

**LANDAUER
METROPOLITAN**
Respiratory Care

Patient Instruction Manual

NASAL CPAP THERAPY

www.landmetro.com

PHYSICAL PROBLEMS

Call your physician if you experience any of the following problems.

| | |
|-----------------------------------|-------------------------------|
| Fever or Chills | Loss of appetite |
| Wheezing | Chest pain |
| Increased Mucus Production | Swelling of the ankles |
| Mucus becomes thickened | Weight gain |
| Headaches | Feeling dizzy or sleepy |
| Increased Irritability | Decreased concentration |
| Audible grunting | Increased shortness of breath |
| Increased cough | Change in mucus color |
| Any changes in physical sensation | Swelling around the eyes |

Call Landauer Metropolitan Home Care 1-800-631-3031 Extension 3368 with question pertaining to the following

| | |
|----------------------------------|-----------------------|
| Dry mouth, throat, nose | Machine issues |
| Irritations around mouth or nose | Billing Issues |
| When to use device | Supply questions |
| Cleaning of equipment | Mask, Tubing, Filters |

Any further questions you may have can also be directed to the clinical services division at Landauer Metropolitan Inc. **1-800-631-3031 Extension: 3368**

If you experience any physical changes please contact your physician immediately.

If you experience severe physical problems call EMERGENCY MEDICAL SERVICES

SAFETY PRECAUTIONS

Never try to clean your unit by placing it directly into water. The electrical components will be damaged and will create a shock to the user the next time it is plugged into an electrical outlet.

Never plug the unit in if it has any water on it at all. Moisture always increases the potential for electrical shock.

Plug your **CPAP** unit into an outlet that is not being used to supply electricity to other appliances. If you need to use the same outlet that is being shared by other equipment make sure the other appliances are not being used at the same time.

Never try to repair your **CPAP** unit yourself. Your unit is considered medical equipment and needs to be repaired by qualified medical repair professional. If you are renting this



equipment please contact **Landauer Metropolitan 1-800-631-3031** and your unit will be replaced immediately. If this unit has been purchased either through **Landauer Metropolitan** or another Home care Provider we will be able to assist and service your needs and repairs or we will be able to guide you as to where it should be brought.

Never use your **CPAP** machine with an extension cord.

Never place your **CPAP** directly near a window or a heater.

NASAL CPAP THERAPY

Nasal Continuous Positive Airway Pressure Therapy (CPAP) was first described in 1981 as a simple and effective way of treating obstructive sleep apnea. Obstructive Sleep Apnea is the result of an obstruction (blockage) located in the airway.

This could stem anywhere from the nose down into the lower portions of your lungs. Your breathing muscles continue to function, but because of the obstruction, no air is able to enter or exit your lungs.

Control of your breathing is more difficult during sleep than it is during wakefulness. The muscles relax and the body exerts less effort to breath. As a result of this decreased muscle control, the tongue may have a tendency to fall back wards or the soft palate may collapse blocking off your airway.

You experience episode of apnea (no breathing) when there is no movement of air into or out of the lungs. This apneic episode can last from a second to over a minute and may occur hundreds of times through out the night. This trapping of air in your lungs causes the carbon dioxide (CO₂) levels to rise which in turn stimulates you to reawaken

During apneic episodes, increased CO₂ stimulate the brain to awaken you somewhat, this will help your breathing but does not allow you to completely sleep comfortably and productively. Although you are unaware of these constant interruptions of your sleep.

This lack of deep restful sleep causes excessive daytime sleepiness and put extra stress on your heart and other major organs.

Your CPAP involves wearing either a mask over your mouth and nose, just your nose or nasal pillows which are inserted into the nostrils. A blower in the CPAP unit gently pushes a prescribed amount of air through the mask or pillows. The flow of air causes a slight pressure build up in your airways and lungs. This will assist in eliminating the obstruction and keeping your airway and lungs open. This enables you to breathe normally and will return you to a normal nights sleep pattern.

Your physician has prescribed a certain pressure for you. This pressure was obtained during the sleep study (polysomnogram) you had while you slept. The CPAP unit Landauer Metropolitan Inc. provided you have been preset is ready for use. The therapist

will provide you with detailed instruction on the proper use and maintenance of your unit. Please feel free to ask any and all questions you may have.

Landauer Metropolitan Inc. will continue to provide you with any and all new updated technologies as they become available to us. We will continue to remain in close contact with you and your physician to report any question or concerns either of you may have.

There are many different **CPAP** units which are currently on the market today. They are basically all the same in terms of their function.

All of the units contain the following:

1. On / Off switch – this is for turning the machine physically on and off
2. Air inlet filters – this is the area where external air enters the unit to keep the motor cool, the filters need to be periodically cleaned and or changed, the frequency may vary depending on the environment you are using your unit in.
3. Air outlet – this is the opening where your tubing will connect to which will then connect to your mask appliance

CPAP Special Features

RAMPING

Many of the units today have a unique feature called Ramping. When the ramping feature is activated, the airflow delivery from your unit will start out lower than the originally prescribed pressure, this pressure will gradually increase to your prescribed level over a certain time interval which has also been ordered by your physician. This feature will allow you to fall asleep easier while the pressure continues to increase over time. Your Respiratory Care Practitioner will instruct you on this feature.

SETTING UP THE CPAP UNIT

1. Place the CPAP unit on a flat, sturdy surface near an area where you can sleep. Make sure the inlet port is free from obstruction (drapes, clothes, etc.). Do not place the unit on a carpet or pad as this may prevent the flow of air needed to cool down your CPAP system. Keep the unit away from heaters and or air conditioners this will have a tendency to draw that air into the unit which in turn will affect the operations of the unit.
2. Make sure the on / off switch is in the off position when not in use. Remember to always plug your unit into a grounded outlet.
3. Connect the tubing to the air outlet of your CPAP unit. You are now ready to assemble the remaining parts to your unit.

ASSEMBLY OF YOUR HEADGEAR

There are many types of headgears which are used in conjunction with many types of mask. Your Respiratory Care practitioner will inform and instruct you on which type you are currently using.

NASAL PILLOWS

1. Place the headgear on your head as described by the Practitioner and adjust it to a comfortable fit using the Velcro tabs to hold it in place.
2. Remove the headgear off without unfastening the Velcro straps. Insert the pillows into the shell and attach the shell to the circuit (TUBING). Place the tubing into the Velcro fitting which comes directly over your head.
3. Place the headgear and attached circuit back over your head. Insert the nasal pillows into your nostrils and lightly pull the tubing over the back of your head until the pillows fit securely into your nostrils.
4. Adjust the straps to a comfortable fit and a good seal.
5. connect the remaining end of the circuit to your CPAP outlet port

FACE MASK (FULL or NASAL)

1. Depending on the mask which was provided to you connect all straps in the appropriate positions as outlined by your Practitioner.
2. Most nasal mask have either 3 – 4 straps. Depending on the device your therapist provides you.
3. Some mask contains a whisper swivel valve (expiratory port) some are built directly into the mask. This valve is where your exhaled gas will escape from; prevent this valve from being obstructed.
4. make sure the mask has a snug fit you do not want it to tight but you also do not want air to leak out the sides
5. Each strap should be adjusted so that it form a secure fit, do not tighten one strap tighter then the next; all should be pulled to the same extent.

FINAL ASSEMBLY

1. Connect the tubing to your mask, either through the separate whisper swivel valve or the one which is incorporated into the mask itself
2. The other end of the tubing should then be connected to the outlet of your unit.
3. Turn the unit on. Adjust the mask until there are no leaks; again keep in mind all straps should be pulled to the same tension.
4. Once you have fit your mask or pillows and there are no leaks you may want to mark the straps with a marker to identify the position for future positioning.
5. position the tubing so that it loops over the top of your bed, chair, or anything which will allow you to rest comfortably while not pulling on your mask or headgear.

6. find a comfortable position in your bed which you will be sleeping in, take a few deep breaths through your nose and relax
7. If you utilize the ramping feature pressure the bottom, this will again lower the pressure to allow you to fall asleep a little easier.
8. If you are utilizing a humidifier ensure that it full with water.

OXYGEN AND YOUR CPAP UNIT

If your Physician has prescribed oxygen to be used in conjunction with your unit it may be connected to your CPAP circuit by using a O2 entrainment adapter or by attaching the O2 tubing directly into your mask.

Never turn your CPAP unit on or off with oxygen flowing into the unit.

HUMIDIFIERS

Your physician may have prescribed a humidifier to be used in conjunction with your CPAP unit. If you have been experiencing dryness in your nose or throat this may be the reason why your physician has ordered this therapy. If you are experiencing this problem and you do not have a humidifier in corporate with your CPAP inform your Respiratory Care Practitioner and he will speak with your physician about prescribing one for you. In order to utilize your CPAP system with a humidifier systems please follow the steps below.

There are two different systems which could be used Heated or Cool Mist, speak with your Respiratory care Practitioner to see which unit would be more beneficial for your needs.

1. Your Respiratory care Practitioner will instruct you on the proper setup and maintenance of your humidifier unit. They will show you how to assemble and disassemble the unit for cleaning purposes.
2. Fill the humidifier with either sterile or distilled water. Please do not fill chamber beyond the fill line, this will prevent water from blowing into the circuit.
3. Never place medications into your chamber
4. Always remember to turn off the unit when not in use, or when you are refilling the unit.
5. Along with your setup came a tubing 18 inch, this tube should be connected directly to the CPAP outlet port, and the other end to the inlet port of the humidifier. You are now ready to use your humidifier system.

CLEANING PROCEDURES

THIS SHOULD BE DONE DAILY

Nasal, Full face mask or pillows:

1. Wash your hands thoroughly. This is very important.
2. Remove the headgear from the mask or nasal pillows shell. Disconnect the mask or shell (remove pillows from the shell as shown to you by your Practitioner), whisper swivel and tubing.
3. With mild soap and warm water gently wash your mask (or shell), whisper swivel and tubing assembly thoroughly. Be sure to also rise warm soapy water through the inside of the tubing as well.
4. rinse all the same with warm water allow to air dry through out the day
5. reassemble all once they are dry

Note: if your mask still feels grimy or greasy repeat the above process again. Never wipe down any of your supplies with alcohol this will can cause skin irritations and breakdown of the plastics.

THIS SHOULD OCCUR WEEKLY

1. Wash tubing and headgear in warm soapy water, do not put into washing machine
2. Disinfect tubing as well as all supplies in an organic solution of one-part white vinegar, and two-parts water solution. Allow all parts to sit in the solution for approximately 30 – 45 minutes.
3. Rinse all parts well with warm water and allow to air dry
4. Check filters to see if they also need to be changed, remember it is very important to either change or clean these filters.
5. Humidifier chambers must be drained daily and rinsed with soap and water as well as disinfect with solution weekly. After disinfection please remember to completely rinse well with warm water. Allow to air dry, use secondary chamber while primary dries.

FILTERS

Cleaning of your units filters will depend on the system which you were provided. There are usually two filters the first is usually disposable on a predetermined interval your Practitioner will inform you as to when to change. The second filter is usually a permanent filter that should be cleaned following the procedure outlined above. Disposable normally replaced 4 – 6 weeks, and the non-disposable cleaned a minimum of once per week.

Any additional questions, concerns, or problems please do not hesitate to contact Landauer Metropolitan Inc. at 1-800-631-3031 Extension 3368