

Changing times — and masks

As in any dynamic field, makers and manufacturers are constantly improving their masks. Each mask listed shows the date that the information was current. Those with a serious interest in any of the models listed are urged to request the most current available information on the mask that interests them.

John Bach, M.D

University of Medicine & Dentistry
University Hospital
Dept. of Rehabilitation B-239
150 Bergen Street
Newark, N.J. 07103-2425

Dr. Bach heads a group that makes a custom-fitted nasal interface (nose mask) designed especially for assisted ventilation applications. The group prefers that users come to Newark, where they can make a moulage (facial cast) from which the mask can be formed. If, however, a prospect cannot come to Newark, they will coach a local prosthodontist on how to make a moulage from which the group can form a mask. For more information, write Dr. Bach or call him at 201/456-4393.

Primary Application:

IPPV

Date of Report:

December 1990

Approximate Delivery Time:

If visiting Newark: 2-7 days

If from your cast: 3 weeks

Approximate Cost:

If visiting Newark: \$650 US

Mask only from your cast: \$150 US

Useful Life:

More than one year

Comments:

While visiting the group in Newark offers the best assurance of satisfaction, this mask has a good success rate using the local casting method as well. If not going to Newark, it is recommended that the local prosthodontist selected contact Dr. Bach for special instructions before starting work on the moulage and for final fitting, which requires a plastic gasket to be formed and fitted. This mask is currently being used by over 20 purchasers for night time assisted ventilation.



Healthdyne Technologies

1255 Kennestone Circle
Marietta, Georgia 30066

This mask is stocked by many medical supply distributors throughout the USA. To locate the distributor nearest you, write the Director of Clinical Services at the address shown above, or call (800) 421-8754. In Georgia, call (800) 535-5231. Fax call (404) 499-1139.

Primary Application:

CPAP

Date of Report:

March 1991

Delivery Time:

Usually immediate from stock

Approximate Cost:

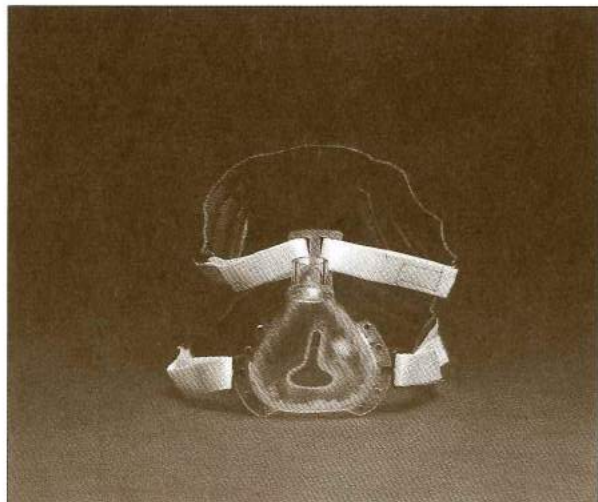
Mask and headgear moderate

Estimated Useful Life:

Usually over 1 year

Comments:

This mask is good for tryout by a first-time user. Occasionally it causes skin sores or discomfort at facial pressure points, but is reported to be in successful long-term use by some for nighttime ventilation. The headgear is available in three different sizes. Well worth a try.



Barry Make, M.D.

Director
Pulmonary Rehabilitation
National Center for Immunology
and Respiratory Medicine
1400 Jackson Street
Denver, CO 80206
(303) 398-1783

Dr. Make heads a group that makes different types of custom-fitted nasal interfaces (nose masks) designed specifically for ventilation applications. The group requires users to come to Denver. Cost estimate shown below assumes that user is already receiving positive pressure ventilation by way of nose mask. If the patient requires other diagnostic tests, or ventilation is being initiated for the first time, there would be additional charges. For more information, write Dr. Make at the address shown above, or call him at (303) 398-1783.

Primary Application:

IPPV

Date of Report:

December 1990

Approximate Delivery Time:

For mask and headgear only: 1-5 days

Approximate Cost:

For mask and headgear only: \$100-\$400 US

Useful Life:

2-5 years

Comments:

The type of mask employed is based upon facial anatomy of the user. The simplest mask can be made in about an hour. More complicated masks are made from a facial impression, and take several days to fashion.

Hugh Newton-John, M.D.

Yarra Bend Road
Fairfield, Victoria 3078
Australia

Dr. Newton-John heads a group that provides custom-fitted nasal interfaces (nose masks) for ventilation applications. The group fabricates nose masks based on the Lyon (France) design using silicon putty, but which are made from parts obtained in Australia. It is necessary for users to come to Fairfield where the mask is individually formed. Cost estimate shown below assumes the user is already receiving positive pressure ventilation by way of nose mask. If diagnostic tests are required or if ventilation is being initiated for the first time, there are additional charges. For more information, write Dr. Newton-John at the address shown above or call (03) 488-2222.

Primary Application:

IPPV Fairfield Hospital

Date of Report:

December 1990

Approximate Delivery Time:

For mask and headgear only: 1 day

Approximate Cost:

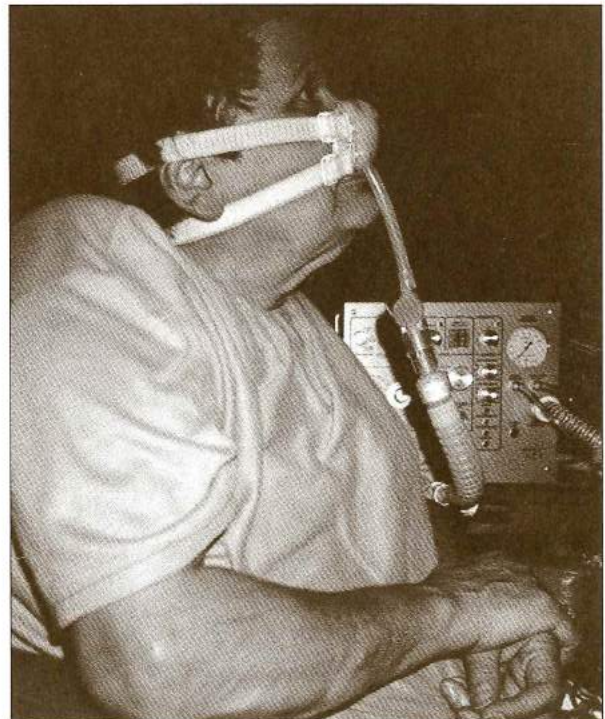
For mask and headgear only: A\$100

Estimated Useful Life:

6 months

Comments:

Dr. Newton-John has considerable experience in this field, and merits consultation by any prospective IPPV user within traveling distance of Fairfield (Melbourne), Australia.



Peter Peschel

West Germany

Mr. Peschel offers a custom-fitted nose mask made of skin-sensitive plastic material. The mask is designed specifically for ventilation use. Mr. Peschel prefers that users come to Oyten, West Germany, where a facial cast (moulage) can be made from which the mask is formed. If, however, a user is unable to visit Oyten, a local prosthodontist may be instructed on how to make a cast from which a mask can be formed in Oyten. For more information, write Mr. Peschel or call him at 0 42 07/39 84.

Primary Application:

IPPV

Date of Report:

January 1990

Approximate Delivery Time:

If visiting Oyten: 5 days

Approximate Cost:

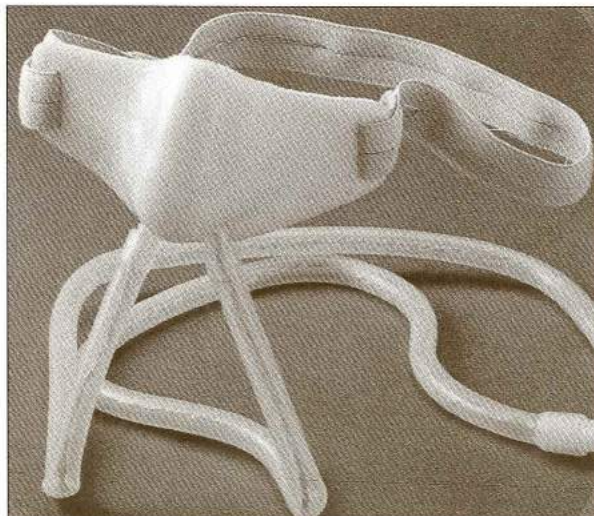
If visiting Oyten: \$300 US

Useful Life:

More than one year

Comments:

This mask is produced in a very workmanlike manner, and can be directly attached to standard 22mm airway hose systems. While visiting Oyten for moulage and final fitting offers the best assurance of satisfaction, this mask should have a good success rate using the local casting method as well, provided a local prosthodontist carefully follows Mr. Peschel's instructions when making the moulage. Some assistance may also be required for final adjustments to headgear straps. The mask may also be used for CPAP applications.



Puritan-Bennett

10800 Pflumm Road
Lenexa, Kansas 66215

This unique nasal interface introduces cycled air directly into the nostrils through two pliable inserts called nasal "pillows." Available in three sizes, pillows fit easily in to a plastic shell which is attached to the headgear by a Velcro strap. The complete interface (called ADAM Circuit by the manufacturer) is available from many medical supply distributors throughout the western world. For the name of the distributor nearest you, write the Sales Manager at the address shown above or call (913) 469-5400. In the U.S. call 1-800-248-0890 (press 1).

Primary Application:

CPAP and Nasal Ventilation

Date of Report:

December 1990

Delivery Time:

Usually immediate from stock

Approximate Cost:

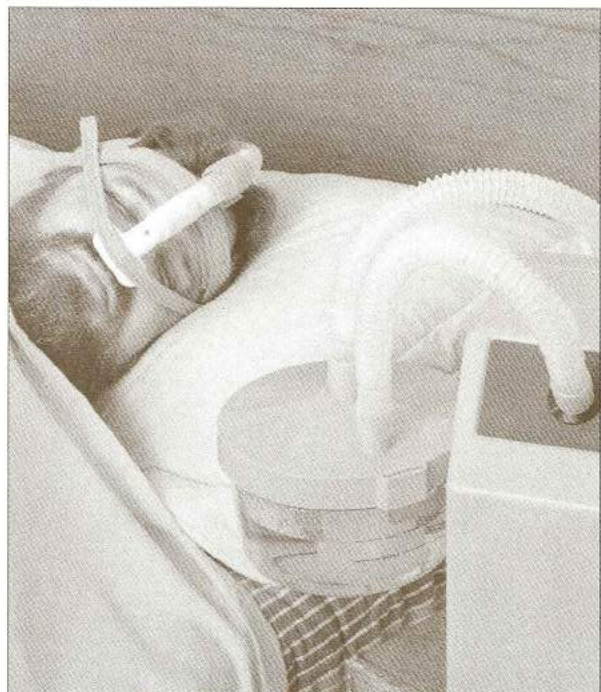
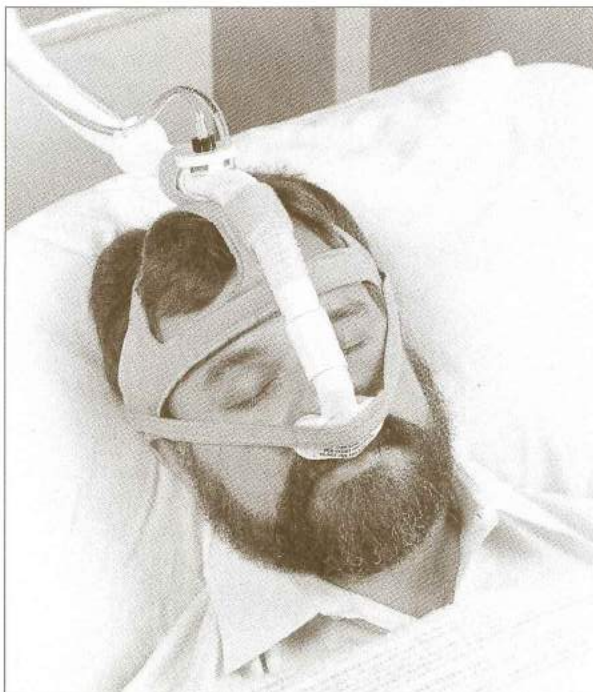
Mask and headgear: \$75.00 US

Estimated Useful Life:

Over 1 year

Comments:

By reducing skin contact to a minimum, this approach offers more comfort than most CPAP interfaces. Parts are easy to disassemble, sterilize, and reassemble. Pillows may be replaced easily and inexpensively. It is designed for both nasal CPAP and nasal ventilation applications. Specify which application at time of order.



REMAFA Tech

Pliggvagen 34
126 36 Hagersten
Sweden
Attention: Lennart J. Remmer A.I.M.F.T.

This firm produces a custom-fitted nasal mask and headgear designed specifically for ventilation use. Mr. Remmer prefers that users come to Hagersten where the firm is equipped to make a moulage (facial cast) from which the mask can be formed. Mr. Remmer will also visit a user who is unable to travel to Hagersten, subject to making mutually satisfactory arrangements. For more information write Mr. Remmer at the address shown above or, if dialing on AT&T line, call 01146/08-744 06 55.

Primary Application:

IPPV

Date of Report:

December 1990

Approximate Delivery Time:

If visiting Hagersten: 2 days

Approximate Cost:

Mask & headgear only: \$300 US

Estimated Useful Life:

More than three years

Comments:

For best results, the manufacturer prefers to have users visit Hagersten; however, if a user cannot travel to Hagersten, a mask can be made from a user's moulage. If having a moulage made locally for mailing to the manufacturer, it would be advisable to get instructions from the manufacturer before making the moulage. The nipple connecting the mask to the airway hose is available in either 15 mm for use with Swedish airway hose systems, or 22 mm diameter for connection to standard US airway hose systems.



Respironics, Inc.

1001 Murry Ridge Drive
Murrysville, PA 15668-8550

Available in 7 standard sizes (petite, small, medium, medium/small, medium/wide, large, large/narrow) this silicone contour mask is stocked by most leading medical supply distributors throughout the western world. To locate the distributor nearest you, call Customer Service (800) 638-8208 or (412) 733-0200.

Primary Application:

CPAP and NPPV

Date of Report:

March 1991

Delivery Time:

Usually immediate from stock

Approximate Cost:

Mask with swivel: \$52.00 US

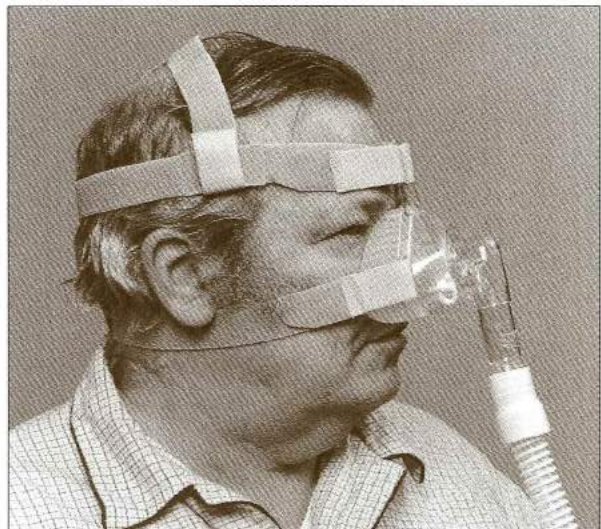
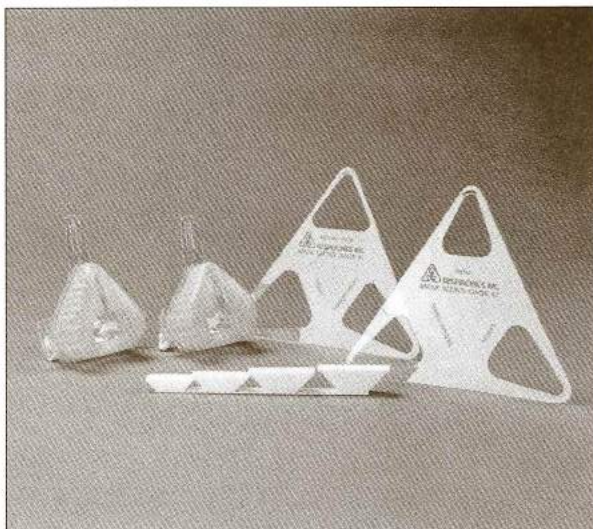
Headgear: \$35.00

Useful Life:

Usually over 1 year

Comments:

This mask is ideal for tryout by a first-time user. Occasionally causes skin sores or discomfort at facial pressure points, but if it works, you're in clover. Forehead spacers are available to alleviate pressure at bridge of nose. Although it proves unsatisfactory for many IPPV users, it is reported to be in successful long-term use by some for nighttime ventilation. Well worth a try.



SEFAM

Rue Du Bois de la Champelle
54500 Vandoeuvre-Les-Nancy
France

SEFAM offers for sale a kit of materials from which custom masks can be molded to the individual contours of the user's face in a home setting. This unique process results in a custom-fitted mask without the need to make a moulage (facial impression) as a separate step. The kit is for sale through leading medical supply companies in almost all European countries. For further information write P. Haan, General Manager, at address shown above, or call at 83.44.10.00 or Telecopie (FAX) 83.44.52.31. U.S. Distributor: LIFECARE, 688 Aspen Ridge Drive, Lafayette, CO 80026. Telephone: (303) 666-9234. FAX: (303) 666-0415

Primary Application:

IPPV

Date of Report:

December 1990

Estimated Delivery Time:

Usually immediate from stock

Approximate Cost:

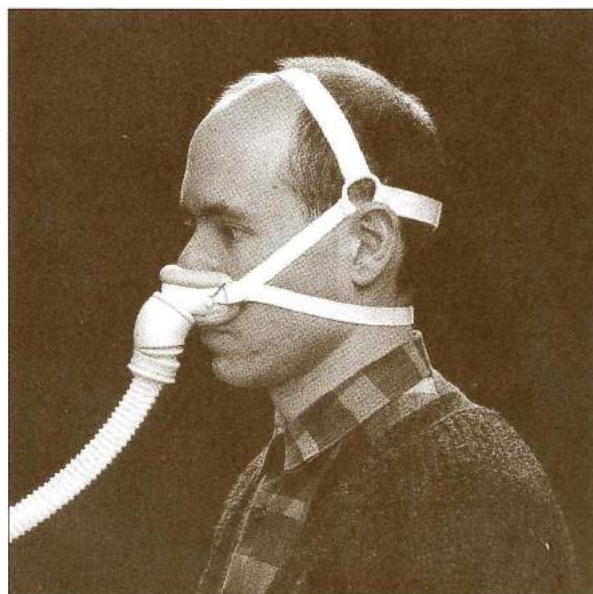
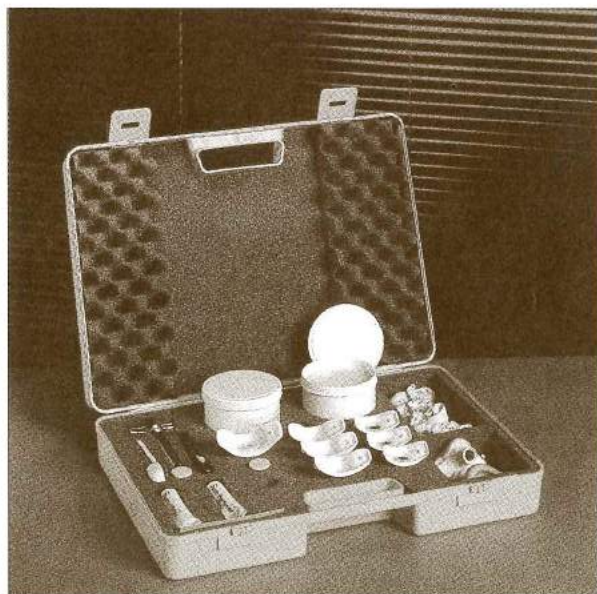
Kit including material for 5 masks: 2,000 F

Estimated Useful Life:

3-6 months each mask

Comments:

This firm works in close collaboration with Professeur Dominique Robert and Docteur Patrick Leger of Lyon, France, who are generally credited with having pioneered the use of nasal IPPV. The firm's products are well documented in a brochure with illustrations in full color. It is recommended that first time users of the kit hire a professional who is experienced in working with the kit, as some skill and experience are required.



Susan Sortor, RRT

Dallas Rehabilitation Institute
9713 Harry Hines Blvd.
Dallas, Texas 75220

Ms. Sortor heads a group at DRI that makes a custom-fitted mask designed specifically for ventilation applications. The mask covers both nose and mouth, and offers a choice of either nasal or oral ventilation. It is held in place only by a bite plate, allowing users to remove the mask without use of hands. Most work can be done on an outpatient basis but users must be able to visit Dallas for dental impressions, casting, and fitting. Night monitoring is necessary, and requires hospitalization. Contact: Susan Sortor (214) 358-8340.

Primary Application:

IPPV

Date of Report:

December 1990

Approximate Delivery Time:

Within one week after arrival

Approximate Cost:

\$1,500

Useful Life:

More than one year

Comments:

This mask has two outstanding features: by offering a choice of nose or mouth breathing, it provides insurance against nasal congestion, and it can be removed without help even by people with no use of arms or hands. This group also offers the SEFAM mask (see page 11). Ms. Sortor and her group are very experienced, and are reported to have a high success rate.

\$2.50

For further information write:
International Ventilator Users Network (I.V.U.N.)
4502 Maryland Avenue
Saint Louis, MO 63108
USA