



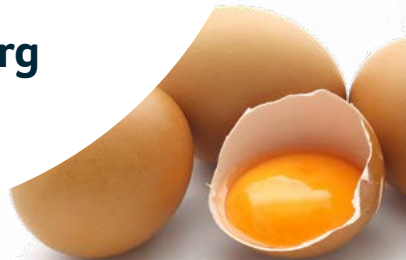
Anaphylaxis

The four **A**'s:

Awareness / **A**llergic signs & symptoms / **A**drenaline / **A**ction

Allergy UK Helpline 01322 619898

www.allergyuk.org



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Awareness

Understanding anaphylaxis

Anaphylaxis is a severe and potentially life-threatening allergic reaction. It usually comes on within minutes of being exposed to the 'allergen' (the substance responsible for the allergic reaction) but it may take longer for symptoms to develop.

Anaphylaxis is a medical emergency. Recognising the signs and symptoms early and treating quickly with the medicine 'adrenaline' is vital.

Anaphylaxis can be triggered by foods, medications, insect venom (insect stings) or other substances, for example latex. The most common cause of anaphylaxis in children is food, whilst medication and insect venom are more common triggers in adults.^{1,2} Sometimes there is no known cause for an anaphylactic reaction. This is called idiopathic anaphylaxis.

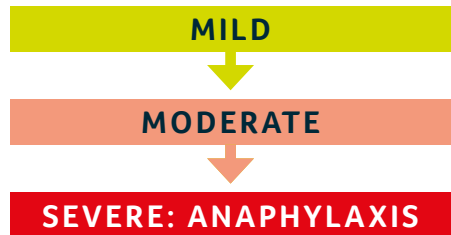
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Common allergic triggers include:

- Food (cow's milk, egg, fish, peanut, sesame and tree nuts)
- Medications (antibiotics such as penicillin, pain medication such as aspirin or drugs used for operations for sedation and anaesthesia)
- Venom (from stinging insects like bees and wasps)
- Latex (rubber gloves, balloons, condoms)



Allergic reactions can be mild, moderate or severe, with the most severe and life-threatening type called anaphylaxis. Anaphylaxis affects many important systems in the body including the airway, breathing and circulation.



There is no way of predicting how mild, moderate or severe an allergic reaction will be.

Risk factors for anaphylaxis include asthma that is not well-controlled and/or having had a previous severe allergic reaction.

Other factors that may affect how severe an allergic reaction is include:³

- Physical exercise
- Medication – prescription and recreational drug use
- Alcohol
- Stress
- Infection/high temperature
- Hormones



Allergic signs & symptoms

Allergic signs and symptoms need to be recognised early to ensure that the right treatment is given promptly.

Signs of an allergic reaction usually occur within minutes of being exposed to an allergen but can appear up to two hours after exposure. Mild to moderate allergic symptoms can be treated with antihistamine medication but should be considered as possible 'early warning signs' as mild reactions can quickly develop into more severe allergic reactions.



Signs of a mild to moderate allergic reaction may include one or more of the following:



Rash (hives),
redness, itchy skin



Swelling of the lips,
eyes or face



Itchy or
tingling mouth



Stomach pain,
nausea, vomiting

Signs of a severe allergic reaction (anaphylaxis) include one or more of the following symptoms which can be difficult to determine:



Airway:

- Swollen tongue
- Difficulty swallowing
- Throat tightness
- Change in voice (hoarse/croaky)



Breathing:

- Difficulty breathing
- Chest tightness
- Noisy breathing
- Persistent cough
- Wheeze



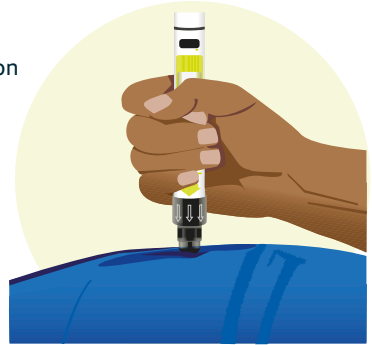
Circulation:

- Feeling dizzy or faint
- Collapse
- Loss of consciousness
- Pale and floppy (in babies/small children)

Adrenaline

Adrenaline is an emergency medicine used to treat a severe allergic reaction. It works quickly to reverse the symptoms of anaphylaxis by reducing swelling, opening up the airway and improving blood pressure. Antihistamines should never be taken instead of adrenaline in the case of a severe allergic reaction. If asthma and symptoms of a severe allergic reaction occur at the same time then adrenaline should always be given first and the asthma relief inhaler afterwards.

Adrenaline auto-injector (AAI) devices contain the medicine adrenaline which is administered by an injection into the muscle in the middle of the outer thigh (upper leg). AAI's are prescribed by a doctor for those at risk of a severe allergic reaction based on an individual's needs. They are designed to be user-friendly and to be used by anyone. It is important to know how to use the type of AAI you have been prescribed.



Action

- If the person having a severe allergic reaction has an adrenaline auto-injector (eg Epi-Pen) this should be used without delay.
- Always call an ambulance – dial 999 – say (**ANA-FIL-AXIS**) – to get medical help as soon as possible
- Position is important - lie the person flat. If they feel that their breathing is affected by this position, as in asthma, then help them sit up slightly but do not stand them up. Standing or moving (unless in an unsafe place) should be avoided.
- Stay with the person having the allergic reaction until medical help arrives. If there is no improvement after five minutes and another adrenaline auto-injector is available, a second dose of adrenaline can be given ideally in the other leg.
- If a person has an allergic reaction that requires adrenaline, they should always go to hospital for further observation and treatment e.g. additional doses of adrenaline. Sometimes anaphylaxis can reoccur after the first episode has been treated and apparently settled.



Anaphylaxis checklist



- Know your trigger/s and how to avoid it/them
 - Know what to do when accidental exposure occurs
 - Be aware of the signs and symptoms of an allergic reaction
 - Always carry or have available allergy medication
 - Know how to use your adrenaline auto-injector (practice with a trainer device)
 - Check expiry dates and set reminders for adrenaline auto-injector renewals
 - Ask your doctor to complete an Allergy Action Plan (written set of instructions)
 - If you have asthma, ensure it is well-controlled, and use a spacer with your inhaler
 - Always have two adrenaline auto-injectors immediately available
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References:

1. Increase in anaphylaxis-related hospitalizations but no increase in fatalities: An analysis of United Kingdom national anaphylaxis data, 1992-2012. *Journal of Clinical Allergy and Immunology* April 2015, Vol 135 (4) P. 956-963 PJ Turner et al.
2. Trends in hospitalizations for anaphylaxis, angioedema, and urticaria in Australia, 1993-1994 to 2004-2005. *Journal of Clinical Allergy and Immunology* October 2007 Vol 120 (4) Leanne Poulous et al.
3. Cofactors in allergic reactions to food: physical exercise and alcohol are the most important. *Journal of Immunology and Inflammatory Disorders* 2016 Dec; 4(4): 392-400. Astrid VersLuis et al.

We're here to help



Contact our Helpline Monday - Friday, 9am-5pm:

Call: 01322 619898

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This leaflet has been produced with the support of ALK-Abello Ltd

Published by Allergy UK 2021 - Version 1

Allergy UK is the operational name of The British Allergy Foundation, a charitable company limited by guarantee and registered in England and Wales. Company No: 4509293. Charity No: 1094231 – Registered in Scotland Charity No: SCO39257



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