

## Drug allergy overview

NICE Pathways bring together all NICE guidance, quality standards and other NICE information on a specific topic.

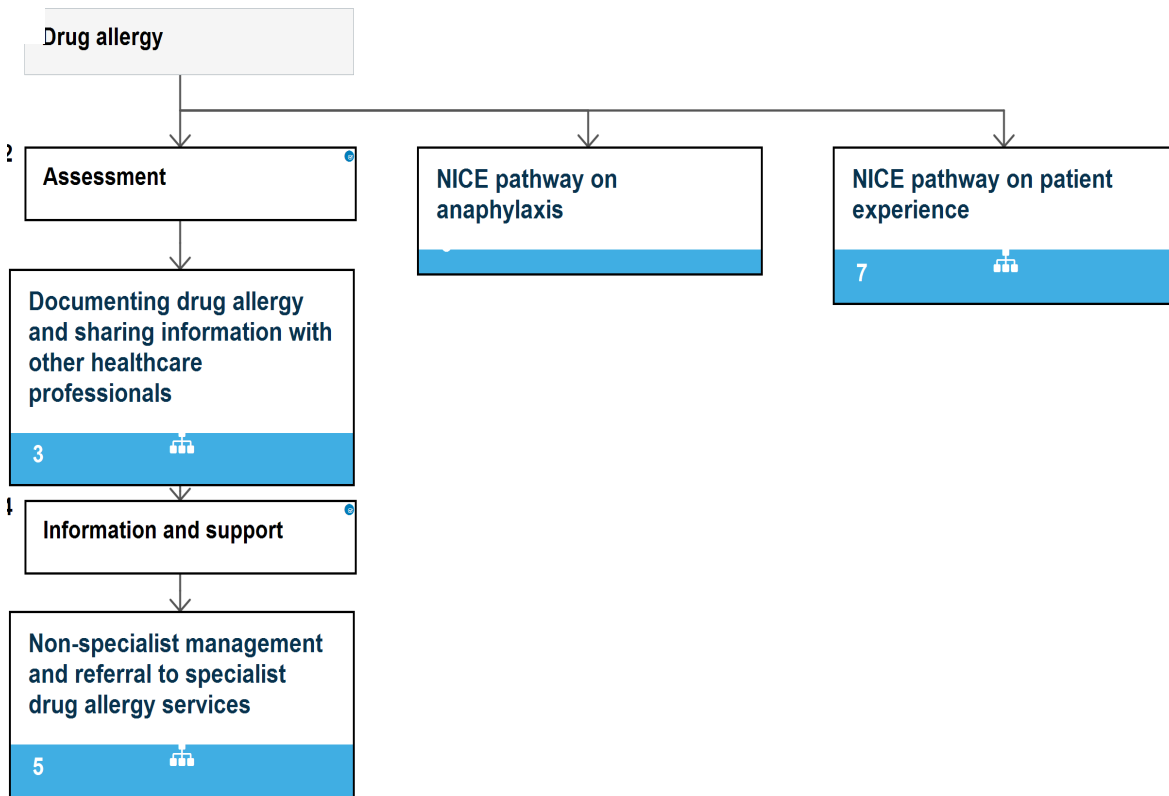
NICE Pathways are interactive and designed to be used online. They are updated regularly as new NICE guidance is published. To view the latest version of this pathway see:

<http://pathways.nice.org.uk/pathways/drug-allergy>

Pathway last updated: 11 November 2016

This document contains a single pathway diagram and uses numbering to link the boxes to the associated recommendations.

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## 1 Drug allergy

No additional information

## 2 Assessment

When assessing a person presenting with possible drug allergy, take a history and undertake a clinical examination. Use [signs and allergic patterns of suspected drug allergy with timing of onset \[See page 6\]](#) as a guide when deciding whether to suspect drug allergy.

Be aware that the reaction is more likely to be caused by drug allergy if it occurred during or after use of the drug and:

- the drug is known to cause that type of reaction **or**
- the person has previously had a similar reaction to that drug or drug class.

Be aware that the reaction is less likely to be caused by drug allergy if:

- there is a possible non-drug cause for the person's symptoms (for example, they have had similar symptoms when not taking the drug) **or**
- the person has gastrointestinal symptoms only.

NICE has produced a pathway on [gastrointestinal conditions](#).

### Measuring serum tryptase after suspected anaphylaxis

After a suspected drug-related anaphylactic reaction, take 2 blood samples for mast cell tryptase in line with recommendations in the NICE pathway on [anaphylaxis](#).

Record the exact timing of both blood samples taken for mast cell tryptase:

- in the person's medical records **and**
- on the pathology request form.

Ensure that tryptase sampling tubes are included in emergency anaphylaxis kits.

### Measuring serum specific immunoglobulin E

**Do not use** blood testing for serum specific IgE to diagnose drug allergy in a non-specialist setting.

## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

1. Documentation using the structured assessment guide

### 3 Documenting drug allergy and sharing information with other healthcare professionals

See Drug allergy / Documenting drug allergy and sharing information with other healthcare professionals

### 4 Information and support

Discuss the person's suspected drug allergy with them (and their family members or carers as appropriate) and provide structured written information (see documenting new suspected drug allergic reactions in this pathway). Record who provided the information and when.

Provide information in line with the recommendations in the NICE pathway on patient experience.

Ensure that the person (and their family members or carers as appropriate) is aware of the drugs or drug classes that they need to avoid, and advise them to check with a pharmacist before taking any over-the-counter preparations.

Advise people (and their family members or carers as appropriate) to carry information they are given about their drug allergy at all times and to share this whenever they visit a healthcare professional or are prescribed, dispensed or are about to be administered a drug.

Explain to people with a suspected allergy to a non-selective NSAID (and their family members or carers as appropriate) that in future they need to avoid all non-selective NSAIDs, including over-the-counter preparations. For other recommendations on allergy to NSAIDs see non-specialist management and when to refer to a specialist drug allergy service in this pathway.

For recommendations on providing information after specialist drug allergy investigations see providing information to people who have had specialist drug allergy investigations in this pathway.

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## Quality standards

The following quality statement is relevant to this part of the interactive flowchart.

2. Advice about carrying personal structured drug information

### **5 Non-specialist management and referral to specialist drug allergy services**

[See Drug allergy / Non-specialist management and referral to specialist drug allergy services](#)

### **6 NICE pathway on anaphylaxis**

[See Anaphylaxis](#)

### **7 NICE pathway on patient experience**

[See Patient experience in adult NHS services](#)

## Signs and allergic patterns of suspected drug allergy with timing of onset

Note that these boxes describe common and important presenting features of drug allergy but other presentations are also recognised.

### Immediate, rapidly evolving reactions

<p>Anaphylaxis – a severe multi-system reaction characterised by:</p> <ul style="list-style-type: none"> <li>erythema, urticaria or angioedema <b>and</b></li> <li>hypotension and/or bronchospasm</li> </ul>	<p>Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)</p>
<p>Urticaria or angioedema without systemic features</p>	
<p>Exacerbation of asthma (for example, with NSAIDs)</p>	

### Non-immediate reactions without systemic involvement

<p>Widespread red macules or papules (exanthem-like)</p>	<p>Onset usually 6–10 days after first drug exposure or within 3 days of second exposure</p>
<p>Fixed drug eruption (localised inflamed skin)</p>	

### Non-immediate reactions with systemic involvement

<p>DRESS or drug hypersensitivity syndrome characterised by:</p>	<p>Onset usually 2–6 weeks after first drug exposure or within 3 days of second exposure</p>
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<ul style="list-style-type: none"> <li>• widespread red macules, papules or erythroderma</li> <li>• fever</li> <li>• lymphadenopathy</li> <li>• liver dysfunction</li> <li>• eosinophilia</li> </ul>	
<p>Toxic epidermal necrolysis or Stevens–Johnson syndrome characterised by:</p> <ul style="list-style-type: none"> <li>• painful rash and fever (often early signs)</li> <li>• mucosal or cutaneous erosions</li> <li>• vesicles, blistering or epidermal detachment</li> <li>• red purpuric macules or erythema multiforme</li> </ul>	<p>Onset usually 7–14 days after first drug exposure or within 3 days of second exposure</p>
<p>Acute generalised exanthematous pustulosis characterised by:</p> <ul style="list-style-type: none"> <li>• widespread pustules</li> <li>• fever</li> <li>• neutrophilia</li> </ul>	<p>Onset usually 3–5 days after first drug exposure</p>
<p>Common disorders caused, rarely, by drug allergy:</p> <ul style="list-style-type: none"> <li>• eczema</li> <li>• hepatitis</li> <li>• nephritis</li> <li>• photosensitivity</li> <li>• vasculitis</li> </ul>	<p>Time of onset variable</p>

## Glossary

### COX-2

cyclooxygenase 2

### DRESS

drug reaction with eosinophilia and systemic symptoms

### IgE

immunoglobulin E

### NSAID

non-steroidal anti-inflammatory drug

## Sources

[Drug allergy: diagnosis and management](#) (2014) NICE guideline CG183

## 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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