

**Great Ormond Street Hospital for Children NHS Foundation Trust: Information for Families** 

# One-way (speaking) valves

This leaflet aims to provide parents and carers with the following information about their child's one-way (speaking) valve:

- What the valve does
- Who can have a valve
- The advantages and disadvantages of wearing a valve
- How often your child should wear it
- Ideas to encourage your child to wear the valve.



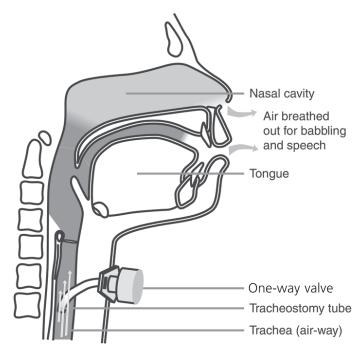
# What is a one-way valve?

A one-way valve is a plastic attachment that fits on to the end of your child's tracheostomy tube. The valve opens to allow your child to breathe in through the tracheostomy tube. When they breathe out the valve closes. This diverts the air up through the voice box, throat and mouth/nose as in normal speech. Not all children will be able to produce a voice immediately the valve is placed on the tracheostomy tube. Your speech and language therapist will explain your child's particular difficulties.

### Wearing the valve and breathing in

# Nasal cavity Teeth Lips Tongue Epiglottis Vocal folds Oesophagus (food pipe) One-way valve Tracheostomy tube Trachea (air-way)

### Wearing the valve and breathing out





# Who can have a valve?

Many children with a tracheostomy cannot have a speaking valve.

The main reasons are:

- Severity of upper airway obstruction, such as a severe subglottic stenosis
- Large tracheostomy tube size
- Significant swallowing problems

# What are the benefits of wearing a valve?

These vary from child to child but some of the benefits may include:

- a louder voice
- clearer speech/voice
- normal passage of air through the throat and mouth
- improved ability to smell and taste
- reduced secretions
- easier development of babbling (early speech sounds) in young babies
- easier language development in small children
- more efficient speech i.e.more words on one breath by older children.

# What are the disadvantages of wearing a valve?

There are very few disadvantages. However, when your child first starts to use the valve he or she may notice that there is an increase in effort is needed to breathe out. It may take your child a while to get used to it. He or she may therefore need to gradually build up the amount of time he or she wears the valve. Your speech and language therapist will advise you about this.

Some children produce thicker secretions as the valve does not humidify the air when your child breathes in. You may need to alternate use of the speaking valve with an HME/Swedish nose.

# How is the valve fitted?

The valve will be fitted for the first time by your child's speech and language therapist either on the ward or in the outpatient clinic depending on what is most appropriate for your child.

Whilst it is very easy to fit the valve by simply fixing it to the end of the tube the speech and language therapist will assess that it is safe for your child to use.

If your child has a changing or fluctuating airway problem or is undergoing ENT surgery, this may impact on their speaking valve suitability and tolerance. If your child's airway problems change, please contact your speech and language therapist to discuss.



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# Speaking Valves: A programme for your child

# **Patient details**

Child's Name:	
Date of speaking valve assessment:	
Speech and language therapist:	
Your child has been given a	speaking valve

# Instructions for fitting the valve – checklist

- Check if your child needs suctioning before putting the valve on.
- Ensure that the valve is clean and that the flap inside the valve is not sticking. Wash the valve at least once a day in warm soapy water and dry thoroughly before fitting.
- If your child has a cough or cold he or she may not be as comfortable wearing the valve. Remove the valve until your child is feeling better.
- Always supervise your child when he or she is wearing the valve. He or she should not wear the valve when sleepy or asleep.

# Instructions specific to your child

	Enc	ourage to wear his or her speaking valve
	for	minutes/hours times each day during:
		play
times when you are talking with your child		
		meal times

- lacktriangle Gradually increase the length of time your child wears the speaking valve as tolerated lacktriangle
- Your speech and language therapist may order a different type of speaking valve for your child. Your speech and language therapist will liaise with your community children's nursing team regarding ordering more or different valves for your child.



# Games and exercises to encourage your child to wear their valve:

Games that will attract your child's attention and distract them from the speaking valve:

- 1. Playing with his or her favourite toys
- 2. Blowing bubbles
- 3. Reading books

**Notes** 

- 4. Playing with noisy or moving toys
- 5. Peek-a-boo / Hide and Seek / Ready Steady Go games.

Please ask your child's speech and language therapist if you have any questions about any of the advice in this leaflet:	
Contact Name:	
Contact Telephone Number:	

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