

August 2025

e-chamber Nebuliser: Customer Care & Use Document

At Bird Healthcare, our priority is ensuring safe and effective use of your nebuliser. Recent customer feedback has highlighted a few recurring themes which we would like to address. After thorough technical review of feedback, we wish to clarify and reiterate the following important points.

1. Charging Port Care

The nebuliser includes a USB charging port. As with any electronic device, this port must remain dry and free of moisture.

- Do not rinse or submerge the charging port in water.
- Do not immerse or dunk the entire device in water - it has been reported that some patients have done this, which will inevitably allow water into the battery housing and cause electrical faults or hazards.
- When cleaning, only wash the removable medication cup component. The body of the device itself should only be wiped clean with a damp cloth and dried afterwards
- Ensure all parts are completely dry before re-assembly or charging.

Why this matters: Any water inside the charging port or battery compartment can cause overheating, melting, or complete device failure. These are not product faults but the result of improper handling. Correct cleaning practices prevent this issue entirely.

2. Replacement Medication Cups

Medication cups are semi-disposable consumable items, with a maximum warranty of three months under the e-chamber manufacturer's policy. The e-chamber nebuliser is designed using *vibrating mesh* technology, which is the only way to achieve such a compact, portable nebuliser design.

- Vibrating mesh works by passing liquid medication through an extremely fine micro-pore membrane.
- Over time, exposure to liquids naturally leads to a very thin film or mineral layer forming on the mesh surface. This can gradually narrow or block the microscopic pores.
- This is not unique to e-chamber — it is a characteristic of all vibrating mesh nebulisers worldwide and why the mesh needs replacing over time.

Ways to extend the life of the medication cup:

- Always rinse the medication cup thoroughly with fresh water after use.
- Where possible, use distilled (demineralised) water, as it is largely free from minerals and helps prevent build-up.
- Clean and dry the cup after every use to minimise residue.
- Be aware that certain medications shorten cup life:
 - Hypertonic saline (salt water) accelerates mineral deposition and reduces lifespan.
 - Other non-salt-based medications generally allow longer service life.

Why this matters: If the device is not rinsed and cleaned regularly — whether after each use, or at the very least daily/weekly — the mesh will accumulate residue that reduces its longevity. The finite service life of the medication cup is a natural reality of vibrating mesh technology, not a defect. With good cleaning habits, users can significantly extend the effective lifespan of their medication cups but deterioration is unfortunately inevitable.

3. Connector Pins & Plate Cleaning

The nebuliser relies on a precise connection between two contact points:

1. The connector pins on the medication cup
2. The metal plates located on the body of the device

Both must remain clean and free from corrosion, medication residue or other foreign build-up to ensure a good connection is made.

- After each use, carefully clean and dry both the pins and the plates.
- Do not leave moisture or residual medication on the surfaces.
- Store the nebuliser in a clean, dry environment.

Why this matters: If there is any build-up or corrosion, the connection between the pins and plates can be interrupted. In this situation, the nebuliser may appear to turn on, but no nebulisation will occur because the electrical signal is not being transmitted effectively between the medication cup and the device. Maintaining clean, dry pins and plates ensures uninterrupted performance.

4. Voluntary Replacement of 2021-Manufactured Devices

Devices manufactured in 2021 (manufacture date is printed on the bottom of the unit) were built using an earlier metal alloy for the connector pins and plates. Since then, we have introduced a new alloy that provides:

- Reduced corrosion risk
- Improved conductivity
- Enhanced reliability

Because the newer alloy is not compatible with earlier models, Bird Healthcare will voluntarily replace any e-chamber nebuliser manufactured in 2021 or earlier.

If you own a device from this manufacture date, we will exchange it for the latest version at no cost. This program reflects our dedication to continuous improvement and ensuring our customers always have access to the highest standard of care.

Please email service@birdhealthcare.com to arrange your replacement.

Our Commitment

These matters outlined above are not product design issues. They are preventable with correct care and use. Bird Healthcare and e-chamber remain committed to providing:

- Updated user manuals and care instructions
- Easy-to-follow self-help guides
- Training and support resources for healthcare providers and patients
- Voluntary replacement of older models to ensure customers always benefit from the latest quality improvements

We thank you for your attention to these important care requirements. By following them, you will ensure safe, reliable, and effective performance of your nebuliser for its full-service life.