

Children's Hospital, John Radcliffe Hospital

# Viral Induced Wheeze

Information for parents and carers



## What is a viral induced wheeze?

A wheeze is a high-pitched whistling sound that occurs during breathing. It can be associated with increased difficulty in breathing.

Breathlessness and wheezing can occur with a respiratory viral illness (e.g. a cold). The wheezing episodes usually last 2-4 days, but can be longer. Between colds, children are usually free of wheeze, even when they are exercising.

Nearly one third of all pre-school age children will wheeze on at least one occasion when they have a cold. Children with asthma also wheeze. The difference between asthma and viral-induced wheeze is that children with asthma will wheeze at times other than when they have a cold – often with exercise or when they are exposed to particular ‘triggers’ like house dust mites or pets. Most children with viral-induced wheeze will stop wheezing as they get older and will not develop asthma.

## Is it asthma?

A wheeze is more likely to be caused by asthma if your child is wheezing at times when they are otherwise well. Wheeze with asthma can occur:

- at night or when waking
- during or after exercise
- after contact with a ‘trigger’ (pollen, pets, dust)
- when upset or laughing
- occasionally for no apparent reason.

Children with asthma are more likely to have eczema or hayfever and a family history of asthma, hayfever or eczema.

## How is a viral induced wheeze treated?

### **Relievers**

As soon as your child becomes wheezy, starts coughing excessively or is short of breath, they need to use their reliever inhaler. Reliever inhalers contain a medication called short-term inhaled bronchodilators; this is usually salbutamol. This can also be given via a nebuliser machine. Nebulisers are given in hospital, as they need oxygen to work.

Relievers relax the muscle surrounding the airway and make it easier to breathe.

There is no proven effective preventative treatment for pre-school aged children who keep having episodes of viral wheeze. Children with viral wheeze do not appear to respond to regular inhaled corticosteroids (brown inhalers).

### Using a spacer

All inhalers should be delivered using a spacer, as this is the most effective way of giving the medication. The nurses in the hospital will show you how to use this. Please ask if you have any questions about using the spacer before you go home.

Spacers are plastic devices that help the inhaler medicine get into the lungs, where it is needed. Inhalers and spacers are as effective as nebulisers at ensuring the medicine reaches the airways, if they are used correctly.

## How do I give my child their inhaler?

Your child may need lots of positive encouragement when they first start to use the spacer. You may want to make it into a game, or use a small reward to encourage them.

1. Sit your child in an upright position, as this will help them to breathe in the inhaler medicine.
2. Shake the inhaler and push it into the port on the end of the spacer. Hold the spacer away from your child's face.
3. If you are using a spacer with a face mask you will need to fit this over your child's nose and mouth. You will need to make sure that there are no gaps, as these will let the inhaler gases escape before they can be breathed in.

If your child is not keen to have the mask of the spacer placed over their nose and mouth, or they need help to use the spacer, you may want to sit them upright on your lap or use it when they are lying down.



Some spacers come with a mouthpiece instead of a mask. These are usually for children aged 3 and above who are able to breathe in and out just through their mouth.

4. Press the top of the inhaler firmly and release, this will administer one puff into the spacer. Allow your child to breathe in and out **slowly and deeply** with the spacer mask still on their face, so that they breathe in the inhaler medicine. If your child is using a mouthpiece, they will need to breathe **slowly** in and out through their mouth, keeping their lips sealed around the mouthpiece.

You should be able to see the yellow valve in the mask spacer moving as your child breathes. Count 5-10 breaths for each puff of the inhaler (10 breaths if your child is under two years of age, 5 breaths if they are over two).

5. Remove the spacer mask from your child's face or the mouthpiece from their mouth. Shake the spacer and attached inhaler, to get it ready for the next dose.
6. Put the spacer mask back on to your child's face (or get them ready with the mouthpiece) and administer the next puff.
7. Repeat the process until your child has had the prescribed amount of puffs.

**If the spacer makes a whistling noise, this means your child is breathing too quickly. Encourage them to take slower, deeper breaths to make sure they receive a sufficient dose of their medicine. It may help if you breathe with them, so they can copy you. Remember to shake the inhaler between each puff, otherwise your child will not get all of the medicine.**

## Cleaning the spacer

This only needs to be done once a month and the spacer should be replaced once a year. It doesn't matter if the clear plastic tube starts to look cloudy.

Remove the inhaler port and soak both parts of the spacer and the mask or mouthpiece in warm soapy water for 15 minutes. Rinse with hot tap water and leave to air dry in an upright position. Do not put any parts of the spacer in the dishwasher as this will damage it.

## When do I give my child their inhaler once we have been discharged from hospital?

If your child is wheezy/breathless give them 10 puffs of the (salbutamol) blue inhaler (with the spacer) up to every 4 hours. If they do not respond or improve after 10 puffs or they need it again within 4 hours you must seek medical attention.

If your child continues to be wheezy/breathless 48 hours after they have been discharged from hospital, seek further medical advice.

Make an appointment to see your child's GP within 48 hours of discharge, for a check-up.

If you are very concerned about your child's breathing, call 999.



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Braille or audio version, please call **01865 221 473**  
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September 2016

Review: September 2019

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