



# 2018 surveillance of drug allergy: diagnosis and management (NICE guideline CG183)

Surveillance report

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# Surveillance decision

We will not update the guideline on [drug allergy: diagnosis and management](#).

## Reasons for the decision

New evidence was identified on the diagnosis of drug allergy in people with suspected antibiotic allergy. These diagnostic methods primarily focused on the use of skin tests (skin prick testing and intradermal testing) and oral challenge/drug provocation tests (DPTs) in children. Whilst the guideline does not explicitly include recommendations on the use of these tests, which are undertaken in a specialist setting, they were considered in the economic evidence used to inform [section 1.4](#), covering referral to specialist drug allergy services. The evidence found during this surveillance review supports the use of skin tests and DPTs in diagnosing antibiotic allergy in children, however limited data was identified on the diagnostic performance of these tests. It was concluded that in the absence of further evidence synthesis or additional published studies, this evidence would not be sufficient to trigger an update at this time.

No new evidence was identified concerning the signs and symptoms of drug allergy, measuring serum specific immunoglobulin E or serum tryptase after suspected anaphylaxis in children. In addition, no new evidence was identified concerning the documentation and sharing of drug allergy information with other healthcare professionals, providing information and support to patients and non-specialist management and referral to specialist services.

For further details and a summary of all evidence identified in surveillance, see [appendix A](#).

# Overview of 2018 surveillance methods

NICE's surveillance team checked whether recommendations in [drug allergy: diagnosis and management](#) (NICE guideline CG183) remain up to date.

The surveillance process consisted of:

- Initial feedback from topic experts via a questionnaire.
- Examining related NICE guidance, quality standards and NIHR signals.
- A search for new or updated Cochrane reviews.
- A search for ongoing research.
- Literature searches to identify relevant evidence.
- Assessing the new evidence against current recommendations and deciding whether or not to update sections of the guideline, or the whole guideline.
- Consulting on the decision with stakeholders.
- Considering comments received during consultation and making any necessary changes to the decision.

For further details about the process and the possible update decisions that are available, see [ensuring that published guidelines are current and accurate](#) in developing NICE guidelines: the manual.

## Evidence considered in surveillance

### Search and selection strategy

Based on topic expert feedback, the evidence search for the surveillance review was focused on the diagnosis and management of drug allergy in children.

We found 9 studies in a search for systematic reviews, randomised controlled trials and observational studies published between 10 January 2014 and 1 August 2018.

We also included:

- 4 relevant studies from a total of 18 identified by topic experts.

From all sources, we considered 11 studies to be relevant to the guideline.

See [appendix A](#): summary of evidence from surveillance for details of all evidence considered, and references.

## Selecting relevant studies

The evidence search was expanded to include observational studies to capture studies of relevance to the sections on assessment of drug allergy.

## Ongoing research

We checked for relevant ongoing research; of the ongoing studies identified, none were assessed as having the potential to change recommendations.

## Intelligence gathered during surveillance

### Views of topic experts

We considered the views of topic experts, including those who helped to develop the guideline. For this surveillance review, topic experts completed a questionnaire about developments in evidence, policy and services related to NICE guideline CG183. We sent questionnaires to 7 topic experts and received 4 responses. The topic experts either:

- participated in the guideline committee who developed the guideline
- were recruited to the NICE Centre for Guidelines Expert Advisers Panel to represent their specialty.

Two topic experts highlighted that the guideline should be more paediatric focused, particularly on antibiotic allergy and challenges without skin test in children. Although the guideline recommendations are applicable to children, young people and adults, 1 topic expert commented that children need different management. As such, the evidence search for this surveillance review was focused on the diagnosis and management of drug

allergy in children, in particular antibiotic allergy. However, the evidence found on diagnosing antibiotic allergy in children was not sufficient to impact recommendations at this time.

One topic expert commented that the recommendations state to take a drug allergy history but do not provide further detail about next steps. However, NICE guideline CG183 does provide recommendations for documenting such information in medical records, sharing information with other healthcare professionals and lists criteria for referral to specialist services. Another topic expert commented that whilst recommendations on documentation remain current, republication would result in greater uptake of recommendations and support work on antibiotic stewardship. Whilst we are unable to re-issue guidance, this surveillance review may result in some renewed publicity and implementation activity for the guideline.

Expert feedback emphasised that the guideline should include recommendations concerning the management of drug allergy in people with social care needs under [section 1.3](#). The issues highlighted by the topic expert have been addressed by other NICE guidelines on [medicines optimisation](#) (NICE guideline NG5) and [patient experience in adult NHS services](#) (NICE guideline CG138) referenced within existing recommendations.

Topic experts highlighted studies on antibiotic allergy in children and penicillin allergy "de-labeling" of which several relevant studies have been included as evidence in this surveillance review. A topic expert highlighted several papers on perioperative anaphylaxis and allergy to biological agents, however these studies did not fit the evidence type inclusion criteria for the guideline and therefore have not been included as evidence in this surveillance review.

## Implementation of the guideline

The NICE [uptake database](#) indicates that the uptake of [recommendation 1.2.1](#) on the documentation of drug allergy is high. Recommendation 1.2.1 was well implemented with 97.7% of patients in an acute setting having their medicine allergy status recorded (May 2018). It is important to note that the uptake of this recommendation has increased annually from May 2015 (96%).

In addition, topic expert feedback focused on implementation of the guideline. One topic expert commented that the recommendations are difficult to implement in practice due to limited resources. Another topic expert commented that ongoing work is still required to

implement the guideline recommendations and therefore it is important not to make any amendments at present. The expert commented that NICE guideline CG183 has had widespread take-up and "has been read and analysed by many allergists and immunologist worldwide and recommendations very well received".

## Views of stakeholders

Stakeholders are consulted on all surveillance decisions except if the whole guideline will be updated and replaced. Because this surveillance decision was to not to update the guideline, we consulted on the decision.

Overall, 7 stakeholders commented, of whom 4 agreed with the decision to not update the guideline, 1 disagreed with the decision and 2 noted that they had no comments on the proposal. The stakeholders included royal colleges, charities and NHS England.

Reasons for disagreement with the decision not to update included requests to update recommendations with greater reference to the investigation of suspected allergy to local anaesthetics and to provide specified structured information to patients. We felt that these areas were already addressed within existing recommendations of the guideline.

One stakeholder suggested the guideline should make greater reference to safe alternative drugs in cases of suspected drug allergy, which we felt is also addressed by existing guideline recommendations. We note that this is a topical area as NICE recently published a [medicines evidence commentary](#) (MEC) and news feature relating to this issue. New evidence indicated that people with a documented 'penicillin allergy' had an increased risk of developing meticillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile*, thought to be due to the increased use of alternatives to beta-lactam antibiotics (Blumenthal et al. 2018). The MEC highlights the importance that only 'true' penicillin allergies are documented, which supports the guideline recommendations.

One respondent commented that there would be a "healthcare burden" in the avoidance of all non-selective non-steroidal anti-inflammatory drugs (NSAIDs) in those with suspected allergy. However, during the development of [recommendation 1.4.3](#) it was noted that only a small proportion of patients would require specific treatment with NSAIDs, whilst the majority of people would be able to take alternative treatments. Therefore, it was deemed not to be cost effective to refer people who do not require treatment with NSAIDs. Additionally, a strong signal was not identified through this surveillance review to indicate that the recommendation needs updating. This is an area we will monitor and consider

again at the next surveillance review of the guideline.

One stakeholder suggested that the majority of people with nasal polyps are able to tolerate NSAIDs, referring to [recommendation 1.4.7](#). During the development of this recommendation it was noted that people with asthma are generally advised to avoid using an NSAID, and the presence of nasal polyps can put patients at a higher level of risk. As such, it was considered that people with asthma who also have nasal polyps are likely to be intolerant of NSAIDs. During this surveillance review a strong signal was not identified in this area to suggest that the recommendation needs changing. However, this is an area we will consider again at the next surveillance review of the guideline.

One respondent commented that the definition of anaphylaxis needed revising in light of the highlighted [Report and findings of the Royal College of Anaesthetists' 6th National Audit Project: Perioperative Anaphylaxis](#). NICE guideline CG183 describes common and important presenting features of drug allergy but notes that other presentations are also recognised, therefore no change is anticipated.

See [appendix B](#) for full details of stakeholders' comments and our responses.

See [ensuring that published guidelines are current and accurate](#) in developing NICE guidelines: the manual for more details on our consultation processes.

## Equalities

No equalities issues were identified during the surveillance process.

## Editorial amendments

During surveillance of the guideline we identified the following points in the guideline that should be amended:

- Recommendation 1.2.8 should be amended to cross refer to the NICE guideline on [medicines optimisation: the safe and effective use of medicines to enable the best possible outcomes](#) (NICE guideline NG5). The guideline number and hyperlink should be amended in the existing cross reference.



## Overall decision

After considering all evidence and other intelligence and the impact on current recommendations, we decided that no update is necessary.

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