NHS
National Institute for
Health and Clinical Excellence

# Anaphylaxis overview

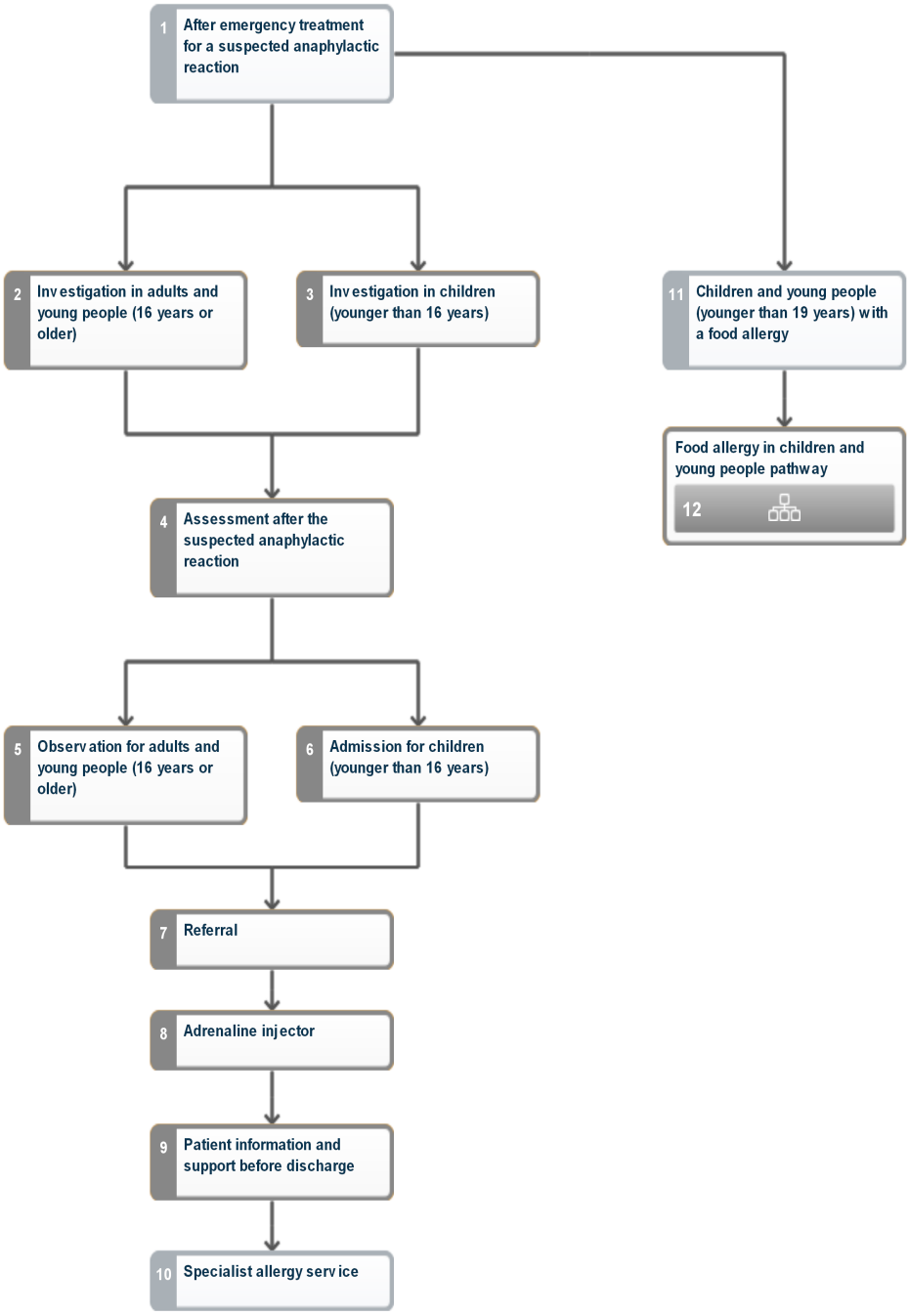
A NICE pathway brings together all NICE guidance, quality standards and materials to support implementation on a specific topic area. The pathways are interactive and designed to be used online. This pdf version gives you a single pathway diagram and uses numbering to link the boxes in the diagram to the associated recommendations.

To view the online version of this pathway visit:

http://pathways.nice.org.uk/pathways/anaphylaxis

Pathway last updated: 04 January 2012


NICE Pathways



## 1 After emergency treatment for a suspected anaphylactic reaction

No additional information

## 2 Investigation in adults and young people (16 years or older)

After a suspected anaphylactic reaction in adults or young people 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 1–2 hours (but no later than 4 hours) from the onset of symptoms.

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

## 3 Investigation in children (younger than 16 years)

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

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

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

## 4 Assessment after the suspected anaphylactic reaction

Document the acute clinical features of the suspected anaphylactic reaction (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] and, in most cases, associated skin and mucosal changes).

Record the time of onset of the reaction.

Record the circumstances immediately before the onset of symptoms to help to identify the possible trigger.

## 5 Observation for adults and young people (16 years or older)

Adults and young people aged 16 years or older who have emergency treatment for suspected anaphylaxis should be observed for 6–12 hours from the onset of symptoms, depending on their response to emergency treatment. In people with reactions that are controlled promptly and easily, a shorter observation period may be considered provided that they receive appropriate post-reaction care prior to discharge.

## 6 Admission for children (younger than 16 years)

Children younger than 16 years who have emergency treatment for suspected anaphylaxis should be admitted to hospital under the care of a paediatric medical team.

## 7 Referral

After emergency treatment for suspected anaphylaxis, offer people 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 on-going management of, and patient education about, suspected anaphylaxis.

Each hospital trust providing emergency treatment for suspected anaphylaxis should have separate referral pathways for suspected anaphylaxis in adults (and young people) and children.

## 8 Adrenaline injector

After emergency treatment for suspected anaphylaxis, offer people (or, as appropriate, their parent and/or carer) an appropriate adrenaline injector as an interim measure before the specialist allergy service appointment.

## 9 Patient information and support before discharge

Before discharge a healthcare professional with the appropriate skills and competencies should offer people (or, as appropriate, their parent and/or carer) the following:

- information about anaphylaxis, including the signs and symptoms of an anaphylactic reaction
- information about the risk of a biphasic reaction
- information on what to do if an anaphylactic reaction occurs (use the adrenaline injector and call emergency services)
- a demonstration of the correct use of the adrenaline injector and when to use it
- 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
- information about patient support groups.

NICE has written a booklet for patients and the public explaining its guidance on anaphylaxis.

## 10 Specialist allergy service

No additional information

## 11 Children and young people (younger than 19 years) with a food allergy

No additional information

## 12 Food allergy in children and young people pathway

See Food allergy in children and young people / Food allergy in children and young people overview

## Glossary

### Anaphylaxis

Anaphylaxis is a severe, life-threatening, generalised or systemic hypersensitivity reaction. 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.

### Biphasic reaction

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

Denotes a form of anaphylaxis where no identifiable stimulus can be found. All known causes of anaphylaxis must be excluded before this diagnosis can be reached.

### Suspected anaphylactic reaction

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 an 'anaphylactic' reaction. Throughout this guideline, anyone who presents with such signs and symptoms is classed as experiencing a 'suspected anaphylactic reaction', and should be diagnosed as having 'suspected anaphylaxis'.

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experiencing a 'suspected anaphylactic reaction', and should be diagnosed as having 'suspected anaphylaxis'.

## Source guidance

Anaphylaxis: assessment to confirm an anaphylactic episode and the decision to refer after emergency treatment for a suspected anaphylactic episode. NICE clinical guideline 134 (2011)

## Patient-centred care

Patients and healthcare professionals have rights and responsibilities as set out in the NHS Constitution – all NICE guidance is written to reflect these. Treatment and care should take into account individual needs and preferences. People should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. If someone does not have the capacity to make decisions, healthcare professionals should follow the Department of Health's advice on consent and the code of practice that accompanies the Mental Capacity Act. In Wales, healthcare professionals should follow advice on consent from the Welsh Government. If the person is under 16, healthcare professionals should follow the guidelines in Seeking consent: working with children.

## Your responsibility

The guidance in this pathway represents the view of NICE, which was arrived at after careful consideration of the evidence available. Those working in the NHS, local authorities, the wider public, voluntary and community sectors and the private sector should take it into account when carrying out their professional, managerial or voluntary duties. Implementation of this guidance is the responsibility of local commissioners and/or providers. Commissioners and providers are reminded that it is their responsibility to implement the guidance, in their local context, in light of their duties to avoid unlawful discrimination and to have regard to promoting equality of opportunity. Nothing in this guidance should be interpreted in a way which would be inconsistent with compliance with those duties.

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