

No 9. Wheezy Infants (under 2 years of age)

1. Virus induced breathlessness

- When young babies have viral colds, the lining of tubes to their lungs may become swollen. This and the extra mucus caused by the cold can make the tubes very narrow and then it is hard to move the air through the tubes to the lungs when breathing.
- The noise of the air moving through the tubes can sound like a soft whistle or wheeze.
- In some babies, the tiny muscles that surround the airway tubes tighten during virus infections and this makes the tubes even narrower. This condition is called bronchiolitis.

2. Why is the child breathless?

- It is hard work to move air through narrow airway tubes (like trying to breathe through a drinking straw). Babies try to cope with the work by breathing faster or harder than usual but they can get very tired if they have to do this for many hours.

3. Signs to watch for

- Most babies can manage the extra work of breathing during colds but sometimes they need help. If the airway tubes are swollen or blocked with mucus the breaths may not be enough to carry oxygen to the lungs. This can become a serious problem if it stops the breathing being effective.

4. When to call the doctor for a breathless child

- When the baby is too breathless to feed or drink
- If the baby's colour becomes blue over the lips or tongue
- If the child cannot be woken from sleep
- If the child does not respond to voice
- If the child is very floppy when lifted
- If the child's chest pulls in with each breath or there is a grunt with every breath

5. How to describe the problem on the phone

- Say if the child has trouble breathing, if their breathing is noisy and if their chest pulls in with each breath.
- If their colour is blue or greyish white
- If their breathing has gone from noisy to quiet as they get worse
- If they cannot be woken or do not respond

6. What treatment is needed?

- There are no medicines that kill viruses. If the tubes are swollen but the baby is coping with the extra work, it is often best to let the virus infection clear itself and to give treatment like extra oxygen and tube feeding if needed, to help the baby cope.
- If the child has wheezing or breathlessness caused by tight muscles around the airway tubes, then inhaled medication or sometimes steroid medicine may help. These help only some babies and can cause side effects if used for other types of breathing difficulty.
- Antibiotics do not help treat viral infections. An antibiotic will help if there is a second infection causing complications. If this is suspected, a chest x-ray can help decide best treatment.
- If the baby gets too tired to keep breathing enough, then it may be necessary to help them with a ventilator. For this, the baby is transferred to a children's Intensive Care Unit.

7. Can further attacks be prevented?

- Every baby catches colds and it is normal for them to have around ten viral respiratory infections a year for the first few years. Young babies who are in contact with other children are especially prone to these.
- The main way to help avoid the illness being so severe and aid recovery is to keep the baby away from anyone who smokes near them. Keeping the whole house smoke free can really help. Many children have less problems as they get older but avoiding exposure to tobacco smoke helps at all ages.

8. Is this asthma?

- Viral induced breathlessness is not the same as asthma, but some children with this diagnosis will go on to have asthma as they get older. Babies whose parents or brothers and sisters have asthma, eczema or hay fever are more likely to go on to have asthma and some of them will respond well to asthma treatments during these viral wheezy illnesses.

9. Home based action plans

- It may be possible to plan for early treatment to start before the breathlessness gets so bad that the child needs to go to hospital.
- Action plans depend on parents and doctors knowing what the danger signs are on this child and planning treatment to start from then. This is generally possible only if the child has repeated attacks with the same pattern of symptoms each time and the same response to treatment.
- Such plans should be agreed ahead and include plans for:
 - when to call an emergency doctor
 - when to go direct to hospital and
 - when to see the doctor if all goes according to plan and the child stays at home.

10. Happy Wheezers

- There are a few babies who wheeze even when they seem to be well. Because they do not seem distressed by their breathing, often well grown or even quite chubby babies, they are often called 'happy wheezers'. Their wheeze does not change with treatment and over time it improves. Even when these babies look 'happy' they often have to breathe more quickly than normal. Their work of breathing can be very hard when they have a viral cold.
- It is not known exactly what causes this pattern.
- It is commoner in infants whose mothers smoked in pregnancy. Smoking in pregnancy can slow the growth of the developing baby's lungs. It may be that the baby's airway tubes are too small for the needs of breathing oxygen. It may help to avoid letting the baby put on more weight than normal and, again, to avoid exposing the baby to tobacco smoke.

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