

# Anaphylaxis

Quality standard

Published: 24 March 2016

[www.nice.org.uk/guidance/qs119](https://www.nice.org.uk/guidance/qs119)



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This standard is based on CG134.

This standard should be read in conjunction with QS97, QS44, QS174 and QS25.

## Quality statements

Statement 1 People who have emergency treatment for suspected anaphylaxis are referred to a specialist allergy service.

Statement 2 People who are prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis are given training in how and when to use it before being discharged.

Statement 3 People who have a systemic reaction to wasp or bee stings are referred to a specialist allergy service to assess whether venom immunotherapy would be suitable.

Statement 4 (placeholder) Ongoing training in adrenaline auto-injector use.

# Quality statement 1: Referral to specialist allergy services after emergency treatment

## Quality statement

People who have emergency treatment for suspected anaphylaxis are referred to a specialist allergy service.

## Rationale

Specialist allergy services can provide a definitive diagnosis and identify the cause of an anaphylactic reaction. Referral to these services after emergency treatment for suspected anaphylaxis will ensure that people receive the correct advice and treatment. If people are not referred to a specialist allergy service their safety might be compromised and they may receive inappropriate management, have an increased risk of recurrent anaphylactic reactions and feel anxious about possible recurrence.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Structure

Evidence of local arrangements and written clinical protocols to ensure that people who have emergency treatment for suspected anaphylaxis are referred to a specialist allergy service.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from clinical protocols.

## Process

Proportion of cases of emergency treatment for suspected anaphylaxis that are followed by referral to a specialist allergy service.

Numerator – the number in the denominator that are followed by referral to a specialist allergy service.

Denominator – the number of cases of emergency treatment for suspected anaphylaxis.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

## Outcome

People who are vulnerable to anaphylaxis feel able to manage their condition.

**Data source:** Data can be collected from a local survey of people who are vulnerable to anaphylaxis.

## What the quality statement means for different audiences

**Service providers** (such as primary care providers, emergency departments and paediatric services) ensure that people who have had emergency treatment for suspected anaphylaxis are referred to a specialist allergy service.

**Healthcare professionals** (such as GPs, emergency department staff, and members of paediatric and adult medical teams) refer people who have had emergency treatment for suspected anaphylaxis to a specialist allergy service. The referral can be made by the person's GP, for example, after initial treatment in an emergency department or by hospital staff.

**Commissioners** (such as integrated care systems, clinical commissioning groups and NHS England) commission local specialist allergy services and agree pathways for referral to specialist allergy services for people who have had emergency treatment for suspected anaphylaxis.

**People who have had emergency treatment for suspected anaphylaxis (a severe, life-threatening allergic reaction)** are offered an appointment at a specialist allergy service. This is to find out the cause of the reaction and to get advice on what to do in the future.

## Source guidance

Anaphylaxis: assessment and referral after emergency treatment. NICE guideline CG134 (2011, updated 2020), recommendation 1.1.9

## Definitions of terms used in this quality statement

### Suspected anaphylaxis

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. The NICE guideline on anaphylaxis gives details of clinical features that suggest anaphylactic reaction. Anyone who presents with such signs and symptoms should be diagnosed as having 'suspected anaphylaxis'. [Adapted from NICE's guideline on anaphylaxis, terms used in this guideline]

### Specialist allergy service

A service consisting of healthcare professionals with the skills and competencies needed to accurately investigate, diagnose, monitor and provide ongoing management of, and patient education about, suspected anaphylaxis. The service should be age-appropriate if possible. [NICE's guideline on anaphylaxis, recommendation 1.1.9]

Details of local allergy services are available from the British Society for Allergy and Clinical Immunology (BSACI) 'find a clinic' search, including information on services with expertise, in particular, allergies such as food, drug or venom allergies, or from the NHS website allergy service finder. [Expert opinion]

## Equality and diversity considerations

When referring people to a specialist allergy service, any potential difficulties in access such as travelling distance, disability or financial barriers should be taken into account.



# Quality statement 2: Education in adrenaline auto-injector use

## Quality statement

People who are prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis are given training in how and when to use it before being discharged.

## Rationale

Adrenaline auto-injectors should be offered to people after emergency treatment for suspected anaphylaxis, as an interim measure before they have a specialist allergy service appointment. It is important to use an adrenaline auto-injector as soon as possible if an anaphylactic reaction is suspected. Ensuring that people know when and how to use their specific device, and encouraging them to get familiar with it by practising with a trainer auto-injector, will help ensure timely and correct use if they have a further anaphylactic reaction.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Structure

Evidence of local arrangements and written protocols to ensure that people who are prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis are given training in how and when to use it before being discharged.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from clinical protocols.

## Process

Proportion of people who are prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis who are given training in how and when to use it before being discharged.

Numerator – the number in the denominator who are given training in how and when to use an adrenaline auto-injector before being discharged.

Denominator – the number of people who are prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

## Outcome

a) People who have had a suspected anaphylactic reaction feel able to manage their condition.

**Data source:** Data can be collected from a local survey of people who have had a suspected anaphylactic reaction.

b) Cases of emergency treatment for suspected anaphylaxis after an adrenaline auto-injector has been prescribed.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

## What the quality statement means for different audiences

**Service providers** (such as emergency departments, and paediatric and adult medical services) ensure that healthcare professionals can provide brand-specific training in how and when to use adrenaline auto-injectors for people who are prescribed adrenaline auto-injectors after emergency treatment for suspected anaphylaxis. They also ensure that information on using auto-injectors and how to position the body after using them is

available to give to people. Information should include how to get a trainer auto-injector from the manufacturer to practise with.

**Healthcare professionals** (such as emergency department staff, and members of paediatric and adult medical services) provide brand-specific training for people prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis, before they are discharged. They demonstrate correct use and provide an opportunity for the person to practise using a training device. They also give people information about how and when to use it, including how to position their body after using it. They encourage the person to practise at home by getting a trainer auto-injector from the manufacturer.

**Commissioners** (such as integrated care systems and clinical commissioning groups) ensure that they commission services that can provide brand-specific training and information on how and when to use adrenaline auto-injectors for people who have been prescribed an adrenaline auto-injector after emergency treatment for suspected anaphylaxis.

**People who are prescribed an adrenaline auto-injector because they have had emergency treatment for suspected anaphylaxis (a severe, life-threatening allergic reaction)** are shown how to use their specific brand of adrenaline auto-injector before they go home from hospital. This includes practising using a training injector, and being given information that explains how and when they should use it, and how to position their body afterwards. They are also encouraged to get a trainer auto-injector from the manufacturer so that they can practise at home.

## Source guidance

[Anaphylaxis: assessment and referral after emergency treatment. NICE guideline CG134 \(2011, updated 2020\), recommendation 1.1.11](#)

## Definitions of terms used in this quality statement

### Training in how and when to use an adrenaline auto-injector

This includes:

- A brand-specific demonstration of using an adrenaline auto-injector and practice using a training device.
- Advice on lying down after using the adrenaline auto-injector (or sitting up if the person is struggling to breathe) and avoiding standing up or changing position suddenly, even if they are feeling better.
- Giving information about anaphylaxis, including the signs and symptoms of an anaphylactic reaction and what to do if an anaphylactic reaction happens (such as using the adrenaline auto-injector as soon as they notice any signs and calling emergency services.)
- Emphasising the importance of knowing how to use the auto-injector before it is needed.
- Encouraging the person to get familiar with the device and get a trainer auto-injector from the manufacturer to practise with.

[Adapted from [NICE's guideline on anaphylaxis](#), recommendation 1.1.11; the [Medicines and Healthcare products Regulatory Agency \(MHRA\) Public Assessment Report of the Commission on Human Medicines' Adrenaline Auto-injector Expert Working Group](#); and expert opinion]

## Equality and diversity considerations

Information provided about using adrenaline auto-injectors should be accessible to people with additional needs, such as physical, sensory or learning disabilities, and to people who do not read or speak English. People receiving information about adrenaline auto-injectors should have access to an interpreter or advocate if needed.

# Quality statement 3: Specialist assessment for venom immunotherapy

## Quality statement

People who have a systemic reaction to wasp or bee stings are referred to a specialist allergy service to assess whether venom immunotherapy would be suitable.

## Rationale

Venom allergy from bees and wasps accounts for approximately a quarter of adult cases of anaphylaxis of known cause. Venom immunotherapy can reduce the risk and severity of systemic reactions. Ensuring that people who could benefit from venom immunotherapy are assessed for this treatment will help to improve uptake and reduce the incidence of venom-induced anaphylaxis.

## Quality measures

The following measures can be used to assess the quality of care or service provision specified in the statement. They are examples of how the statement can be measured, and can be adapted and used flexibly.

## Structure

Evidence of local arrangements and written protocols to ensure that people who have a systemic reaction to wasp or bee stings are referred to a specialist allergy service to assess whether venom immunotherapy would be suitable.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from clinical protocols.

## Process

Proportion of people who have a systemic reaction to a wasp or bee sting who are referred

to a specialist allergy service to assess whether venom immunotherapy would be suitable.

**Numerator** – the number in the denominator who are referred to a specialist allergy service to assess whether venom immunotherapy would be suitable.

**Denominator** – the number of people presenting with a systemic reaction to a wasp or bee sting.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

## Outcome

a) Prescriptions of venom immunotherapy.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from prescribing systems.

b) Incidence of venom-induced anaphylaxis.

**Data source:** Data can be collected from information recorded locally by healthcare professionals and provider organisations, for example, from patient records.

c) People feel able to manage their condition after treatment for anaphylaxis caused by a wasp or bee sting.

**Data source:** Data can be collected from a local survey of people who had treatment for anaphylaxis caused by a wasp or bee sting.

## What the quality statement means for different audiences

**Service providers** (such as primary care providers, emergency departments and specialist allergy services) ensure that there are agreed local pathways in place for people who have a systemic reaction to a wasp or bee sting to be referred to a specialist allergy service for assessment for possible venom immunotherapy. Venom immunotherapy should be offered when suitable as part of the local pathway.

**Healthcare professionals** (such as GPs and emergency department staff) refer people who have a systemic reaction to a wasp or bee sting to a specialist allergy service for assessment. Healthcare professionals at specialist allergy services assess whether venom immunotherapy is suitable for people referred to them and offer venom immunotherapy if it is suitable.

**Commissioners** (such as integrated care systems, clinical commissioning groups and NHS England) ensure that they commission specialist allergy services that can offer venom immunotherapy, and that there are agreed local pathways in place for people who have a systemic reaction to a wasp or bee sting to be referred to these services for assessment and treatment.

**People who have a severe reaction to a bee or wasp sting** are offered an appointment at a specialist allergy service to check if they would benefit from treatment (called venom immunotherapy) that can reduce the risk of future reactions to bee or wasp stings.

## Source guidance

[Diagnosis and management of hymenoptera venom allergy. British Society for Allergy and Clinical Immunology \(BSACI\) guidelines \(2011\)](#)

## Definitions of terms used in this quality statement

### Specialist allergy service

A service consisting of healthcare professionals with the skills and competencies needed to accurately investigate, diagnose, monitor and provide ongoing management of, and patient education about, suspected anaphylaxis. The service should be age-appropriate if possible. [[NICE's guideline on anaphylaxis](#), recommendation 1.1.9]

Details of local allergy services are available from the [British Society for Allergy and Clinical Immunology \(BSACI\) find a clinic search](#), including information on services with expertise, in particular, allergies such as food, drug or venom allergies, or from the [NHS website allergy service finder](#). [Expert opinion]

## Assessment for venom immunotherapy

A number of criteria are evaluated before giving venom immunotherapy, to identify whether the treatment is safe and appropriate. [NICE's technology appraisal guidance on pharmlagen for the treatment of bee and wasp venom allergy](#) and [BSACI's guideline on the diagnosis and management of hymenoptera venom allergy](#) provide criteria for assessment for venom immunotherapy. [Expert opinion]

Venom immunotherapy should be carried out only by allergy specialists with experience and knowledge in this field and in centres undertaking venom immunotherapy in significant numbers of patients and where the team has expertise in treating anaphylaxis. [[BSACI's guideline on the diagnosis and management of hymenoptera venom allergy](#)]

## Equality and diversity considerations

When referring people to a specialist allergy clinic, any potential difficulties in access such as travelling distance, disability or financial barriers should be taken into account.



# Quality statement 4 (placeholder): Ongoing training in adrenaline auto- injector use

## What is a placeholder statement?

A placeholder statement is an area of care that has been prioritised by the quality standards advisory committee but for which no source guidance is currently available. A placeholder statement indicates the need for evidence-based guidance to be developed in this area.

## Rationale

Recurrence of an anaphylactic reaction can occur a long time after an adrenaline auto-injector is first prescribed and after a person, and their families or carers, are shown how to use the device. People who have been prescribed an adrenaline auto-injector following an anaphylactic reaction are more likely to be able to self-manage anaphylactic reactions if they are provided with ongoing training on how and when to use their adrenaline auto-injector.

The [British Society for Allergy and Clinical Immunology \(BSCAI\) guideline \(2016\) on prescribing an adrenaline auto-injector](#) includes recommendations on ongoing training in adrenaline auto-injector use. This placeholder statement will be updated when this quality standard is next reviewed.

# Update information

## Minor changes since publication

**January 2022:** The rationale, definition and audience descriptors for statement 2 were amended to align with recommendation 1.1.11 in the updated [NICE guideline on anaphylaxis](#) and to reflect the advice on information people should be given about using their adrenaline auto-injector in the [Medicines and Healthcare products Regulatory Agency \(MHRA\) Public Assessment Report of the Commission on Human Medicines' Adrenaline Auto-injector Expert Working Group](#). A link was added to statement 4 to highlight guidance on ongoing training for people with adrenaline auto-injectors that will be considered when this quality standard is next reviewed.

## About this quality standard

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. NICE quality standards draw on existing NICE or NICE-accredited guidance that provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement.

Expected levels of achievement for quality measures are not specified. Quality standards are intended to drive up the quality of care, and so achievement levels of 100% should be aspired to (or 0% if the quality statement states that something should not be done). However, this may not always be appropriate in practice. Taking account of safety, shared decision-making, choice and professional judgement, desired levels of achievement should be defined locally.

Information about [how NICE quality standards are developed](#) is available from the NICE website.

See our [webpage on quality standards advisory committees](#) for details about our standing committees. Information about the topic experts invited to join the standing members is available from the [webpage for this quality standard](#).

NICE has produced a [quality standard service improvement template](#) to help providers make an initial assessment of their service compared with a selection of quality statements. This tool is updated monthly to include new quality standards.

NICE guidance and quality standards apply in England and Wales. Decisions on how they apply in Scotland and Northern Ireland are made by the Scottish government and Northern Ireland Executive. NICE quality standards may include references to organisations or people responsible for commissioning or providing care that may be relevant only to England.

## Diversity, equality and language

Equality issues were considered during development and [equality assessments for this quality standard](#) are available. Any specific issues identified during development of the

quality statements are highlighted in each statement.

Commissioners and providers should aim to achieve the quality standard in their local context, in light of their duties to have due regard to the need to eliminate unlawful discrimination, advance equality of opportunity and foster good relations. Nothing in this quality standard should be interpreted in a way that would be inconsistent with compliance with those duties.

ISBN: 978-1-4731-1803-4

## Endorsing organisation

This quality standard has been endorsed by NHS England, as required by the Health and Social Care Act (2012)

## Supporting organisations

Many organisations share NICE's commitment to quality improvement using evidence-based guidance. The following supporting organisations have recognised the benefit of the quality standard in improving care for patients, carers, service users and members of the public. They have agreed to work with NICE to ensure that those commissioning or providing services are made aware of and encouraged to use the quality standard.

- [Anaphylaxis Campaign](#)
- [British Society for Allergy and Clinical Immunology](#)
- [Royal College of Physicians \(RCP\)](#)
- [Royal College of General Practitioners \(RCGP\)](#)
- [College of General Dentistry](#)