

Your quick guide to:

Asthma and Anaphylaxis: Can we reduce the risks to our children?

This factsheet summarises the findings of the 2024 Child Mortality Database Report, which reviewed all asthma and anaphylaxis-related deaths in children in the UK between 1st April 2019 and 31st March 2023.

It also explains key outcomes from the review and provides context for the report's recommendations, offering practical advice on how we can all help reduce the risk of serious asthma and allergic reactions in children.

Why is important to have a review of asthma deaths?

The review identifies common factors in child deaths across the UK, analysing each case to understand why it occurred and what actions can be taken to reduce or prevent similar risks in the future.

"Every child who dies is a precious individual and their deaths represent a devastating loss for parents, siblings, grandparents, carers, guardians, extended family and friends. With all child deaths there is a strong need to understand what happened, and why. We must ensure that anything that can be learned to prevent future deaths from happening is identified and acted upon." (CMD 2024).

You can access the key findings of the report here.

The findings of the report

The report found that 54 children and young people died from asthma and 19 from anaphylaxis during the review period, with those aged 15–17 identified as the most at-risk group.

All of the children who died had both asthma and allergies. The allergens involved included foods such as nuts, cow's milk, egg, and seafood, as well as environmental triggers like house dust, pollen, mould, and animals. Other contributing factors included infections, as well as both indoor and outdoor air pollution.

Of the 54 children who died from asthma, 18 were from Asian, Black, Mixed or other minority ethnic backgrounds, and 35 were White. Among the 19 anaphylaxis deaths, approximately 50% were from minority ethnic backgrounds and 50% were White. The majority of these children lived in urban areas, and a significant proportion came from the most deprived parts of the UK.

Modifiable factors

The report highlighted some modifiable factors; these are things we can do to reduce the risk factors that lead to worsening asthma and increase the risk of serious allergic reactions.

- Avoid smoking near children. Children who lived in houses where people smoked cigarettes, vaped or other things like cannabis were at a higher risk factor for worsening asthma, as were children and young people who smoked or vaped.
- Maintain a healthy lifestyle with regular exercise and eating a balance diet to support the immune system. Being obese was identified as a risk factor for asthma.
- Understand your allergic and irritant trigger factors and put in place avoidance or measures to reduce exposure where possible. Environmental factors as well as food allergens were all contributing factors.
- Agree a personalised asthma or allergy action plan with your health care professional.
- Request education on correct device technique, how to recognise asthma deterioration, or a serious allergic reaction and know what action to take with a sudden deterioration, and when to call for emergency help.
- To support recognition and treatment of other allergic conditions such as allergic rhinitis and eczema which may impact on symptom control.
- The need for clear labelling on food packaging and to understand what that labelling means for your child e.g. precautionary allergy labelling (PAL).

How can I include these modifiable factors and recommendations into my child's asthma and allergy care?

Key facts:

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All of the children who died had both asthma and allergies.

Poor communication

between professionals and families was identified as a contributing factor in 25% of the cases reviewed.

In some cases, important information was not provided in the parent or carer's native language.

The review found that many of the children who died did not have an asthma or allergy action plan in place.

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If you have any comments about this Factsheet, contact Allergy UK on info@allergyuk.org. The guidance in this Factsheet is based on current best practice and





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Be involved in your child's asthma and

Ensure you agree a personalised asthma or allergy action plan with your health care professional.

- Personalised asthma action plan (PAAP)
- · Allergy management plans.

allergy care.

The review found that many of the children who died did not have an asthma or allergy action plan in place.

Action plans play a vital role in helping individuals manage their symptoms, recognise when to seek medical help, and know what steps to take in an emergency. They also support shared decision-making by outlining agreed treatments and care to help manage the condition effectively.

In addition, regularly attending asthma and allergy reviews is essential for ongoing monitoring and support.

Seek advice

If you notice that you or your child's symptoms are getting worse, especially if they begin to affect daily activities, hobbies, or mental wellbeing, seek medical advice without delay.

The report found that 65% of children who died from asthma and 47% of those who died from anaphylaxis had attended A&E in the year before their death due to their symptoms.

Frequent visits to A&E or hospital admissions for asthma or allergic reactions are signs that the condition is not well controlled, this significantly increases the risk of a life-threatening asthma attack or severe allergic reaction.

Communicate

Poor communication between professionals and families was identified as a contributing factor in 25% of the cases reviewed.

Concerns were raised by parents and carers about the care provided, including the lack of clear guidance on how to recognise symptoms or what to do if their

child's condition worsened. In some cases, important information was not provided in the parent or carer's native language.

Why does good communication matter?

Clear communication ensures that families understand how to identify when a condition is getting worse and what steps to take. It also helps them make informed decisions about treatment options and understand the importance of ongoing care and management. Good communication empowers families to play an active role in their child's health and safety.

Be informed

Ask about the treatment or management options for you or your child so that you can understand what the asthma and allergy triggers are and how their treatment works.

- Take asthma and allergy medication as prescribed to achieve good symptoms control
- Ensure that you and your child have been taught how to use the prescribed medical devices.

Why is this information important?

Children with poorly controlled asthma are at greater risk of severe asthma attacks that may require hospital admission. They are also more vulnerable to serious breathing difficulties if they experience a severe allergic reaction.

For those living with both asthma and allergies, the risk of a severe allergic reaction is significantly higher when asthma is not well managed.

That's why it's vital to keep asthma under control, by following an asthma and allergy action plan, taking medication exactly as prescribed, recognising when symptoms are getting worse, and knowing when and how to seek help.

Preventer inhalers should be used regularly as directed. Trainer pens for adrenaline autoinjectors are available from manufacturers to help you practise using them with confidence.

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Be aware Asthma

If you use your reliever inhaler (usually coloured blue) more than 3 times a week or need a prescription for a reliver (blue inhaler) more than 3 times a year, then you need to seek advice from your GP or asthma/ practice nurse as this is an indication your asthma is poorly controlled.

The report found that 87% of the children who died from asthma had three or more reliever inhalers (salbutamol) prescribed in the year prior to their death with 50% having used 12 or more.

The regular use of a reliever inhaler (more than three times a week) to manage asthma symptoms is a cause for concern and indicates that the asthma is not well controlled.

Of the children reviewed, 35 children used less than nine preventer inhalers in the year before they died and 23 used four or fewer in the year before they died.

Preventer inhalers contain a very low dose of corticosteroid that is inhaled directly to the airways to ensure that the medicine is targeted to work in lungs, some are also called combination inhalers and combine a reliver and corticosteroid to aid symptom control. This medicine needs to be taken on a regular basis to be most effective (on average one inhaler will last approx. 4-6 weeks if used regularly).

If you or your child has asthma and has only been prescribed a reliever (salbutamol) inhaler, but not a corticosteroid preventer inhaler, you should be reviewed by a qualified healthcare professional as soon as possible.

Important tip: Many inhalers do not have a dose counter, making it difficult to know when they are empty. If yours doesn't, keep track of when you start using it, and replace it every 4-6 weeks if used daily.

Anaphylaxis

Some of the children in the report had an adrenaline autoinjector but did not carry it with them. Not all of the children had an Adrenaline autoinjector that was in date.

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Adrenaline auto-injectors (often referred to as EpiPen or Jext pens) are lifesaving medications designed to be used for a serious allergic reaction (anaphylaxis). They only work if you take them with you everywhere you are going.

Adrenaline auto-injectors do have a sell by date, and if out of date a new prescription should be ordered as the adrenaline will start to degrade and not be as effective. However, do not get rid of your adrenaline autoinjector until you have received your new in date adrenaline autoinjectors.

Know your trigger factors

Where possible, be aware of your allergic triggers and discuss these with healthcare professional how to put avoidance or reduction measures in place where appropriate. If you are unsure of your allergen triggers you could try keeping a symptoms diary to see if there is any pattern to your symptoms.

The report found that 54% of the children who died from asthma also had allergies that had contributed to their worsening symptoms. Nine reported "no known allergies" and 19 reported no information on allergies.

Allergens were reported as food including nuts, cow's milk egg and shellfish, environmental allergens including house dust, pollen, animals and mould.

There was a need for clear labelling on food packaging and to understand what that labelling means for your child e.g. precautionary allergy labelling (PAL).

Other contributing factors identified in the report

Infections which can trigger or worsen asthma symptoms.

- Air pollution. All the children in the report lived and attended school in areas with high levels of traffic-related pollution.
- Poor indoor air quality. Exposure to smoke, dust, and mould can significantly worsen asthma.

Indoor air quality plays a vital role in the health of children and young people. Poor housing conditions, such as damp, mould, dust, and the presence of pet dander, are strongly linked to more frequent and severe asthma and allergy symptoms.

Lifestyle factors

Having an active lifestyle and healthy eating will help support your immune system and manage your symptoms of asthma and allergies as well as the following.

- Do not smoke, vape or use recreational drugs such as cannabis indoors or in enclosed spaces near your child as exposure to smoke is a high-risk factor for asthma and allergic reactions.
- For older children and young people discourage smoking, vaping or use of recreational drugs such as cannabis.
- Maintain a healthy weight as obesity is a risk factor in managing asthma symptoms.
- Indoor irritants and allergens, house dust, mould, smoke and pet allergens were identified as some of the risk factors for poor asthma control.
- Outdoor provoking factors identified included pollen, mould and air pollution.
- Children who lived in houses where people smoked cigarettes, vaped or used recreational drugs such as cannabis were high risk factors for worsening asthma, as were children

and young people who smoked or vaped.

Understand how to respond in an emergency

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Asthma

Recognition of worsening asthma is crucial, even children with mild or well controlled asthma can have an asthma that deteriorates and can become very serious very quickly. Symptoms of worsening or uncontrolled asthma, include increased breathlessness, especially on exertion; waking up at night with coughing, wheezing and or shortness of breath, if any of these symptoms occur you need to seek medical advice.

Emergency action - Call 999. Parents/ carers should be instructed to state clearly that the child is having an asthma attack, breathing difficulty, is short of breath, or not responding to their blue reliever when calling emergency services, as these words trigger priority response.

How to support someone having an asthma attack.

Anaphylaxis

Anaphylaxis is a serious allergic reaction and a medical emergency. Common causes of anaphylaxis include food, wasp/bee venom (stings) and medication. Recognising the signs and symptoms early and treating quickly with the medicine 'adrenaline' is vital to save life.

Emergency action - Give adrenaline if available, dial 999 for an ambulance and state anaphylaxis (ana -fill- axis) to get medical help as soon as possible. Stay with the person having the allergic reaction until medical help arrives.

How to support someone in anaphylaxis.

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