

# Spacers and Children – Mask or Mouthpiece?

## What do the guidelines say?

- The British Thoracic Society (BTS) Asthma Guideline states that in young children a pMDI and spacer is the preferred method of delivery of  $\beta$ -agonists and inhaled corticosteroids. A face mask is required until a child can breathe reproducibly using the spacer and mouthpiece<sup>1</sup>.
- The Global Initiative for Asthma (GINA) states that children should be switched from a face mask to a mouthpiece as soon as they are able to demonstrate good technique. Where a facemask is used it must be fitted tightly around the child's mouth and nose to avoid loss of drug. The preferred device aged 0-3 is a pMDI plus spacer with face mask. The preferred device for children aged 4-5 is pMDI plus spacer with mouthpiece<sup>2</sup>.
- NICE states for children aged < 3 years, the preferred device is a pMDI with a spacer and face mask. For children aged 3-5 years the preferred device is pMDI with spacer and a mouthpiece (if they are able to demonstrate good technique)<sup>3</sup>.
- Asthma and Lung UK (ALUK) state that once a child can drink through a straw, or they're older than five, they should be using a spacer without a facemask. This is because medicine can be wasted when using a mask, as it can stick to your child's face and to the inside of the mask<sup>4</sup>.

## The South Yorkshire Children and Young People's Alliance Asthma Team recommend:

- Review a child's inhaler technique and spacer use regularly.
- Most 3–5-year-olds should be able to use a spacer with mouthpiece – especially if they are able to drink through a straw.
- Children should be switched from face mask to mouthpiece as soon as they can breathe through the spacer mouthpiece or they are older than 5

Using the correct choice of spacer will ensure optimal drug delivery to the lungs as poor mask seal with the face may result in impaired or variable dosage delivery<sup>5</sup> and drug deposition on the face significantly adds to overall drug loss and has the potential of local side effects.

## Appropriate spacer choices include:



Aerochamber plus Flow-VU small mask (orange) for 0-18 months



Aerochamber plus Flow-Vu medium mask (yellow) for 1-5 years



Aerochamber plus Flow-Vu Youth mouthpiece (green) for 5+ years but can be considered from 3 if appropriate. (has low resistance valve designed specifically for children)



Aerochamber plus Flow-Vu Adult mouthpiece (blue) for 5+ years (has a higher resistance than youth mouthpiece therefore reserve for older children)

## Why choose Aerochamber Plus Flow-VU?

Flow-VU indicator moves if there is a good mouth seal and can indicate to a parent or carer if the child is inhaling correctly.

Flow-VU signal whistle alerts if inhalation is too quick.