

Humidification and non-invasive ventilation



What is a heated humidifier?

A heated humidifier is a chamber of water that allows moisture to be added to the air being delivered by your non-invasive ventilation (NIV) machine. Some ventilators have a built-in humidifier unit and others have a separate 'bolt-on' version.

Why do I need a heated humidifier?

We recommend that you use a heated humidifier to prevent the pressurised air from the machine drying out your airways. This can cause discomfort and can sometimes make your secretions more sticky and difficult to cough and clear.

Filling the humidifier

The humidifier has a water chamber which ideally should be filled with distilled or deionised water (such as you put in steam irons or car batteries). You can also use filtered water or cooled boiled tap water. The purer the water the less limescale will build up, reducing the need for de-scaling.

Caring for the humidifier

The unit and chamber needs to be kept clean and the water must not be allowed to become stale. Clean the outside of the unit once a week with a damp cloth and washing-up liquid. In the morning, the water in the chamber must be thrown away and the chamber allowed to air dry. The water should be refilled when the unit is used again at night.

DO NOT SIMPLY TOP UP THE WATER LEVEL. This will not be pleasant to use and will cause the chamber to quickly become coated with limescale.

Descaling

If you start to notice a build-up of limescale in your chamber it

should be soaked in 1 part white vinegar and 9 parts water, or the same dilution of lemon juice. This will dissolve the limescale. If this is done regularly it will help prevent a thick layer of limescale from forming.

When de-scaling your humidifier chamber please make sure the chamber is thoroughly rinsed out with tap water before you use it again.

If you feel that the limescale is too thick and you are not able to remove it using the above methods, please let us know at your next review.

Potential problems with the humidifier

Too much or not enough moisture in the tubing

If too much moisture is being produced by the humidifier this may cause 'gurgling' noises as the water moves in the tubing. It might also make your face wet if the water trickles down into the mask. If there is too much moisture in the mask or tubing, the temperature of the humidifier needs to be turned down.

Alternatively, if you feel very dry after using your NIV and there is very little condensation in the tubing, the temperature needs to be turned up.

If there is still a problem with the level of moisture, please discuss this at your next appointment.

Water accidentally getting into the NIV machine

Please remove the water chamber and throw away the water BEFORE moving the NIV machine around. This reduces the risk of water getting into the NIV machine.

If water from the humidifier does get into the NIV it may damage the machine or may stop it from working completely. If this happens, please unplug the NIV and contact your ventilator team as soon as possible.

How to contact us

If you have any problems or concerns about your humidifier please contact us as soon as possible:

If you are a cystic fibrosis patient please call the Cystic Fibrosis Physiotherapists:

Tel: **01865 225 713**

(8.30am to 4.30pm, Monday to Friday)

All other patients, please call the Sleep and Ventilation service:

Tel: **01865 226 651**

(9.00am to 5.00pm, Monday to Friday)

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALSJR@ouh.nhs.uk**

Louise Warnock (Senior Physiotherapist), Oxford Adult Cystic Fibrosis Centre
Nichola Gabriel (Senior Physiotherapist), Oxford Sleep and Ventilation Service
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Oxford University Hospitals NHS Trust
Oxford OX3 9DU
www.ouh.nhs.uk/information

