Using the care pathway

The Royal College of Paediatrics and Child Health (RCPCH) care pathway for drug allergy is presented in two parts: an algorithm with the stages of ideal care and a set of competences required to diagnose, treat and optimally manage drug allergy. The algorithm has numbers which correspond to the competences outlined within the body of the document. These competences have not been assigned to specific health professionals or settings in order to encourage flexibility in service delivery. Each pathway has a set of core knowledge documents of which health professionals should be aware. These documents are the key clinical guidance that inform the pathways.

We recommend that this pathway is implemented locally by a multidisciplinary team with a focus on creating networks between staff in primary and community health care, social care, education and hospital based practice to improve services for children with allergic conditions. All specialists should have paediatric training in line with the principles outlined in the Department of Health Children's National Service Framework - particularly standard 3 which states that staff training should reflect the common core of skills, knowledge and competences that apply to staff who work with children and young people.

For the purposes of the RCPCH care pathways children is an inclusive term that refers to children and young people between the ages of 0-18 years. It is important to recognise that, while the RCPCH drug allergy pathway is linear, entry can occur at any part in the pathway.

Further information regarding the RCPCH allergy care pathways can be downloaded at: www.rcpch.ac.uk/allergy.
Life threatening/severe
Non life threatening
History of suspected drug allergy

**Self Care (1)**
- Recognition that symptoms may be due to the medicine
- Stop administration of the medicine
- Early administration of symptomatic treatment
- Seek advice from a health care professional

**Health Care Professional (2)**
- Recognition that symptoms may be due to the medicine
- Stop administration of the medicine
- Early administration of symptomatic treatment
- Other treatment, if necessary
- Onward referral

**Medical Care**
- Allergy focussed clinical history and examination
- Identify possible causative medications and exclude non immunological adverse events
- Basic investigations
- Risk assessment
- Assess and optimise management of other allergies/atopic disease
- Provide medication advice, including avoidance and alternatives
- Communication (e.g. health care providers, medical identity talisman)
- Patient/parent/carer support and minimising impact on quality of life
- Onward referral, if further investigation and/or desensitisation required

**Specialised Care**
- Specialised investigations
- Desensitisation (should only be undertaken in a specialist setting)

**Provide follow-up care**
- Consider review of diagnosis and update avoidance advice

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Notes:
1. The colours on the pathway and competence table correspond to the modified Scottish Intercollegiate Guidelines Network (SIGN) grade:
   - GRADE A
   - GRADE B
   - GRADE C
   - GRADE D
   - CLINICAL PRACTICE GUIDELINE
   - GOOD PRACTICE POINT
2. The numbers on the pathway correspond to the competences required to provide care - these are on the following pages
3. Links to the references can be found within the competence statements
Drug allergy definition

Drug allergy is defined as an immune-mediated hypersensitivity reaction to a medicinal product and may be divided into Immunoglobulin E (IgE) mediated (immediate-onset) reactions and non-IgE-mediated (delayed-onset) reactions.

The Working Group acknowledges a wide range of adverse reactions occur to medicinal products this pathway does not cover the treatment of these reactions.

Core knowledge document

No core knowledge documents for the management of children with drug allergies were identified.

Competences

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<tr>
<th>Ref</th>
<th>Pathway stage</th>
<th>Competence</th>
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<tbody>
<tr>
<td>1</td>
<td>Self care</td>
<td>Be able to</td>
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<tr>
<td></td>
<td></td>
<td>• recognise that symptoms may be caused by medication and to stop using the medicine</td>
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<tr>
<td></td>
<td></td>
<td>• administer treatment to relieve symptoms (e.g. antihistamine, topical steroid)</td>
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<td></td>
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<td>• seek advice from a health care professional</td>
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<tr>
<td>2</td>
<td>Health care professional</td>
<td>Have access to:</td>
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<tr>
<td></td>
<td></td>
<td>• drug reference manuals for adverse drug reactions, such as the British National Formulary for children (BNF-C)</td>
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<tr>
<td></td>
<td></td>
<td>Know</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• the symptoms and signs of common adverse drug reactions</td>
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<td></td>
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<td>Be able to</td>
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<tr>
<td></td>
<td></td>
<td>• recognise that symptoms may be caused by medication</td>
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<tr>
<td></td>
<td></td>
<td>• advise to stop using the medicine, making a provision for safe alternative medication if medically indicated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• administer treatment to relieve symptoms (e.g. antihistamine, topical steroid)</td>
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<tr>
<td></td>
<td></td>
<td>• refer to an appropriate clinic for further investigation</td>
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<tbody>
<tr>
<td>3</td>
<td>Further assessment and management - history and examination, id trigger</td>
<td>Have access to:</td>
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<tr>
<td></td>
<td></td>
<td>• drug reference manuals for adverse drug reactions, such as the BNF-C</td>
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<tr>
<td></td>
<td></td>
<td>Be able to</td>
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<tr>
<td></td>
<td></td>
<td>• take an allergy focused clinical history and examination (14, 15)</td>
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<td></td>
<td></td>
<td>• differentiate between IgE mediated, non IgE mediated reactions and common adverse drug events</td>
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<td>Ref</td>
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| 4   | **Further assessment and management** - basic investigations | Have access to:  
- facilities, practical skill and knowledge to undertake and interpret basic investigations including  
  - skin prick testing (14-19)  
  - measurement of serum specific IgE (17, 20)  
  - oral drug provocation tests to a limited number of drugs (e.g. amoxycillin, penicillin) in a safe and controlled environment (14, 21)  
- appropriate quality control through guidelines and standard operating procedures to ensure the clinical competence of staff conducting SPT and drug provocation tests  
- an accredited laboratory for serum specific IgE testing  

Understand the  
- relationship between sensitisation and clinical allergy  
- performance (sensitivity, specificity, negative/positive predictive values) of tests for sensitisation to medications which commonly cause drug allergy and adverse drug reactions  

Know  
- which medications may cross react (22)  

Be able to  
- take an allergy focused clinical history and examination (14, 15)  
- interpret the results of investigations in the context of the clinical history  
- advise about appropriate medication alternatives and emergency medication for patients with drug allergy  
- accurately code drug-related allergies and adverse reactions, as per Short Clinical Guideline (SCG) Guidance on the Representation of Allergies and Adverse Reaction Information Using NHS Message Templates (23) |
| 5   | **Further assessment and management** – risk assessment | Know  
- the natural history of drug allergy  
- that some drug reactions are potentially high risk  

Be able to  
- identify high risk drug allergy scenarios  
- provide the patient/parent/carer with a reasonable risk assessment indicating the likelihood of further reactions and the need for safe alternatives |
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| 6   | **Further assessment and management** – assess and optimise | Know  
• the spectrum of atopic disease  
Be able to  
• assess and initiate the management of patients presenting with allergic conditions |
| 7   | **Further assessment and management** – medication advice | Know  
• common cross reactivities  
Be able to  
• advise about safe alternative medications |
| 8   | **Further assessment and management** – communication (15, 24, 25) | Know  
• the importance of effective communication with the entire network of agencies and individuals involved in the child’s care including primary care, community paediatrics, SEYS  
• to complete a Yellow Card for any reported side effects from medications  
Be able to  
• provide written communication to patients, parents and carers, primary care, other health care professionals (including school nurses), schools and early years settings (SEYS) and, where necessary, social services  
• inform children and families about the process and appropriate timing for obtaining a medical alert talisman (e.g. medical identity bracelet) |
| 9   | **Further assessment and management** – minimise impact on quality of life | Know  
• how drug allergy may impact on different aspects of daily life and medical care decisions for the patient, family and health care professionals  
• what resources are available locally and nationally to support patients and their families (e.g. Anaphylaxis Campaign)  
Be able to  
• explore and manage child/young person’s expectations and concerns about conditions and relevant treatments  
• ensure age and culturally appropriate education at each contact point  
• provide support to patients to help minimise the impact of drug allergy on quality of life  
• provide details of different types of resources, including patient charities, websites and local support groups, as well as psychosocial support, if required |
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| 10  | **Further assessment and management** – onward referral | Know  
• the indications for referral for further investigations (e.g. anaesthetic anaphylaxis (26))  
• where desensitisation may be appropriate                                                                                               |
| 11  | **Further assessment and management** – specialised investigations | Have access to  
• facilities to perform and interpret (in a controlled and safe environment):  
  – intradermal tests  
  – oral or subcutaneous provocation tests (15)  
• appropriate quality control through guidelines and standard operating procedures to ensure the clinical competence of staff conducting drug provocation tests  

Know  
• that specialist investigations occur in addition to further assessment and management  
• the limitations of investigations for drug allergy  

Be able to  
• undertake and interpret investigations including  
  – intradermal tests  
  – oral or subcutaneous provocation tests  
• exclude allergy to alternative related drugs (e.g. antibiotics and anaesthetics) |
| 12  | **Desensitisation**                                | Have access to  
• appropriate quality control through guidelines and standard operating procedures to ensure the clinical competence of staff conducting desensitisation  

Know  
• the indications for and limitations of performing drug desensitisation  
• the principles of performing drug desensitisation  

Be able to  
• perform and supervise drug desensitisation procedures |
| 13  | **Follow up care**                                 | Know  
• the natural history of common drug allergies  

Be able to  
• review diagnosis and update avoidance advice  
• support effective transition to adult services, if appropriate |
References

1. Drug Allergy Care Pathway: Self Care.
2. Drug Allergy Care Pathway: Health Care Professional.
3. Drug Allergy Care Pathway: Assessment and Management – Medical Care – History and Examination.
4. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Basic Investigations, Identify Trigger.
5. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Risk Assessment.
6. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Assess and Optimise.
7. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Medication Advice.
8. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Communication.
9. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Minimise Impact on Quality of Life.
10. Drug Allergy Care Pathway: Assessment and Management (Medical Care) - Onward Referral.
11. Drug Allergy Care Pathway: Assessment and Management (Specialist Care) – Specialised Investigations.
12. Drug Allergy Care Pathway: Assessment and Management (Specialist Care) - Desensitisation
13. Drug Allergy Care Pathway: Follow up Care.