

## World Asthma Day – Backgrounder

### Philips and Asthma

For parents of children with asthma, it is important they monitor and manage all of the factors that can make their child feel better or worse, or that trigger an asthma attack. Weather, air quality, exercise and even food can all impact asthma. Encouraging children to take their asthma medication correctly, and following their treatment plan, can help better manage day-to-day triggers and keep their asthma under control.

When used properly, inhalers can help people live a normal life. The medicines children are prescribed to treat their asthma can't work unless taken as they are intended, yet 90% of asthma patients have incorrect technique when taking their medication<sup>1</sup>.

Philips's asthma management solutions put parents in control of their child's asthma, and are designed to ensure they are getting the most out of their medicine:

**1. OptiChamber Diamond Valved Holding Chamber & Mask**

Medication can often end up in a child's mouth, throat and stomach when using an inhaler on its own. By including a valved holding chamber (commonly referred to as a spacer), drug delivery can improve by as much as four times<sup>2</sup>.



**2. Innospire go**

A lightweight, portable mesh nebulizer with built-in rechargeable battery providing up to 30 treatments (120 minutes of use). Medication can be delivered in as little as 4 minutes<sup>3</sup> either at home or on the go.



**3. PersonalBest Peak flow meter**

A peak flow meter that measures how fast air is blown out from a child's lungs will give parents added confidence that their child's asthma is being properly managed.



**4. Sami the Seal pediatric nebulizer system**

Sami the Seal combines reliability with a cute character design to provide a child with a breathing treatment that is friendly and comfortable. The compressor comes with our highly efficient SideStream nebulizer and Tucker the Turtle character facemask to provide a fast treatment, in as little as 6 minutes<sup>2</sup>.



### Optimizing indoor air quality

Improving indoor air quality has the potential to reduce many irritants and allergens that can trigger a child's asthma symptoms. There are four major factors that influence indoor air quality and that can act as triggers for an asthma attack:

- 1. PM 2.5** – the microscopic air pollutants that are common triggers for an asthma attack

2. **Allergens** – such as pollen coming in from outdoors, dust mites, pet dander (flakes of skin) and mold spores
3. **Bacteria and viruses** – inhalation can cause influenza, common colds, tuberculosis and other infections, whilst also increasing the risk of asthma
4. **Air humidity or dry air** – this can aggravate allergies, asthma and other respiratory conditions

To combat poor air quality, Philips air purifiers can help to reduce allergens and control air quality levels in a child's bedroom; and its humidifiers maintain comfortable moisture levels:

**1. Philips Air Purifier Series 2000i**

This connected air purifier removes 99.97% of airborne allergens including pollen, house dust mites and pet dander. To help decrease the impact of these moments, it also includes AeraSense, a particle sensor that detects even a slight change in the air and ensures the purifier's settings are adjusted to reduce airborne allergens. The App gives real-time air quality feedback via the display, plus allergy management advice.



**2. Philips Air Purifier Series 3000i –**

Combining AeraSense and VitaShield IPS technologies, the connected Philips Air Purifier Series 3000i reduces allergens, gases and odors. Through a display and App, users are able to monitor the quality of their indoor air in real-time. Available anywhere, the App also gives users advice on their allergen management regimen. VitaShield IPS technology also uses natural filtration to collect and retain many contaminants, leaving indoor air cleaner.



**3. Philips Humidifier Series 2000**

This humidifier helps users to retain comfortable moisture levels in their home by maintaining a constant and even, relative humidity between 40% and 60%. NanoCloud Technology spreads 99% less bacteria compared to ultrasonic humidifiers. This unique humidification technology uses a natural, cold evaporation process with no artificial additives. It humidifies the users' home by generating tiny molecules of pure water that are invisible to the eye, and evenly distributes them around the room.



**4. Philips DeCombi Series 5000**

This 2-in-1 dehumidifier combines a highly efficient dehumidification system with an air purifier. Removing up to 25 liters<sup>4</sup> of water per day – the equivalent of 50 bottles<sup>5</sup> of drinking water per day. Its NanoProtect filter removes ultrafine particles as small as 0.02micron<sup>6</sup>, 99% airborne Aspergillus Niger mold spores<sup>7</sup>, bacteria<sup>8</sup> and the H1N1 virus<sup>9</sup>. What is more, it also features a humidity sensor with a numerical display and an air quality sensor.



With advanced technology, plus certification or testing by AHAM, ECARF and Airmid, each product in the Philips Air portfolio is designed to ensure you have cleaner air or comfortable moisture levels, always.

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<sup>1</sup> Sanchis J, Gich I & Pefersen S. Systematic review of errors in inhaler use: has patient technique improved over time? *Chest* 2016;128(5):3198–3204 [https://www.pharmaceutical-journal.com/learning/learning-article/how-to-help-patients-optimize-their-inhaler-technique/20201442.article#fn\\_6](https://www.pharmaceutical-journal.com/learning/learning-article/how-to-help-patients-optimize-their-inhaler-technique/20201442.article#fn_6)

<sup>2</sup> <https://www.usa.philips.com/c-e/hs/respiratory-care/what-is-asthma-spacer.html>

<sup>3</sup> Using 2.5ml Salbutamol

<sup>4</sup> Refer to DE5205 and DE5206 dehumidification performance

<sup>5</sup> Refer to normal drinking water of 500ml/bottle

<sup>6</sup> The filter was tested with NaCl test aerosol according to DIN71460-1 in IUTA

<sup>7</sup> Microbial Reduction Rate Test conducted at Airmid Healthgroup Ltd. tested in a 28.5m<sup>3</sup> test chamber contaminated with airborne *Aspergillus niger* mold spores within 60 minutes of operation

<sup>8</sup> Tested by Shanghai Institute of Measurement and Testing Technology (SIMT) in 30m<sup>3</sup> chamber according to GB21551.3-2010, (*Staphylococcus albus*) 8032 as testing bacteria

<sup>9</sup> Microbial Reduction Rate Test conducted at Airmid Healthgroup Ltd. tested in a 28.5m<sup>3</sup> test chamber contaminated with airborne influenza A(H1N1)