

Nebulizer therapy

# Taking nebulized therapy?

Your complete guide to using a Philips nebulizer

### Contents



## Understanding nebulizer therapy

What is nebulizer therapy?	5
Nebulizer therapy	6
What is a compressor?	7
Why use a nebulizer?	8
SideStream technology	9
Nebulizer compressor range	10
InnoSpire Go	11



### How to use your Philips nebulizer

How to use your Philips nebulizer compressor	13
How to use your Philips InnoSpire Go portable mesh nebulizer	15
Facemask or mouthpiece?	18
Nebulizer therapy for Children	19



### Looking after your Philips nebulizer

General maintenance	21
Cleaning your Philips nebulizer compressor	22
Cleaning your Philips InnoSpire Go portable mesh nebulizer	24
Replacing your nebulizer	26
Compressor maintenance	27

## Your complete guide to using a Philips nebulizer

For over 30 years we have been manufacturing respiratory devices and solutions, designed to help you manage your condition more effectively. Our high quality performing products reflect the wide range of experience we have gained over these years.

This guide will help you understand the basics of aerosol therapy. We will help you to get the most out of your device by explaining the basics of how your Philips nebulizer and compressor works, including advice on how to use, clean and maintain. Nebulizer therapy needn't be confusing! At Philips, we believe there's always a way to make life better, which is why we have set ourselves the goal to improve the lives of 3 billion people a year by 2025. By understanding what matters to people, we create innovations that make a real difference to the way we live.

To find out more, please visit: www.philips.com/better-me-better-world

## Understanding nebulizer therapy

Understanding nebulizer therapy

## What is nebulizer therapy?

Nebulizer therapy is a way of treating illnesses that affect the lungs and cause breathing problems, such as asthma, chronic obstructive pulmonary disease (COPD), chronic bronchitis, and other lung-related conditions.

A prescribed liquid medicine is placed into a medication chamber (nebulizer). The nebulizer is the part of the system that changes the medication into a fine mist, which allows it to reach deep into the lungs where it is most effective. There are three main types of nebulizer:

#### Jet nebulizers

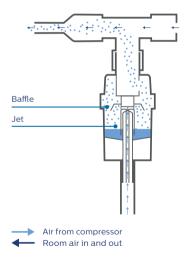
Jet nebulizers use compressor systems to provide a flow of air to the nebulizer. This air jet converts liquid medication into aerosol.

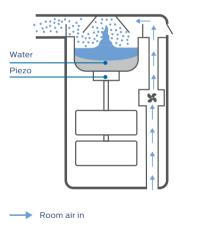
#### **Ultrasonic nebulizers**

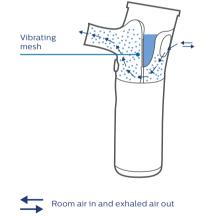
Ultrasonic waves pass through a reservoir of water driving energy through the medication to create the aerosol. They are not suitable for all commonly prescribed medications.

#### Mesh nebulizer

The medication is forced through a mesh containing microscopic holes which creates the aerosol.







## What is a compressor?

The compressor is a pump that draws in air and blows it out at high pressure into the jet nebulizer to produce a fine mist of medication that can be inhaled. Mesh and ultrasonic nebulizers do not need a compressor.

The compressor is electrically powered by the power outlet in your home or, if it is a portable compressor, it may also have a separate battery or charger.



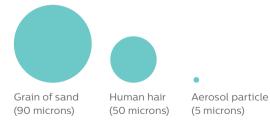
## Why use a nebulizer?

Nebulizers are typically used if the medication prescribed is only available as a liquid or if you have difficulty using an inhaler/puffer.

By delivering medication directly to your lungs, a nebulizer provides a fast and effective form of treatment.

### The importance of particle size

The fine mist created by a nebulizer is made up of thousands of particles. The particles that make up the mist are so small that they are measured in microns ( $\mu$ m) which is equal to a thousandth of a millimeter. To travel deep into the lungs, the particles that are inhaled need to be within the size range of 1 and 5  $\mu$ m<sup>1</sup>. This is extremely small when you consider that the average 'human hair' is around 50  $\mu$ m. If the particles are not less than 5  $\mu$ m it is unlikely that they will reach the lungs where they can be most effective.



1. webmd.com. Asthma/guide/home-nebulizer-therapy#1. Accessed October 2017.



### Nebulize with SideStream for fast, efficient drug delivery

Our nebulizer compressor systems are combined with our highly efficient SideStream technology. SideStream has been designed to draw more air in, via an active venturi system, resulting in fast drug delivery and short treatment times. It also has a unique diamond jet design which helps to minimize wear from frequent use and aids consistent delivery of a high-quality aerosol. SideStream is suitable for use with most commonly prescribed respiratory medications. SideStream has a unique venturi built into the nebulizer's top, which is designed to draw in extra air and shorten treatment times.





Innovative jet design producing consistently high quality aerosol

### **Our Nebulizer Compressor Range**

#### Home use

#### Philips InnoSpire Essence



Combined with our disposable SideStream nebulizer, the InnoSpire Essence is designed for frequent home use.

Philips InnoSpire Elegance



Combined with our reusable SideStream nebulizer, the InnoSpire Elegance is designed for continuous use in the clinic or at home.

Philips InnoSpire Deluxe



A robust and easy to use nebulizer compressor system that includes built-in storage to keep all your therapy accessories and supplies organized and handy.

#### Child friendly

#### Philips Sami the Seal and Willis the Whale



Two lovingly designed, pediatric nebulizer compressor systems that are shaped like friendly animal characters to help encourage children take their therapy.

## **InnoSpire Go**

### Portable mesh nebulizer

Fast, effective and easy to use, the InnoSpire Go nebulizer is designed to shorten treatment time, giving you or your child more time for those special moments with family and friends.

- Delivers medication in as little as 4 minutes\*
- Sleek, streamlined design and easy operation
- Virtually silent delivery of medication, at home or on the go
- Simple two-part construction for easy cleaning
- Built-in rechargable battery delivers up to 30 treatments (120 minutes of use) per charge



## How to use your Philips nebulizer

## How to use your Philips nebulizer compressor

The following is a basic guide for using a Philips nebulizer compressor system. You should always refer to the instructions for use supplied with your nebulizer and compressor for more detailed and specific instruction.



Plug your compressor into the power outlet, then connect one end of the long nebulizer tubing to the airflow outlet on your compressor.



Push the other end of the long tubing onto the stem at the bottom of your SideStream nebulizer.



Unscrew the two halves of the SideStream nebulizer.



Remove the medication from the pack and pour into the bottom part of the SideStream nebulizer. Make sure all of the contents are emptied out.\*



Screw the two halves of the nebulizer back together.



Connect either the mouthpiece or the mask to the top of the SideStream nebulizer.

\*Please note: If you have been instructed to dilute the solution, add the amount of saline as instructed.

## How to use your Philips nebulizer compressor



If using a facemask, hold it over your mouth and nose whilst placing the elastic strap around the back of your head.



If using a mouthpiece, place it between your lips.



Sit upright in a chair or in bed and relax as much as possible. When ready, turn on the compressor and take normal steady breaths.



Your treatment may be paused by turning off the compressor and securely placing the nebulizer in the holder.



Turn off the compressor when your nebulizer begins to make a 'spluttering' noise. Your treatment has now finished.

#### Notes:

- When using, always keep your compressor on a firm surface such as a table. Do not place your compressor on the carpet floor to avoid dust being drawn in.
- Be careful not to block the vents on the outside of the compressor
- Keep the compressor clean and dust free by wiping with a damp cloth
- There will be a small amount of medication left in the nebulizer at the end of your treatment. This is perfectly normal.

## How to use your Philips InnoSpire Go

The following is a basic guide for using a Philips InnoSpire Go portable mesh nebulizer. You should always refer to the instructions for use supplied for more detailed and specific instruction.



Attach the mouthpiece to the handset.



Lift the lid of the green medication chamber and empty the contents of your medication vial into the chamber.



Close the lid.



If you are using a mask, you should attach the facemask adapter to the mouthpiece and then attach your mask to the adapter.



Make sure you don't exceed the maximum fill volume, which is marked by the word MAX under the hinge.



If you are going to use the power adapter, plug the cable into the socket on the handset and plug the adapter into the power outlet.

## How to use your Philips InnoSpire Go

#### Continued



Turn on your nebulizer by pressing the ON/OFF button on the handset.



If the light is green, the battery is charged and ready to go.



If the light is amber, there's enough charge for at least one more treatment, but be sure to charge your nebulizer after your treatment.



If the light flashes amber and then switches off, there's not enough charge to take a treatment. If this is the case, simply use the power adapter to continue.



Look to make sure that aerosol is coming out of the mouthpiece or the facemask.



If using the mouthpiece, hold the handset in your hand, place the mouthpiece between your teeth and seal your lips around it. Breathe normally through your mouth.

## How to use your Philips InnoSpire Go

#### Continued



If using a facemask, hold the handset in your hand, gently press the mask against your face and breathe normally through your mouth.



Do not tilt the handset more than 45° in any direction as this might stop it from completely nebulizing the medication in the chamber.



If you need a rest, just press the ON/ OFF button to pause your treatment. When you're ready to continue, press the ON/OFF button again.



Your treatment will take about four minutes and is finished when the nebulizer beeps and the light flashes.



The device will then turn itself off automatically.

## Should I use a facemask or a mouthpiece?

Nebulizer medication can be delivered effectively through either a facemask or a mouthpiece, and both accessories are usually included with your nebulizer compressor system.



Facemasks are an option for some people, particularly children or older patients, and are often the only choice when a person may be unable to use a mouthpiece. However, facemasks are not for everyone and can make some people feel uncomfortable.



Mouthpieces are generally used by those who find a facemask to be restricting or uncomfortable, but some children may be too young to use a mouthpiece and should be encouraged to use a facemask that is either held or secured with a strap.

### Nebulizer therapy for Children

Your child may have been prescribed a nebulizer by their doctor. The information in this guide applies to children as well as adults, but if you are unsure of anything, always consult your child's doctor or nurse for guidance.

Nebulizer therapy can sometimes be unsettling for children and they may be frightened by a facemask being held over their nose and mouth. However, it is important that the facemask is held as close as possible to the face to reduce medication loss during treatment.

The choice between a facemask or mouthpiece is an individual one and, in agreement with your doctor/nurse, you should use whichever option feels right for you and your child.

## Looking after your Philips nebulizer

## General maintenance

It is important to keep your nebulizer clean and dry because germs like growing in damp conditions. A small amount of drug always remains in the medication container after treatment. This should be emptied and cleaned to prevent the medication from crystallizing and blocking the nebulizer jets. If not cleaned, the performance of your nebulizer will decline as it cannot work as efficiently.

PHILIPS RESPIRONICS InnoSpire Deluxe

## **Cleaning your Philips nebulizer**

The following should help to keep your system working effectively and reliably. These cleaning instructions are recommended for both the reusable and disposable version of the Philips SideStream nebulizer.

#### After each use



After every use, disconnect the nebulizer from the tubing. Turn on the compressor for a short period to clear any moisture from the tubing.



Remove the tubing and the mouthpiece or facemask from the nebulizer. Unscrew the nebulizer into two parts.



If using a facemask, wipe it with a damp cloth. Important: do not wash the tubing.



Wash the nebulizer and mouthpiece in warm, soapy water using regular dishwashing liquid. Clear the fine jet holes by rinsing under clean, cold running water and shake off any excess.



It is essential that the nebulizer parts are completely dry before reassembly.



To maintain effectiveness, it is a good idea to store nebulizer parts between uses in a clean, dry, environment.

## **Cleaning your Philips nebulizer**

#### Continued



It is important to change your tubing and mouthpiece/facemask regularly.

#### Once a week



To ensure optimum performance, reusable nebulizers should be boiled with two drops of dish washing liquid for 10 minutes once a week.



Never use a cleaning brush or sharp objects when cleaning because this will damage the nebulizer.

## **Cleaning your Philips InnoSpire Go**

With just two pieces, cleaning and maintaining the InnoSpire Go portable mesh nebulizer is simple and easy. It is very important to follow the cleaning instructions, otherwise the mesh inside the mouthpiece may become clogged with dried medication.

#### After each use



Pour away any leftover medication from the medication chamber.



Press the release button to separate the mouthpiece from the handset.



Rinse the mouthpiece thoroughly under running water.



Shake off excess water, place it on its side and leave to air-dry fully before storing.

#### **Daily cleaning**



Wash the mouthpiece by hand in warm, soapy water using regular dishwashing liquid.



Rinse the mouthpiece thoroughly under running water.

### **Cleaning your Philips InnoSpire Go**



Shake off excess water, place it on its side and leave to air-dry fully before storing.

#### Weekly disinfection



Boil the mouthpiece in water for 10 minutes with the medication chamber lid open and enough water in the pan to stop it resting on the bottom or boiling dry.



Shake off excess water, place it on its side and leave to air-dry fully before storing.

#### **General care**



Cleaning the handset couldn't be easier, just wipe with a clean damp cloth weekly or whenever needed.



The mask, if used, should be washed once a week in warm soapy water for 2 minutes or leave to soak for 10 minutes. Rinse it under running water and leave to air-dry.



When you're not using your InnoSpire Go, store it in its original case to protect.

## **Replacing your nebulizer**

Your nebulizer should be replaced regularly to help you get the best treatment possible from your nebulizer system.

The instructions included with your current nebulizer will indicate when to replace it, but most disposable nebulizers should be replaced after 1 month. and most reusable nebulizers after 12 months. However, always consult the recommendations included with your nebulizer.

To help you receive the best possible treatment from your Philips nebulizer, you should replace them as follows:





SideStream Disposable Replace after 1 month



SideStream Plus Replace after 12 months



InnoSpire Go Replace the mouthpiece assembly every 12 months



## **Compressor maintenance**

When in use, always keep your compressor on a firm surface such as a table and do not place on a carpet or bed. Do not cover the air vents on the sides of your compressor as this may cause it to overheat. Keep your compressor clean by wiping with a damp cloth.

The air inlet filter on the compressor gets dirty over time and should be changed at least every three months (more often if a member of the household smokes). If the filter is blocked, the compressor will be less efficient.





If your filter is this color then it should be replaced

To maintain performance, some compressors should be serviced and safety checked regularly (at least once a year). Your provider should advise you how to do this.

Please consult the instructions for use supplied with your compressor for more details on correct maintenance and cleaning procedures. Your Philips instructions for use will also provide you with the part numbers needed to reorder accessories.





© 2018 Koninklijke Philips N.V. All rights reserved. Specifications are subject to change without notice. Trademarks are the property of Koninklijke Philips N.V. (Royal Philips) or their respective owners.

PN1539803 Nebulizer Therapy Guide, UK English