Anaphylaxis: assessment and referral after emergency treatment: Draft for consultation

21 January 2026

Overview

This guideline covers assessment and referral for anaphylaxis. It aims to improve the quality of care for people with suspected anaphylaxis by detailing the assessments that are needed and recommending referral to specialist allergy services.

NICE has also produced a guideline on drug allergy.

This guideline will update NICE guideline CG134 (published 2011, amended 2020).

Who is it for?

- Healthcare professionals
- Commissioners and providers
- People with suspected anaphylaxis and their families and carers

What does it include?

- the recommendations
- the guideline context.

New and updated recommendations

We have updated the recommendations on period of observation following treatment for suspected anaphylaxis to bring them in line with guidance from the Resuscitation Council UK.

We have also updated 2 recommendations on admission and referral for consistency with the new recommendations on observation following treatment and to incorporate advice from the MHRA and the British Society for

Allergy and Clinical Immunology (BSACI), on the provision of autoinjectors. You are invited to comment on the new and updated recommendations by answering the questions on the consultation page. New recommendations are marked as **[2026]**.

We have also made some minor changes to the structure of the guideline, including introducing sub-headings to improve navigation.

See update information for a full explanation of what is being updated.

Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in NICE's information on making decisions about your care.

Making decisions using NICE guidelines explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

Healthcare professionals should follow our general guidelines for people delivering care:

- Patient experience in adult NHS services
- Babies, children and young people's experience of healthcare
- Shared decision making
- Medicines adherence
- Medicines optimisation
- Multimorbidity
- Decision making and mental capacity

1.1 Documenting suspected anaphylaxis

1.1.1 Document the acute clinical features of suspected anaphylaxis (rapidly developing, life-threatening problems involving the airway

[pharyngeal or laryngeal oedema] or breathing [bronchospasm with tachypnoea] or circulation [hypotension or tachycardia] and, in most cases, associated skin and mucosal changes). **[2011]**

1.1.2 Record the time of onset of suspected anaphylaxis. **[2011]**

1.1.3 Record the circumstances immediately before the onset of suspected anaphylaxis to help to identify the possible trigger. **[2011]**

1.2 Timing of blood samples

1.2.1 After suspected anaphylaxis in an adult or young person aged 16 years or older, take timed blood samples for mast cell tryptase testing as follows:

- a sample as soon as possible after emergency treatment has started
- a second sample ideally within 1 to 2 hours (but no later than 4 hours) from the onset of symptoms. **[2011]**

1.2.2 After suspected anaphylaxis in a child younger than 16 years, consider taking blood samples for mast cell tryptase testing as follows if the cause is thought to be venom-related, drug-related or idiopathic:

- a sample as soon as possible after emergency treatment has started
- a second sample ideally within 1 to 2 hours (but no later than 4 hours) from the onset of symptoms. **[2011]**

1.2.3 Inform the person (or, as appropriate, their parent or carer) that a blood sample may be required at follow-up with the specialist allergy service to measure baseline mast cell tryptase. **[2011]**

1.3 Period of observation

1.3.1 A suitably qualified and experienced healthcare professional should consider discharging the adult, young person or child after 2 hours of observation, starting from resolution of airway swelling and resumption of normal breathing and stable blood pressure and heart rate if:

- there was a good response (within 5 to 10 minutes) to a single dose of adrenaline given within 30 minutes of the onset of suspected anaphylaxis and
- symptoms have completely resolved, and
- the person already has a supply of prescribed adrenaline auto-injectors and knows how to use them, and
- there is adequate supervision from an appropriate adult, if needed, following discharge. **[2026, adapted from Resuscitation Council guidance]**

1.3.2 Observe the adult, young person or child for a minimum of 6 hours after resolution of all symptoms if:

- 2 doses of intramuscular (IM) adrenaline were needed to treat the anaphylaxis or
- there is a history of biphasic reaction. **[2026, adapted from Resuscitation Council guidance]**

1.3.3 Observe the adult, young person or child for a minimum of 12 hours after resolution of all symptoms if:

- the person had severe anaphylaxis requiring more than 2 doses of adrenaline, or

- the person has severe asthma or had anaphylaxis that involved severe respiratory compromise, or
- there is a possibility of continuing absorption of allergen, for example, slow-release medicines, or
- the person presents out-of-hours, or may not be able to seek help in response to a deterioration in their condition, or
- the person would be discharged to a geographical area where access to emergency care is difficult. **[2026, adapted from Resuscitation Council guidance]**

1.3.4 A suitably qualified and experienced healthcare professional should consider discharging the adult, young person or child after 2 hours of observation from resolution of anaphylaxis following a supervised allergy challenge even if 2 doses of IM adrenaline were needed. **[2026, adapted from Resuscitation Council guidance]**

1.4 Admission and referral

1.4.1 Admit children under 16 years who cannot be discharged under the care of a paediatric medical team. **[2026]**

After emergency treatment for suspected anaphylaxis, offer the adult, young person or child a referral to a specialist allergy service (age-appropriate, where possible) consisting of healthcare professionals with the skills and competencies necessary to accurately investigate, diagnose, monitor and provide ongoing management of, and patient education about, anaphylaxis. **[2011]**

1.4.2 After emergency treatment for suspected anaphylaxis, offer the adult, young person or child (or their parent or carer, as appropriate) 2 adrenaline auto-injectors to use if needed and as a safety measure before the specialist allergy service appointment,

unless the anaphylaxis was due to a drug allergy and the drug can be easily avoided (see NICE's guideline on drug allergy). **[2026]**

1.4.3 Each hospital trust providing emergency treatment for suspected anaphylaxis should have separate referral pathways for suspected anaphylaxis in adults, young people and children. **[2011]**

1.5 Discharge

1.5.1 Before discharge a healthcare professional with the appropriate skills and competencies should offer the adult, young person or child (or their parent or carer, as appropriate) the following:

- information about anaphylaxis, including the signs and symptoms of anaphylaxis
- information about the risk of a biphasic reaction
- advice about how to avoid the suspected trigger (if known)
- information about the need for referral to a specialist allergy service and the referral process
- a prescription for 2 further adrenaline auto-injectors with advice to carry the injectors with them at all times, unless the anaphylaxis was due to a drug allergy and the drug can be easily avoided (see recommendation 1.4.3)
- information on what to do if anaphylaxis occurs (use the adrenaline auto-injector and call emergency services)
- a brand-specific demonstration of the correct use of the adrenaline auto-injector and when to use it, including advice that the person should lie down after using the injector (or sit up if they are struggling to breathe) and should not stand up or change position suddenly, even if they feel better
- information about patient support groups. **[2011, amended 2026]**

Terms used in this guideline

Anaphylaxis

Anaphylaxis is a serious systemic hypersensitivity reaction that is usually rapid in onset and may cause death. It is characterised by rapidly developing, life-threatening problems involving: the airway (pharyngeal or laryngeal oedema) and/or breathing (bronchospasm with tachypnoea) and/or circulation (hypotension and/or tachycardia). In most cases, there are associated skin and mucosal changes.

Severe anaphylaxis is characterized by potentially life-threatening compromise in airway, breathing or the circulation, and may occur without typical skin features or circulatory shock being present.

Biphasic anaphylaxis

After complete recovery of anaphylaxis, a recurrence of symptoms within 72 hours with no further exposure to the allergen. It is managed in the same way as anaphylaxis.

Idiopathic anaphylaxis

Denotes a form of anaphylaxis where no identifiable trigger can be found. All known causes of anaphylaxis (including presentations associated with a delayed reaction, for example, alpha-gal allergy) must be excluded before this diagnosis can be reached.

Suspected anaphylaxis

The diagnosis, prior to assessment by a specialist allergist, for people who present with symptoms of anaphylaxis.

In emergency departments a person who presents with the signs and symptoms of anaphylaxis may be classified as having a ‘severe allergic’ reaction rather than anaphylaxis. Throughout this guideline, anyone who presents with such signs and symptoms is classed as experiencing ‘suspected anaphylaxis’, and should be diagnosed as having ‘suspected anaphylaxis’. The use of the adjective “anaphylactic” should be reserved to

describe “anaphylactic shock” where circulatory shock occurs in the context of anaphylaxis.

Please see the NICE glossary for an explanation of terms not described above.

Context

Anaphylaxis is a serious systemic hypersensitivity reaction that is usually rapid in onset and may cause death. It is characterised by rapidly developing, life-threatening problems involving: the airway (pharyngeal or laryngeal oedema) and/or breathing (bronchospasm with tachypnoea) and/or circulation (hypotension and/or tachycardia). According to Resuscitation Council UK’s guideline on emergency treatment of anaphylaxis, in most cases, there are associated skin and mucosal changes.

Severe anaphylaxis is characterized by potentially life-threatening compromise in airway, breathing and/or the circulation, and may occur without typical skin features or circulatory shock being present.

In emergency departments a person who presents with the signs and symptoms listed above may be classified as having a ‘severe allergic’ reaction rather than anaphylaxis. Throughout this guideline, anyone who presents with such signs and symptoms is classed as experiencing ‘suspected anaphylaxis’ and should be diagnosed as having ‘suspected anaphylaxis’.

People who have had a mild or moderate allergic reaction are at risk of, and may subsequently present with, suspected anaphylaxis. Certain groups may be at higher risk, either because of an existing comorbidity (for example asthma) or because they are more likely to be exposed to the same allergen again (for example people with venom allergies or reactions to specific food triggers). These groups were not included within the scope of this guideline, which is specific to those who have received emergency treatment for suspected anaphylaxis.

Anaphylaxis may be an allergic response that is immunologically mediated, or a non-immunologically mediated response, or idiopathic. Certain foods, insect venoms, some drugs and latex are common precipitants of immunoglobulin E (IgE)-mediated allergic anaphylaxis. Many drugs can also act through non-allergic mechanisms. A significant proportion of anaphylaxis is classified as idiopathic, in which there are significant clinical effects but no readily identifiable cause. The relative likelihood of the reaction being allergic, non-allergic or idiopathic varies considerably with age.

Food is a particularly common trigger in children, while medicinal products are much more common triggers in older people. In the UK it is estimated that 500,000 people have had venom-induced anaphylaxis and 220,000 people up to the age of 44 have had nut-induced anaphylaxis.

There is no overall figure for the frequency of anaphylaxis from all causes in the UK. Because anaphylaxis presents mainly in accident and emergency departments and outpatient settings, few estimates of prevalence are available from NHS sources. Anaphylaxis may not be recorded, or may be misdiagnosed as something else, for example, asthma. It may also be recorded by cause, such as food allergy, rather than as anaphylaxis.

Available UK estimates suggest that approximately 1 in 1333 of the population of England has experienced anaphylaxis at some point in their lives. There are approximately 20 deaths from anaphylaxis reported each year in the UK, with around half the deaths being iatrogenic, although this may be an underestimate.

After acute anaphylaxis, it is believed that many people do not receive optimal management of their condition. One reason for this is healthcare professionals' lack of understanding when making a diagnosis, for example failing to differentiate anaphylaxis from less severe histamine-releasing reactions or from other conditions that mimic some or all of its clinical features. Another reason is a lack of understanding of when or where to refer patients. This can affect the likelihood of the person receiving a definitive diagnosis, which can lead to anxiety, inappropriate management and

recurrent reactions. It can also lead to avoidable costs for the NHS and increase the need for acute care.

Finding more information and committee details

To find NICE guidance on related topics, including guidance in development, see the NICE topic page on allergies.

For full details of the evidence and the guideline committee's discussions, see the full version of the guideline. You can also find information about how the guideline was developed, including details of the committee.

NICE has produced tools and resources to help you put this guideline into practice. For general help and advice on putting our guidelines into practice, see resources to help you put NICE guidance into practice.

Update information

January 2026: The recommendations on period of observation have been updated to reflect the Resuscitation Council UK's emergency treatment of anaphylaxis 2021 guideline (section 8.2). Recommendation 1.4.1 has been amended to clarify our advice on admitting children. Recommendation 1.4.3 has been amended to bring it in line with the Medicines and Healthcare products Regulatory Agency (MHRA) guidance about safe use of adrenaline auto-injectors, and Resuscitation Council UK guidance (section 8.6) and BSACI guidance on adrenaline auto-injector prescription for patients at risk of anaphylaxis. Recommendation1.5.1 has been amended to clarify our advice on adrenaline auto-injectors.

August 2020: Advice was added to recommendation 1.5.1 that people should be offered a prescription for 2 further adrenaline auto-injectors before discharge and advised to carry these with them at all times.

Minor changes after publication

December 2021: We updated our advice in recommendation 1.5.1 on the information people should be given about using their adrenaline auto-injector, in line with advice from the MHRA.

ISBN: 978-1-4731-3867-4