

Bronchiolitis

What is bronchiolitis?

Bronchiolitis is a chest infection in which there is inflammation of the *bronchioles*, which are the smallest branches of the respiratory tree of the lungs. This results in narrowing and blockage of the small air passages with mucus, leading to a negative effect on the transfer of oxygen from the lungs to the bloodstream.

Bronchiolitis can be confused with bronchial asthma or the effects of an inhaled foreign object.

What is the cause of bronchiolitis?

It is caused by one of the common respiratory viruses, especially respiratory syncytial virus. The virus appears to have a particular tendency to target the bronchioles in infants. It is a contagious condition which is usually spread from droplets released into the air by coughing. It can also be spread by hand contact with secretions from the nose or lungs. Bronchiolitis usually occurs in the winter months.

Who gets bronchiolitis?

It typically affects babies from 2 weeks to 12 months, especially under 10 months of age.

What are the symptoms?

At first the infant usually develops symptoms of a mild common cold with a runny nose, fever and cough for about 48 hours. As the infection progresses over the next day or so, the following irritations develop:

- irritating cough
- wheezing
- rapid breathing.

These more severe symptoms last about 3 to 5 days. In a very severe episode there are:

- retractions of the chest and abdomen ('see-saw' movements)
- hypoxia (lack of oxygen)
- possible cyanosis (blue lips or skin).

What is the expected outcome?

The wheezing usually lasts for about 3 days only, and as it settles the child gradually improves. Most babies can be treated at home and are usually better in 7 to 10 days. The cough can last up to a month or so.

Does bronchiolitis recur?

It usually occurs once only but can recur. Some infants can have recurrences in the first 2 years and some

develop bronchiolitis after every cold, especially if there is an underlying tendency to asthma. Some infants with recurrent bronchiolitis may eventually develop asthma. However, most infants with recurrent wheeze will not develop asthma.

What are the risks or complications?

In some cases the infection is severe and the children become depleted in essential oxygen and fluids. They require hospitalisation. Complications, including secondary bacterial pneumonia, are uncommon.

What is the treatment?

There is no particular medicine, including antibiotics, that cures bronchiolitis because it is a viral infection. It gets better naturally but care is required.

Home management

Milder cases (the majority) can be managed at home.

- Encourage quiet resting.
- Paracetamol is recommended for fever.
- The important issue is to keep up plenty of fluids, especially in the very young. Give 1 to 2 extra bottles a day or more frequent breastfeeds. If feeding is difficult give smaller quantities more often.
- Ensure the home environment is smoke-free.

Hospital management

More severe cases with respiratory distress need to be admitted and given oxygen and special feeding.

When to seek help

Seek help if any of the following occur:

- worsening cough and wheeze
- poor fluid intake—refusal to feed, fewer wet nappies, less than half normal intake over 24 hours
- difficult rapid breathing
- difficulty with sleeping
- blueness around the lips
- child generally flat and ill.

Key points

- Bronchiolitis is a viral infection in the first year of life.
- It usually gets better in 7 to 10 days.
- Antibiotics will not cure it.
- Extra fluids are usually needed.
- It usually is a once-only condition.
- Some children get recurrences over 2 years.

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