Bronchiolitis and RSV

Bronchiolitis is a viral chest infection that affects babies and children under two years old more severely than older children. It's most commonly caused by the respiratory syncytial virus (RSV).

Call 999 for urgent help if:

- your child is struggling to breathe. They may grunt or draw the muscles under their chest in when they breathe. This makes them look like they are breathing with their tummy.
- your child's breathing stops for 20 seconds or longer on one occasion, or there are regular shorter pauses in their breathing.
- the colour of your baby's skin inside the lips or under the tongue turns blue.

What is bronchiolitis?

Bronchiolitis is an infection of the smaller airways in the lungs (called the bronchiole or bronchioles). It's more common in babies and very small children up to two years old and is commonly caused by the respiratory syncytial virus (RSV).

Different conditions of similar names

Bronchiolitis should NOT be confused with a very rare condition called bronchiolitis obliterans (even though they share a similar name).

Bronchiolitis vs bronchitis?
Although the names sound similar, bronchitis is another different condition. Bronchitis is an infection affecting the larger airways (called the bronchi). Long-term (chronic) bronchitis is a form of chronic obstructive pulmonary disease (COPD).

How are babies and toddlers affected by bronchiolitis?

Bronchiolitis usually starts like the common cold. It can make your baby or toddler cough and become breathless. This makes it hard for them to breathe and feed.

Bronchiolitis usually starts with a runny or blocked nose, and over 2-3 days the infection may pass down to the smaller airways (bronchioles) in your child's lungs causing them to become inflamed and clogged up with mucus.

In most cases their breathing and feeding will get better within five days. Their cough might last longer.

Is my child at risk?

Bronchiolitis is more common in babies and very small children up to two years old. It's most common up to the age of six months.

Some babies and children are at greater risk of developing severe bronchiolitis:

- premature babies, or those who were born with a lower-than-average birth weight
- babies with existing heart or lung conditions
- babies with poorly developed immune systems
- children with Down's syndrome.

Exposure to tobacco smoke makes it more likely for a baby or toddler to develop more severe bronchiolitis.

Your baby or toddler is most likely to develop bronchiolitis in the UK between October and March when respiratory viral infections are more common.

How serious can bronchiolitis be?

Most children only develop mild symptoms which clear up after a few days, and clear up fully usually after less than a month. Almost all make a full recovery with no long-term effects.

Some children will experience more severe bronchiolitis symptoms. After severe bronchiolitis, it's not uncommon for children to have a cough for weeks or months following the infection. Some may experience intermittent noisy breathing (called wheezing). It is very rare for babies and children without underlying health problems to die from bronchiolitis.

What are the symptoms of bronchiolitis?

Bronchiolitis usually starts like a simple cold. Most babies will only have mild symptoms and you can look after them at home.

Mild bronchiolitis symptoms

Mild symptoms can include:

- a slightly high temperature (fever) – a normal temperature for babies and children is about 36.4C, but this can vary slightly
- a dry and persistent raspy cough
- some difficulty feeding
- some difficulty breathing or fast breathing
- noisy breathing (wheezing).

Severe bronchiolitis symptoms

Some babies have more severe symptoms. They might find it hard to feed and become very breathless or breathe in a shallow, irregular way.

If your baby has a cold that goes on for longer than usual, watch out for the following:

- your child's breathing becoming laboured (very hard work)
- they aren't feeding well - taking half to three quarters of their normal amount, or having dry nappies for 12 hours or longer
- your child is more sleepy or less alert than usual
- your child's body temperature is above 37.5 degrees.

If your child has any of these symptoms, contact a doctor, nurse or pharmacist.

When should I seek medical assistance?

If your baby has mild symptoms, you can usually look after them at home. But always speak to your GP, pharmacist or another health care professional if you have any concerns. You can also call our helpline on 03000 030 555 – our team of friendly nurses are available Monday to Friday, 9am – 5pm.

If your child has severe symptoms of bronchiolitis, get in touch with a health care professional. Out of hours, call NHS 111 (in England and Scotland), NHS 111 Wales or 0845 46 47 (in Wales) or your local out-of-hours service (in Northern Ireland).

Call 999 for urgent help if:

- your child is struggling to breathe. They may grunt or draw the muscles under their chest in when they breathe. This makes them look like they are breathing with their tummy.
- your child's breathing stops for 20 seconds or longer on one occasion, or there are regular shorter pauses in their breathing.
- the colour of your baby's skin inside the lips or under the tongue turns blue.

How is bronchiolitis diagnosed?

A diagnosis of bronchiolitis is made without special tests. Your doctor will ask you about your child's symptoms, check their temperature and listen to their chest. To make a diagnosis the doctor or nurse will consider:

- your child's age
- their symptoms
- their breath sounds (the sound of your baby or toddler's chest when listening with a stethoscope)
- their body temperature.

The doctor or nurse may also check how much oxygen is in your child's blood, using a machine called a pulse oximeter. The pulse oximeter is placed on your child's finger or toe. The pulse oximeter sends light through their skin, which helps detect how much oxygen is in their blood. Pulse oximetry is completely safe and painless.

What causes bronchiolitis?

Bronchiolitis is almost always caused by a virus. The most common virus that causes bronchiolitis is called respiratory syncytial virus or RSV.

When does RSV typically circulate?

In the UK, RSV circulates every year. It typically starts in October and lasts until March, with numbers peaking in December or January.

How common is RSV?

According to statistics from Public Health England, over 60% of children will have caught RSV by their first birthday. And over 80% will have caught the virus by the time they are two years old. Generally speaking, children cope better with RSV as they get older.

Who is at greater risk from RSV?

While most RSV infections cause a mild illness, babies less than six months old are more likely to develop more severe symptoms. Children born prematurely, or those with a long-term lung condition, are also at increased risk of developing a serious illness from RSV.

How can I tell if my child has caught RSV?

RSV infection symptoms are similar to the common cold. For adults and children alike, symptoms are usually mild and can include a runny nose, mild cough, raised body temperature and headaches.

Not all babies infected with RSV or other viruses will go on to develop bronchiolitis.

What can I do to prevent the spread of RSV?

Viruses are spread through the coughs or sneezes of someone who is infected. They can be breathed in from the air or picked up from a surface like skin, toys or door handles.

Transmission of viruses such as RSV can be reduced by:

- practising good hand hygiene (washing your hands with soap and water for at least 20 seconds)
- wiping down surfaces
- avoiding contact with people who have colds or cold-like symptoms.

You can help prevent your child from developing bronchiolitis by taking steps to stop the spreading of viruses.

What is the treatment for bronchiolitis?

Bronchiolitis is treated in different ways, depending on the severity of your child's symptoms.

How can I care for my child with bronchiolitis at home?

Bronchiolitis usually gets better by itself, and most children can be looked after at home.

If your baby has severe symptoms or you are concerned, get in touch with your GP, NHS 111 or go to A&E.

Here are some things you can do at home to care for your child:

Make sure your baby gets enough fluids

Keep an eye out to see if your baby is struggling to feed or is taking longer than usual.

If you're bottle-feeding, check to see if your baby is completing the bottle in the usual time. It may be better to give smaller feeds more frequently to prevent your baby becoming tired.

Help your baby breathe more easily

Babies and children with bronchiolitis find it difficult to breathe normally. You can make it easier by:

- holding your baby's head more upright when feeding
- using saline nasal drops to keep the nostrils clear (in line with the pharmacist's instructions)
- using a humidifier to moisten the air, if you have one.

Give paracetamol or ibuprofen

No medicines can cure bronchiolitis. You can give your baby the normal medicines you would give for a cold, such as paracetamol or ibuprofen made for infants. When used as recommended paracetamol or ibuprofen can be helpful and safe - they can take away mild aches and pains, lower elevated body temperatures and make children feel better. If you're not sure what to give your child, ask a pharmacist.

A high temperature can be scary, but it's a natural response to infection. Keep your baby cool but don't try and reduce your child's fever by sponging them with water. Don't underdress or over-wrap a child with a fever. The NHS has useful information on high temperature (fever) in children at **www.nhs.uk/conditions/fever-in-children**

What about antibiotics?

Bronchiolitis is caused by a virus so antibiotics will not help and can have side effects of their own. Doctors should not prescribe them for treating bronchiolitis.

Keep your baby away from cigarette smoke

Tobacco smoke and the vapours from e-cigarettes can make breathing more difficult. Don't smoke cigarettes or vape in your home or anywhere near your child, and ask others not to as well.

Avoid spreading the virus

Bronchiolitis is highly infectious. Keep toys and surfaces clean and make sure everyone who comes into contact with your baby washes their hands thoroughly.

Treatment for bronchiolitis in hospital

A few babies with bronchiolitis – about 3 in 100 – may need to go to hospital for help with their breathing and feeding. It's usually if they aren't getting enough oxygen into their bloodstream, or if they're not eating or drinking enough.

Children are more at risk of being admitted to hospital if they were born prematurely (before week 37 of pregnancy), or if they have an underlying health condition.

Breathing problems in children can be very worrying. Find out which signs and symptoms to look out for and when you should call 999 at **blf.org.uk/breathing-problems-in-children/when-to-call-999.** If you are concerned, get in touch with your GP, NHS 111 or go to A&E.

If it's not already been tested for, a sample of your child's mucus may be taken to see which virus is causing the bronchiolitis. If it's found your child has RSV, they'll be kept away from other children in the hospital who aren't infected with it, to stop the virus spreading further.

Be given extra oxygen

The doctor or nurse may check how much oxygen is in your child's blood, using a machine called a pulse oximeter. The pulse oximeter is placed on your child's finger or toe. The pulse oximeter sends light through their skin, which helps detect how much oxygen is in their blood. Pulse oximetry is completely safe and painless.

If your child needs more oxygen, it will be given to them through tubes in their nose or a special face mask. This will help more oxygen get into their lungs and will improve their breathing.

Help with feeding

If your child is struggling to be fed, they may be given fluids or milk through a feeding tube (called a nasogastric tube). This is a thin plastic tube that goes into your child's nose and down into their stomach.

If your child cannot be given a nasogastric tube, or they're at high risk of respiratory failure (their breathing is very laboured and difficult), they'll be given fluids directly into a vein (intravenously).

Be treated with nasal suction

If your child's nose is blocked and they're having trouble breathing, or it's affecting their ability to feed, a small plastic tube may be inserted into your child's nostril to suck out the mucus.

Support if my baby is treated in hospital

We know seeing your baby being treated in hospital can be a very difficult experience. Parents and guardians that we've spoken to have described feeling "worried", "scared" and having to "stand their ground" to have their child symptom's taken seriously.

It's important to remember your baby is in the right place to get the best care. If you'd like to talk to someone, our helpline is there for you. Call 03000 030 555 – we're available Monday to Friday, 9am to 5pm. We have a team of health care advisors, as well as our clinical nurse team who can offer advice and support.

When will my child get better?

In most children, breathing problems usually improve after a few days. A cough can take longer to improve and get better.

As long as your child has:

- breathing problems
- a raised body temperature or
- isn't feeding well

they shouldn't go back to nursery. Talk to your child's nursery to find out when they will be happy for your child to return.

If your child has to be admitted to hospital, the length of the hospital stay will vary depending on the severity of the illness. You will be able to care for your child at home when the medical and nursing staff believe your child is safe to be at home and no longer requires hospital care.

How can I prevent bronchiolitis?

Practise good hygiene and avoiding people with infections

We should all do what we can to prevent the spread of illnesses, by:

- keeping away from other people (adults and other children) who have a cough or a cold – this is common sense, but not always possible
- making sure you, your family and anyone who handles your baby washes their hands regularly - you should also regularly wash your child's hands
- wiping down surfaces and toys, and wash and dry eating utensils after use
- covering your child's mouth and nose if they cough or sneeze. Use a tissue and throw it away as soon as it's been used.

Practising good hygiene is an important way of reducing viral infections, like bronchiolitis. During the COVID-19 pandemic, cases of bronchiolitis and other viral infections (including RSV) decreased dramatically. This was partly due to preventative measures like lockdowns and social distancing, as well as increased public awareness of the importance of good hygiene and wearing of masks.

Don't smoke

Do not smoke, or let others smoke, around your baby. It makes your baby more likely to pick up an infection and to make their symptoms worse.

Consider special immunisations if your child is in a very high-risk group

Short term immunisation may be available for a very small number of infants at high risk of developing severe bronchiolitis. There are clear guidelines on who is eligible, and those who qualify will be offered a series of injections during the bronchiolitis season. Ask your doctor or nurse for more information if you think your child might fall into this group.

Can bronchiolitis come back?

Yes. It's possible for your child to get bronchiolitis more than once, even multiple times in a season. You can reduce the risk by taking the steps outlined above.

Additional resources you might find useful

Bliss – Bliss is the leading charity for babies born premature or sick. Their website has information, support and stories shared by people with experience of bronchiolitis and neonatal care.
www.bliss.org.uk

NICU, SCBU and you – a podcast hosted by Bliss. It provides information and support for parents, guardians and families experiencing neonatal care.
audioboom.com/channels/4977978

National Childbirth Trust (NCT) – NCT is the UK's leading charity for parents. They have information and support for parents, aimed at babies and toddlers up to 24 months.
www.nct.org.uk

Get in touch with us to find support near you.

Helpline: **03000 030 555**

Monday to Friday, 9am-5pm

Ringing our helpline will cost the same as a local call.

helpline@blf.org.uk **blf.org.uk**

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We value feedback on our information. To let us know your views, and for the most up to date version of this information and references, call the helpline or visit **blf.org.uk**