The Wheezing Child

What is a wheeze?
A wheeze is a whistling sound that is made as a person breathes. It is mainly heard when the person is breathing out. In most cases a wheeze is caused by the sound of air trying to move through the breathing tubes of the lungs when they become narrow or tight. The breathing tubes are often called the airways of the lungs. There are a number of causes for wheezing in a young child or baby. Some common causes for wheeze are explained below.

1. Viral chest infections
Viral chest infections are by far the most common cause of wheeze in pre-school children, accounting for virtually all wheezy episodes. Most children will only wheeze on one or two occasions associated with a viral infection, while some children will wheeze regularly with viral infections. Up to 66% of children who have frequent episodes of wheeze, will not be wheezy by 6 years of age and will not go on to develop asthma. Viral chest infections cause swelling and mucus to build up in the airways. This makes the airways narrow and causes cough and wheeze. Many viruses can cause wheezing in young children. These viruses are more common in the winter months.

2. Asthma
Wheezing in older children is often due to asthma. Asthma, eczema and hay fever in the family increases the chances of a child developing asthma.
Children with asthma have extra sensitive or “twitchy” airways inside their lungs. This means that their airways over react and become narrow when they come into contact with certain triggers. When this happens they can get short of breath, wheeze or cough. Colds or viral chest infections are the most common trigger for asthma in children. Cigarette smoke exposure is another important trigger. Some children can have specific allergies, which may also trigger their asthma.

3. Cigarette smoke
Young children who breathe in the cigarette smoke of people around them (passive smoking) have a higher risk of wheezing. Cigarette smoke exposure (i.e. passive smoking) can not only trigger wheeze in asthmatics, but also predispose children to the development of asthma, which they might not have developed, had they not been exposed to the smoke. Keeping the house and car smoke free at ALL times, is a vital step in helping to avoid wheezing in your child.
How will my doctor know what is making my child wheeze?

Your doctor will ask you questions about your child and family’s medical background. This will help your doctor decide whether it is just a virus causing the wheeze, or whether there is a chance that this might also be asthma.

Testing for a virus

Your doctor might order a test where a little bit of mucus is sucked from the back of your child’s nose through a long thin tube. The test only takes a few seconds. The mucus is then tested in a laboratory to see whether certain viruses are growing in it that may be causing your child to wheeze. These tests are sometimes helpful but do not always help in making a diagnosis.

Testing for asthma

- At the moment, there are no specific tests for asthma itself. Breathing tests in children over 5 years of age can determine whether obstruction is present which may be asthma. Sometimes a trial of asthma medication may be used to help decide whether your child has asthma.

What treatment will my child need to get better?

For a viral chest infection:

- Antibiotics are not effective in the treatment of viral chest infections, so in most cases they are not needed. The virus will go away by itself.
- In some children with severe respiratory infections, oxygen may be needed in hospital to help with their breathing. The oxygen is given through a face mask or by a thin tube that sits just inside the nose. The nurses caring for your child will closely check your child’s breathing and their need for oxygen.
- Asthma medications may be tried for children older than 12-18 months. For younger infants with viral wheezing, asthma medications are less likely to help.

If asthma is suspected:

- A “reliever” medication, like Ventolin will be administered and if the child has asthma, the reliever medication will help to open up their airways to make breathing easier. Ventolin is breathed into the lungs and is usually given through a puffer and a spacer, or occasionally through a nebuliser.
- A steroid called Prednisolone (Redipred) may be given to help your child recover quickly from their asthma. It is usually taken as a syrup or tablet over a 3 to 5 day period. When taken this way it is very safe with no risk of steroid side effects.
What will I need to do, once my child is well enough to go home:

**Reliever medication**
If your child was treated with reliever medication while in hospital, you will be given a reliever puffer, a spacer and sometimes a mask to give to your child at home. The reliever medicine will most commonly be Ventolin. Other relievers are Asmol and Airomir. These all contain Salbutamol.

In children, puffers have to be given with a spacer and sometimes a mask, to help ensure that the medicine can get down into their lungs. Your nurse will show you how to use the puffer with the spacer. You will also be given written instructions on how to use and how to care for your spacer.

Before you go home, your doctor or asthma nurse will write out an action plan for you. This action plan will let you know how much of the reliever puffer to give at home, how often to give it and when to stop it. It also details what you need to know in case your child has another wheezing episode.

**Follow-up appointment with your doctor**
- It is a good idea to take your child to see your family doctor within a week of going home.
- This is important so your doctor can:
  - check to see if your child has improved,
  - check how much longer your child will need to continue treatment, and to
  - let you know when to have your child reviewed again.

**What should I do if my child ever wheezes or has trouble breathing again in the future?**
- Follow the instructions written out on your child’s action plan.
- Keep your child’s action plan somewhere handy, so you can use it when needed.
- Take your child to see a doctor as soon as possible.

**How will I know if my child is having breathing problems or needs to use their reliever puffer?**
It is important to remember how your child looks and behaves when they are well, so that you will notice the difference if they start to have breathing trouble. Watch closely for any signs of a cold or flu. Wheezing or breathing problems may follow.
Any one of the following signs means that your child is working harder to breathe:

- Sucking in between the ribs or at the base of the neck as they breathe in.
- Breathing harder or faster than normal.
- Tummy pulling in and out as they breathe.
- Wheezing.
- A persistent cough.

If your child displays any of the above symptoms follow your child's action plan, give their reliever and see a doctor as soon as possible.
When should I call an ambulance?

**Call an ambulance on 000.** Follow your action plan if your child shows any one of the following signs:

- Blue at the lips, or
- Can't say more than a few words at a time because they are so breathless, or
- So tired they look like they are going to stop breathing, or
- Breathing very fast, cannot be comforted, are restless or
- Having trouble feeding because they are so short of breath, or
- If you or your child is frightened by what is happening.

While waiting for the ambulance, give your child their reliever puffer through their spacer 4 puffs every 4 minutes until the ambulance arrives.