East Sussex Healthcare
NHS Trust

FOI REF: 24/082

Eastbourne District General Hospital
Kings Drive
Eastbourne
East Sussex
BN21 2UD

Tel: 0300 131 4500
Website: www.esht.nhs.uk

23rd February 2024

FREEDOM OF INFORMATION ACT

I am responding to your request for information under the Freedom of Information Act. The answers to your specific questions are as follows:

Paediatric Allergy Service:

1) **Please can you confirm the Trust operates a Paediatric Allergy Service?**

Yes, a mixture of Joint multi-disciplinary team clinics (Paediatrician, nurse, Dietitian).

2) **Please provide a Service Specification, and/or service description and/or other documents that describe this service (whether standalone or integrated in a broader Service Specification).**

Please see the attached documents.

Please note that it is East Sussex Healthcare NHS Trust's FOI policy to only provide the names of staff that are grade 8a or above. We have, therefore, redacted the names of staff that do not meet this criterion.

3) **hat is the title of the clinician who is clinically responsible for patients seen in this service?**

Consultant Paediatrician.

What GMC specialist register is this clinician on?

Particulars of specialist register not stated on GMC website.

4) **Please provide any subspecialty pathways or protocols related to this service.**

No subspecialty pathways for acute. Clinical guideline attached.

5) **Please provide any quality metrics or reports for this service.**

None.

Cont…/

6) Does the Trust subcontract any of this service? If so, please provide the name of the provider and their service specification.

No.

Cow's Milk Allergy Service:

7) Please can you confirm the Trust operates a Cow's Milk Allergy Service?

Tier one support from health visiting and General Practitioner who would refer to dietetics. Consultant paediatricians follow attached guidance when the children present in the acute setting, but generally managed within primary care settings.

8) Please provide a Service Specification, and/or service description and/or other documents that describe this service (whether standalone or integrated in a broader Service Specification).

Not applicable for acute.

9) What is the title of the clinician who is clinically responsible for patients seen in this service? What GMC specialist register is this clinician on?

Consultant paediatricians within allergy clinics and general paediatric clinics.

10) Please provide any subspecialty pathways or protocols related to this service, including whether there is a standalone Headache Clinic.

None for acute.

11) Please provide any quality metrics or reports for this service.

None for acute.

12) Does the Trust subcontract any of this service? If so, please provide the name of the provider and their service specification.

No.

If I can be of any further assistance, please do not hesitate to contact me.

Should you be dissatisfied with the Trust's response to your request, you have the right to request an internal review. Please write to the Freedom of Information Department (esh-tr.foi@nhs.net), quoting the above reference, within 40 working days. The Trust is not obliged to accept an internal review after this date.

Cont…/

Should you still be dissatisfied with your FOI request, you have the right of complaint to the Information Commissioner at the following address:

The Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire SK9 5AF

Telephone: 0303 123 1113

Yours sincerely

Freedom of Information Department
esh-tr.foi@nhs.net

East Sussex Healthcare NHS Trust

Clinical Guideline- Food allergy in children and young people

Document ID Number:	845
Version:	V3
Ratified by:	Women and Children's Governance and Accountability Members
Date ratified:	October 2021
Name of author and title:	Dr Oana Anton Consultant Paediatrician [redacted] Paediatric Dietician
Date Originally Written:	November 2006
Date of current version was completed	May 2021
Name of responsible committee/individual:	Dr. O Anton
Date issued:	22 October 2021
Review date:	October 2024
Target audience:	All Paediatric medical and nursing staff with emergency department staff
Compliance with CQC Fundamental Standard	Regulation 9 Person centred Care Regulation 12 Safe Care and Treatment Regulation 14 Meeting Nutritional and Hygiene Needs
Compliance with any other external requirements (e.g. Information Governance)	NICE guideline Food allergy in children and young people, CG116 Feb 2011 Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers, Resuscitation Council UK May 2021 BSACI guideline: prescribing an adrenaline auto-injector, 2016
Associated Documents:	Guidelines for Diagnosis and Management of Drug Allergy

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of procedural documents and can only guarantee that the procedural document on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1 2006295	Nov 2006	[redacted]	First publication	
V1 2010203	Sept 2010	[redacted]	Reviewed	Still valid
V2	Nov 2015	Dr Leclezio: Caroline Stephenson Practice educator	Reformatting, review and update	Minor changes in accordance with NICE guidance CG116
V3	May 2021	Dr Oana Anton [redacted] Dr Veronica Leclezio	Reviewed and updated	

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Women, children and sexual health guideline implementation group		Nov 2015
Women, children and sexual health Clinical Unit meeting		April 2016
Paediatric Consultants ESHT	Consultants	
Paediatric Staff Grades ESHT	SpRs	
Pharmacists ESHT		
Women and Children's Guideline Implementation group		August 2021
Raisa Buss (previously Rampersad) Lead Pharmacist for Women's, Children and Sexual Health		August 2021
Women and Children's Governance and Accountability		August 2021
Medicines Optimisation Group		October 2021

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of contents

1. Introduction

Food allergy is an adverse immune response to a food. It can be classified into Ig E-mediated and non-mediated reactions. Many non- reactions, which are poorly defined both clinically and scientifically, are believed to be T-cell-mediated. Some reactions involve a mixture of both and non- responses and are classified as mixed and non- allergic reactions. Food allergy may be confused with food intolerance, which is a non-immunological reaction that can be caused by enzyme deficiencies, pharmacological agents and naturally occurring substances. Food intolerance will not be covered in this guideline. The starting point for the guideline is a suspicion of food allergy, and the use of an allergy-focused clinical history will help to determine whether a food allergy is likely.
In the NHS, most allergy care takes place in primary care. People with a clear diagnosis, and mild but persistent symptoms, are usually managed in general practice without referral to a specialist service. Some people with allergies, and the parents or carers of children and young people with allergies, also buy over-the-counter medicines from community or high-street pharmacies. However, if there is diagnostic doubt or symptoms of a more severe disease, GPs often consider referral for a specialist opinion.

2. Rationale

There is a substantial gap between perceived and proven food allergy (Kayosarri, 1992), resulting in a relatively high incidence of unnecessary dietary restrictions. Allergic reactions to common foods, such as cow's milk and egg, appear in infancy and many have resolved by the age of three. Fish and nut allergies tend to be longer lasting and may not resolve. Early symptoms seen in infancy are often perceived by parents to be potentially severe causing life threatening anaphylaxis and as a result many children continue to have enforced lifestyle restrictions much later into childhood due to fear of re-introducing that food again.
The high degree of media attention placed on the incidence and severity of food allergic reactions has resulted in many children being misdiagnosed because they display "allergic" type symptoms (e.g. rash or vomiting) after coincidental ingestion of a particular food. In later childhood symptoms such as abdominal pain, migraine and fatigue may be wrongly attributed to food intolerance and this can be difficult to prove as at this time other influences, particularly psychological, are likely to play a role.
Avoiding certain foods in a child's diet can prove to be difficult, expensive and can result in nutritional deficiencies. It is, therefore, very important to ensure that foods are not being avoided unnecessarily in a child's diet. However, it is also important to identify true food allergy to ensure that appropriate information on avoidance and instruction for life saving treatment is given in the event of accidental exposure.

3. Scope

These food allergy guidelines should be followed by all health care professionals involved in the management of children with proven/suspected food allergy, who are seen within the East Sussex Healthcare NHS Trust.
Medical and nursing staff is accountable for their management of patients with food allergies and responsible for following this evidence based practice guideline to ensure consistency, currency and safety in patient care. Medical staff is accountable for prescribing of medications and treatment according to this guideline. Nursing staff are accountable for ensuring that nursing care is delivered correctly and safely and drug therapy is administered according to Trust policy. Pharmacists are accountable for ensuring prescriptions are written and administered safely and according to Trust policy.

4. Definitions

Mediated Responses

Mediated reactions are acute and frequently have a rapid onset. Those suspected to have an immediate type allergy should be offered skin prick test and/or blood tests for specific antibodies to the suspected foods and likely co-allergens. Both tests detect the presence of, the main immunoglobulin involved in immediate Type 1 hypersensitivity. A Type 1 hypersensitivity reaction, whether to a food, drug, chemical, animal, insect or airborne allergen, causes an immediate release of histamine. Any, or all, of the body's systems may be involved and it can be potentially fatal.
When proteins from the allergen react with on the surface of the mast cells, histamine is released. Histamine causes vasodilation and plasma leakage (oedema) and contraction of smooth muscle (in the lungs = bronchoconstriction). T cells are also activated to release proteins that stimulate further production of and set the inflammatory process in action. Anaphylaxis is an exaggeration of these processes with vasodilation and plasma leakage occurring throughout the body. This leads to a fall in blood pressure and collapse as well as severe gastrointestinal and respiratory problems which, if not resolved, may lead to death. Hay fever and allergic asthma are examples of a Type 1 reaction producing rhinitis and wheezing.

Non delayed type responses
This can be suspected based on the results of the allergy-focused clinical history, if non--mediated food allergy is suspected, trial elimination of the suspected allergen (normally for between 2–6 weeks) and reintroduce after the trial. Seek advice from a dietitian with appropriate competencies, about nutritional adequacies, timings of elimination and reintroduction, and follow-up.

5. Assessment and allergy focused clinical history

Consider the possibility of food allergy in children and young people who have one or more of the signs and symptoms in Table 1 below. Pay particular attention to persistent symptoms that involve different organ systems.

Recommendation
If food allergy is suspected (by a healthcare professional or the parent, carer, child or young person), a healthcare professional with the appropriate competencies (either a GP or other healthcare professional) should take an allergy-focused clinical history tailored to the presenting symptoms and age of the child or young person.

This should include:

- Any personal history of atopic disease (asthma, eczema or allergic rhinitis)
- Any individual and family history of atopic disease (such as asthma, eczema or allergic rhinitis) or food allergy in parents or siblings
- Details of any foods that are avoided and the reasons why
- An assessment of presenting symptoms and other symptoms that may be associated with food allergy including questions about:
  - the age of the child or young person when symptoms first started
  - speed of onset of symptoms following food contact
  - duration of symptoms
  - severity of reaction
  - frequency of occurrence
  - setting of reaction (for example, at school or home)

  - reproducibility of symptoms on repeated exposure
  - what food and how much exposure to it causes a reaction
- The child or young person's feeding history, including the age at which they were weaned and whether they were breastfed or formula-fed – if the child is currently being breastfed, consider the mother's diet
- Details of any previous treatment, including medication, for the presenting symptoms and the response to this
- Any response to the elimination and reintroduction of foods
- Cultural and religious factors that affect the foods they eat
- Who has raised the concern and suspects the food allergy
- What the suspected food allergen is

Based on the findings of the allergy-focused clinical history, physically examine the child or young person, paying particular attention to:

- growth and physical signs of malnutrition
- signs related to allergy-related comorbidities (atopic eczema, asthma and allergic rhinitis).

Table 1 Signs and symptoms of possible food allergy

Ig E mediated	**Non mediated**
The skin	
Pruritus	Pruritus
Erythema	Erythema
Acute urticarial localised or generalised	Atopic eczema
Acute angioedema- commonly on the lips, face and around the eyes	
The gastrointestinal system	
Angioedema of lisps, tongue, palate	Gastro-oesophageal reflux disease
Oral pruritus	Loose frequent stools
Nausea	Blood and/or mucus in stools
Colicky abdominal pain	Abdominal pain
Vomiting	Infantile colic
Diarrhoea	Food refusal or aversion
	Constipation
	Perianal redness
	Pallor and tiredness
	Faltering growth in conjunction with at least one or more gastrointestinal symptoms above (with or without significant atopic eczema)
The respiratory system (usually in combination with one or more of the above symptoms and signs)	
Upper respiratory tract symptoms (nasal itching, sneezing, rhinorrhoea or congestion [with or without conjunctivitis	
Lower respiratory tract symptoms (cough, chest tightness, wheezing or shortness of breath)	
Signs or symptoms of anaphylaxis or other systemic allergic reactions	

Note: This list is not exhaustive. The absence of these symptoms does not exclude food allergy.
Consider the possibility of food allergy in children and young people whose symptoms do not respond adequately to treatment for:

- Atopic eczema
- Gastro-oesophageal reflux disease
- Chronic gastrointestinal symptoms, including chronic constipation

5.1 Acute management of food allergic reactions

Once a diagnosis of food allergy is suspected based on history and presence of symptoms as mentioned in table 1, the medical professional should offer age-appropriate information that is relevant to the type of allergy (-mediated, non-mediated or mixed).

The information includes:

- the type of allergy suspected
- the risk of a severe allergic reaction
- any impact on other healthcare issues such as vaccination

The diagnostic process, which may require:

- An elimination diet followed by a possible planned re-challenge or initial food reintroduction procedure
- Skin prick tests and specific antibody testing and their safety and limitations
- Referral to secondary or specialist care.
- Support groups and how to contact them.

If an elimination diet is required information should be provided on:

- what foods and drinks to avoid
- how to interpret food labels
- alternative sources of nutrition to ensure adequate nutritional intake
- the safety and limitations of an elimination diet
- the proposed duration of the elimination diet
- when, where and how an oral food challenge or food reintroduction procedure may be undertaken
- for infants still breastfeeding food avoidance advice to breastfeeding mothers and information on the most appropriate hypoallergenic formula or milk substitute to mothers of formula-fed babies.
- **A referral to the dietician is recommended**

The Allergy Action Plan template in appendix A gives details regarding the severity assessment of an allergic reaction.

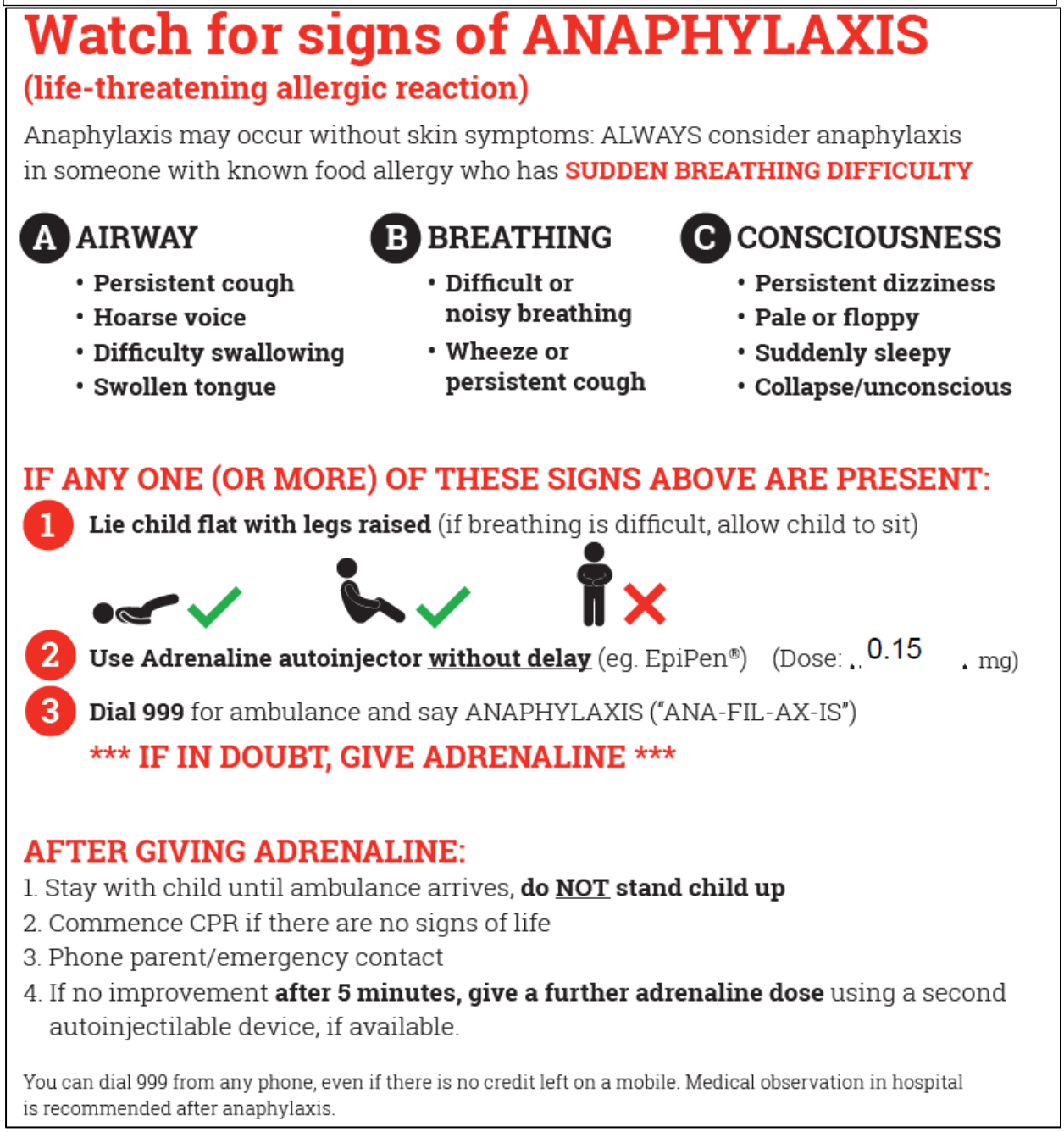
Mild/moderate reactions include symptoms and signs such as:
• Swollen lips face or eyes
• Itchy/tingling mouth
• Hives or itchy skin rash
• Abdominal pain or vomiting
• Sudden change in behaviour

Management of mild to moderate symptoms is to advise on the immediate use of an oral non-sedating antihistamine such as cetirizine or loratadine, to be taken 'as-needed'. In

infants and children aged less than two years the sedating antihistamine chlorphenamine may be used instead.

Severe and life threatening allergic reactions recognition and management should follow the guidance in appendix A. This includes a flow chart with the Anaphylaxis algorithm, refractory anaphylaxis algorithm, RCPCH Allergy Care Pathway for Children with Food and a template of the BSACI Allergy and allergy action plan.

Fig 1 Signs of anaphylaxis and management as per BSACI Allergy Action Plan



After a severe or life threatening allergic reaction children should have a period of observation in hospital. Below table 2 summarises the recommendations from the latest Resuscitation Council guidance on Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers published May 2021.

6. Discharge recommendations

All patients should be reviewed by a senior clinician and a decision should be made about the need for further treatment and duration of observation. There is no reliable way of predicting who will have a biphasic reaction, so decisions about discharge must be made for each patient by an experienced clinician. Patients should be warned of the possibility of a biphasic reaction causing recurrence of symptoms, and advised how they should respond.

Table 2 Recommendations regarding the duration of observation after a severe or life threatening allergic reaction

Consider fast-track discharge (after 2 hours observation from resolution of anaphylaxis) if:	**Minimum 6 hours observation after resolution of symptoms recommended if:**	**Observation for at least 12 hours following resolution of symptoms if any one of the following:**
• Good response (within 5–10 minutes) to a single dose of adrenaline given within 30 minutes of onset of reaction **and** • Complete resolution of symptoms **and** • The patient already has unused adrenaline auto-injectors and has been trained how to use them **and** • There is adequate supervision following discharge	• 2 doses of IM adrenaline needed to treat reaction* **or** • Previous biphasic reaction	• Severe reaction requiring >2 doses of adrenaline. • Patient has severe asthma or reaction involved severe respiratory compromise. • Possibility of continuing absorption of allergen, e.g. slow-release medicines. • Patient presents late at night, or may not be able to respond to any deterioration. • Patients in areas where access to emergency care is difficult.
In all cases, discharge must comply with NICE Clinical Guidance CG134.[96]		

*It may be reasonable for some patients to be discharged after 2 hours despite needing two doses of IM adrenaline, e.g. following a supervised allergy challenge in a specialist setting.

NICE recommends that prior to discharge, a healthcare professional with the appropriate skills and competencies should offer patients (or their parent/carer) the following:

- information about anaphylaxis, including the signs and symptoms of anaphylaxis
- information about the risk of a biphasic reaction (and clear instructions to return to hospital if symptoms return)

- information on what to do if anaphylaxis occurs (use the adrenaline injector and call emergency services), (e.g. Allergy Action Plans which can be downloaded at bsaci.org or sparepensinschools.uk)
- prescription of adrenaline auto-injectors (see Section 8.6 for more detail) or provision of replacement(s) if they have been used
- 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 (e.g. Anaphylaxis Campaign, Allergy UK).

Patients should be provided with an **emergency management or action plan**. For children, these are available at bsaci.org or sparepensinschools.uk.

6.1. Biphasic reactions signs and symptoms

Anaphylaxis can appear to resolve but then cause a recurrence of symptoms several hours later in the absence of further allergen exposure. This is known as a biphasic reaction and occurs in around 5% of patients. Published studies report the median time to biphasic symptoms (i.e. time by which 50% of biphasic reactions have occurred) to be around 12 h.

Biphasic reactions can also occur following milder (non-anaphylactic) allergic reactions, with a similar incidence to biphasic reactions after anaphylaxis

Risk factors for biphasic reactions following anaphylaxis include:

- more severe initial presentation of anaphylaxis
- initial reaction requiring more than one dose of adrenaline
- delay in adrenaline administration (> 30 – 60 min from symptom onset).

Patients with a history of a previous biphasic reaction may also be at an increased risk.

7. The Multi-Disciplinary Food Allergy Clinic

All new referrals for children with suspected or probable food allergy received into the East Sussex Healthcare Trust should be appointed in the specialist allergy clinic. In this clinic there should be access to a health care professional who has been appropriately trained to perform skin prick testing and a dietitian with paediatric experience.

At the initial consultation the paediatrician will take the history and examine the child. They will then confirm whether or not food allergy is the likely diagnosis.

If food allergy is suspected and the child is at least 6 months old (in certain circumstances it may be appropriate below this age) the child will undergo skin prick testing (SPT), with or without specific. The SPT will be performed either by the doctor or the allergy nurse. Based on the SPT results the need for food challenge under supervised medical conditions will be assessed.

The clinic appointment is an opportunity to identify and treat co-morbidities as part of a holistic, individualised approach.

The allergy nurse or doctor will advise patients, parents and carers with regards to risk assessment, to allow them to minimise the impact of allergen avoidance on day to day activities. In order to minimise the impact on the quality of life parents and patients will be offered targeted education about effective food allergen avoidance, recognition and treatment of reactions and their prevention.

Risk in specific situations such (e.g. school and hospital catering) will be discussed and also the emergency medication (including training) and an agreed written personal management plan as appropriate and according to a risk assessment strategy. A follow-up appointment with the resus officers will be arranged from clinic for those with severe/life threatening allergic reactions.
The initial training on the use of adrenaline auto-injectors (AAI) will be provided in the allergy clinic (AAI training pack and access to on-line training to be provided). Please see appendix G for a summary of the British Society for Allergy and Clinical Immunology (BSACI)'s guideline to prescribing an AAI.

The executive summary states that patients at risk of anaphylaxis that should be considered for long-term provision of an adrenaline auto-injector include:

- who have suffered a severe systemic reaction where the allergen cannot be easily avoided
- who are allergic to high-risk allergens, for example nuts with other risk factors (such as asthma), even if the reaction was relatively mild
- who had a reaction in response to trace amounts of allergen/trigger
- who cannot easily avoid the allergen
- with continuing risk of anaphylaxis (e.g. food dependent exercise-induced)
- with idiopathic anaphylaxis
- with significant co-factors (e.g. asthma in food allergy, raised baseline serum tryptase)

A recent **MHRA drug safety update** recommended that individuals who need an AAI should in fact **carry two**. It is important to remember that the aim of self-management is the early and correct administration of adrenaline.

The complex management of patients is best provided by a multidisciplinary team including paediatric-trained, allergy specialist doctor(s), nurse(s) and dietitian(s) with appropriate school nurse/health visitor liaison for the further management of children with food allergy.

7.1 Follow-up in nurse led or consultant clinics

Once a diagnosis has been reached children are followed up with SPT yearly or 2 yearly depending on the age and type of allergen. This will facilitate the recognition in a timely manner of the likelihood of tolerance developing or resolution of the allergic reaction. The follow-up appointment will be an opportunity monitor growth, revise the severity of food reactions and the individualised allergy action plans.

The optimal interval for follow-up testing is not known, and partly depends on the specific food allergen:

- For egg, soybean, or wheat allergy, testing every 12–18 months up to the age of 5 years, and every 2–3 years following this, may be recommended.
- For peanut, tree nut, fish, and shellfish allergy, testing every 2–4 years may be recommended.

Once children reach secondary school age, the allergy nurse or doctor will commence the transition pathway (see Appendix F for generic template). Before the age of 16 years old, children will have the diagnosis confirmed. They will be provided written information to facilitate self-care and be able to perform risk assessment. We will arrange refresher resus training for children on adrenaline auto injectors. Children and young persons and their parents will have written information about their future follow-up care.

7.2 Ig E mediated allergy diagnostic tools

After taking an allergy-focused clinical history, if-mediated allergy is suspected, offer the child or young person a skin prick test and/or blood tests for specific antibodies to the suspected foods and likely co-allergens. Tests should only be undertaken by healthcare professionals with the appropriate competencies to select, perform and interpret them.

Choose between a skin prick test and a specific antibody blood test based on:
- the results of the allergy-focused clinical history and
- whether the test is suitable for, safe for and acceptable to the child or young person (or their parent or carer) and
- the available competencies of the healthcare professional to undertake the test and interpret the results.

7.3 Non Ig E mediated diagnostic tools

Based on the results of the allergy-focused clinical history, if non--mediated food allergy is suspected, trial elimination of the suspected allergen (normally for between 2–6 weeks) and reintroduce after the trial. Seek advice from a dietitian with appropriate competencies, about nutritional adequacies, timings of elimination and reintroduction, and follow-up

7.4 Alternative diagnostic tools

Alternative diagnostic tests in the diagnosis of food allergy are not recommended. These include:

- Vega test
- Applied kinesiology
- Hair analysis.

Do not use serum specific IgG testing in the diagnosis of food allergy.

8. Skin prick Tests (SPT)

An SPT is a quick and usually painless procedure where an allergen extract is superficially introduced into the skin in order to elicit a positive result in patients with clinical hypersensitivity. It provides a rapid and sensitive means of assessing the presence of allergen-specific antibodies.

The basic principle of skin prick testing is the introduction of a small amount of well characterized allergen extract into the epidermis, usually on the volar aspect of the forearm. The purpose of it is that the epidermis is a useful surrogate for the affected organs, because it is accessible, it means many different allergens can be tested at the same time and testing methods have been devised that are both safe and relatively well characterized.

A positive SPT result produces a wheal. A diameter of 3mm or more is the most reliable cut off point for differentiating between sensitized and non-sensitized individuals.

A high percentage of children with a mediated food allergy will have positive SPT. However, both false positive and false negative results can occur. Some children continue to display a positive SPT despite developing clinical tolerance. Therefore, based on clinical judgement a food challenge may be required. Infants have a higher prevalence of negative results despite immediate symptoms on ingestion. Fruit allergy is only likely to show a positive result when using fresh rather than commercial preparations.

8.1 Paediatric Protocol for Skin Prick Testing

SPT reactions are inhibited by antihistamines and also topical corticosteroids applied to the skin where testing is to be performed. Therefore where possible inhibitory medication should be stopped (see table 2) or alternative testing methods considered. Short acting anti-histamines should be stopped for 72hours prior to testing. Long acting antihistamines should be stopped for 7 days. Oral steroids for at least 3 days depending on the dose (if >50 mg/d they should be stopped for at least 7 days).

Cautions
Caution should be taken when considering SPT for patients with unstable asthma. If the patient is experiencing an exacerbation of asthma at the time of testing then SPT may have to be avoided.

Equipment
- Selected allergens and positive and negative control solutions (stored at +2- +8oC). Check expiry date and date opened (some manufacturer's state that skintest solutions should be used within 6 months of opening.) (And/or fresh foods to be used for testing
- Skin prick test recording sheet
- Pen
- Individual sterile skin prick testing lancets
- Sharps bin
- Tissues
- Skin test measure
- Timer / clock / watch
- Pillow – on which to rest the child's arm.
- Appropriate emergency equipment must be accessible
- Antihistamine (syrup/tablet)
- Adrenaline Auto-injector or Vials Adrenaline 1:1000 plus needles and syringe
- Hydrocortisone ointment
- Beta 2 agonist should be available if patient is asthmatic.

Preparation
Verbal consent for the procedure should be obtained. The procedure should be undertaken in accordance with local infection control policy using appropriate hand hygiene measures. Select appropriate test site free from eczema / dermatitis, tattoo marks. The preferred site is the forearm or thigh but the back may also be used particularly in small infants. The skin prick tester should sit opposite the patient with the patient's forearm resting on the pillow with the volar aspect upwards. This enables the tester to maintain eye contact with the patient at all times and provide the patient with a comfortable position for the test. The younger child can sit upon their parent's lap opposite the tester with the pillow resting between them. The parent will hold the upper arm while the tester holds the child's hand or wrist. This enables the tester to maintain eye contact with the parent and child at the same time keeping the child's arm steady, while the child receives reassurance from parental touch. This method is preferable to SPT on the back as maintaining eye contact and being able to see what is happening makes the procedure less frightening for the child.

Table 2 Potential interference of medications with the skin test reaction (adapted from Demoly (2003) [23]; Rueff (2010) [24] and Position Paper: Allergen standardization and skin tests: The European Academy of Allergy (1993))

Drug	Suppression 0: no evidence; (+): possible, +: slight; ++: medium, +++: strong	Abstinence before testing	Reference
Antihistamines			
1st generation H1-blocker	+++	> 2 days	Dreborg (1989) [25]
Hydroxyzine			
2nd generation H1-blocker	+++	7 days	Devillier (2008) [26]
Cetirizine, Loratadine, etc.			
Ketotifen	+++	> 5 days	
H2-blocker	0 - +	Ø	
Glucocorticosteroids			
Topical (in test area)	+	> 1 week [1]	Hammarlund (1990) [27], Pipkorn (1989) [28], Gradman (2008) [29]
Nasal	0	Ø	
Inhaled	0	Ø	
Systemic/short term (up to 10 days)	0 / (+)		
< 50 mg/d Prednisolone-equivalent	0 / (+)	> 3 days	Hammarlund (1990) [30]
> 50 mg/d Prednisolone-equivalent	(+)	> 1 week [2]	Des Roches (1996) [31]
Systemic/long term (more than 10 days)			
<10 mg/d Prednisolone-equivalent	0	Ø	Olson (1990) [32]
>10 mg/d Prednisolone-equivalent	0	> 3 weeks [2]	Des Roches (1996) [31]
Topical calcineurin inhibitors	+	> 1 week	Gradman (2008) [29]
Other systemic drugs			
Omalizumab	++	> 4 weeks	Noga (2003) [33]
Leukotriene receptor antagonist	0	Ø	Cuhadaroglu (2001) [34], Hill (2003) [35]
Cyclosporin A	0	Ø	Munro (1991) [36]
Theophylline	0	Ø	Spector (1979) [37]
Antidepressants			
Doxepin	++	7 days	Rao (1988) [38]
Desipramine	++	3 days	Rao (1988) [38]
SSRI: Citalopram, Fluoxetin, Sertralin	0	Ø	Isik (2011) [39]
β-adrenergic agonists	0	Ø	Abramowitz (1980) [40], Spector (1979) [39]
Salbutamol, Salmeterol, Bambuterol, Terbutalin	0		Petersen (2003) [41]

[1] Depends on dosage and length of treatment (> 3 weeks).
[2] A retrospective study showed no influence of the skin reaction by 10–60 mg prednisone for 2 or more years.

8.2 Procedure for SPT

	ACTION	RATIONALE
1	Explain the procedure to the parents and child, if old enough	To gain informed consent, co-operation and trust. To alleviate anxiety
2	With the help of a play person (if possible) place the child in a comfortable position, resting the forearm on a pillow	To aid comfort and reduce anxiety during the procedure
3	Wash hands and prepare work area	To maintain cleanliness
4	If blood tests are also required, carry out SPT first whilst the child is more relaxed	To alleviate anxiety
5	If necessary clean the volar aspect of the forearm with normal saline or water. Testing may also be done on the back	Body lotions etc. on the test area will alter the surface tension and may cause the allergen drops to run
6	Using a pen, mark and label prospective skin tests at least 2cm apart, starting 5cm above the distal skin crease	To prevent coalescent of positive reactions
7	Place a drop of positive and negative control as two separate marks	Negative control ensures that any reaction that occurs as a result of the prick itself is taken into account when interpreting the results
8	Place a drop of allergen at the next mark	Spacing the allergens aids the safety in evaluating the wheals
9	Use a sterile lancet through the droplet at an angle of 90° and then withdraw	To reduce any trauma and prevent cross contamination. Too light a pressure causes too small a reaction. Too hard a pressure would cause bleeding
10	Remove excess allergen solution with a tissue immediately after the prick test has been performed	To avoid contamination between individual allergens on the skin
11	Leave for 10 minutes making sure the child does not scratch the skin. Involve the parents and a play person if necessary	This may affect the results and cause irritation
12	Use a skin test reaction gauge or transparent ruler to measure the size of the wheal. Record results in medical notes	If positive, the diameter of the wheal should be 3mm or more
13	Observe the child for any signs or respiratory distress or anaphylaxis	Ensure adrenaline is available and on hand for any emergency
14	Treat local reactions the child may have e.g. itching after the test	Anti-histamine cream may be used
15	If the patient appears to have respiratory distress/anaphylaxis treat as per "managing allergic reactions in children" guidelines (see **Appendix A**)	To ensure appropriate and immediate treatment of the allergic reaction

Appendix B contains the form to be completed for requesting follow up skin prick testing (results should also be recorded on this sheet) and an information sheet that should be sent to the parents

Allergy testing may also be used to assess whether tolerance has developed in a person with a confirmed food allergy. The optimal interval for follow-up testing is not known, and partly depends on the specific food allergen:

- For egg, soybean, or wheat allergy, testing every 12–18 months up to the age of 5 years, and every 2–3 years following this, may be recommended.
- For peanut, tree nut, fish, and shellfish allergy, testing every 2–4 years may be recommended.

9. Food Challenge Protocol

Reasons for carrying out a food challenge under controlled, medical conditions:

- Patient has a positive SPT but dubious or inconclusive history of substance
- Patient has a positive SPT but dubious or inconclusive history of exposure
- Patient has a negative SPT but a positive history, where the allergen needs confirming
- Patient has had a previous positive SPT and reaction on exposure, but who now has a negative SPT.
- If previous anaphylaxis or if has a nut allergy
- If parents anxious about carrying out a challenge at home.

A food challenge should not be carried out on a child presenting with a positive history of a reaction and a positive SPT. Food challenges can be carried out on the Short Stay Paediatric Assessment Units.

9.1 Protocol for Arranging Food Challenges:

	Action	**Rationale**
1	Once a food challenge has been agreed email a food challenge proposal form to susan.winborn@nhs.net (see **Appendix C for form**), a member of the team will arrange a day to carry out the challenge with the EDGH Short stay Paediatric Assessment Unit	To ensure that the test can be carried out on the ward with the correct equipment, medication and trained staff available
2	A member of the team will liaise with nursing staff and the parents regarding the food challenge	To ensure a written procedure is available on the day. To ensure that the parents are aware of what the child is to ingest on the day of the challenge. The parents information sheet should be sent out with the appointment letter .(Appendix C)
4	The parents will be informed of the date of the challenge and sent written information confirming the procedure for the challenge day	To gain parental co-operation and alleviate anxiety
5	A named doctor and nurse must be responsible for carrying out the food challenge for that child	To ensure staff are trained and aware of the procedures to follow during the challenge. To prevent professional negligence.
6	The named nurse must carry out baseline observations for that child, including temperature, BP, pulse, respiratory rate, weight.	To enable changes in the event of a reaction to be easily detected
7	The doctor on the day unit must explain the procedure to the parents, examine the child, record any areas affected by eczema, listen to the child's chest to ascertain if there is any wheezing and complete the medical assessment.	To obtain trust and co-operation and alleviate anxiety. To ensure that the parents are aware that the challenge will be stopped if there is a reaction and that they are aware of the treatment that may be required in this instance. To ensure that the child is well enough to undergo the food challenge.
8	The doctor on the day unit must obtain a signed consent form from the parents for the proposed food challenge, if this has not been done at the	To ensure that the parents have agreed to proceeding with the food challenge

	outpatient appointment	
9	The nurse and doctor should check that the correct medication is available and prescribed for that child in the event of a reaction	To ensure that there is no delay in administering appropriate treatment to that child in the event of a reaction. To prevent mistakes being made in the dose administered.
10	**Appendix D** outlines the procedure for giving the test food, if a challenge is to be carried out that is not included here please contact the lead Consultant or Dietician.	To ensure that the correct food and quantity is administered at the correct time
11	The nurse must wash their hands and put on gloves (these should be hypoallergenic if latex allergy is suspected /present). The nurse will then administer the food to the child following the procedure provided by the dietitian. Observations will be checked and recorded prior to proceeding with the next stage of giving the food	To prevent food contamination. To ensure the correct food is given at the correct time. To ensure that any reaction is detected at an early stage to prevent a more severe reaction from developing
12	If a reaction occurs treat according to the "managing an allergic reaction in children" guideline (see Appendix A)	To ensure that the correct treatment is administered and to prevent the situation worsening
13	At the end of the challenge the child and parents should be seen by a doctor.	To discuss the outcome of the challenge. To assess whether the child needs to be admitted overnight for observation. To assess whether the challenged food may now be consumed. To inform the parents of the possibility of a delayed reaction and what they should do in this instance. See Appendix E for parent's information sheet.
14	Discharge summary to be completed by the doctor on e-searcher and include the advice to continue to consume the food routinely to maintain tolerance.	To inform the GP of the outcome of the food challenge

Monitoring Arrangements

Element to be Monitored	**Lead**	**Tool for Monitoring**	**Frequency**	**Responsible Individual/Group/ Committee for review of results/report**	**Responsible individual/ group/ committee for acting on recommendations/action plan**	**Responsible individual/group / committee for ensuring action plan/lessons learnt are Implemented**
Children admitted and managed under this guideline	Audit and Risk Leads and daily by Consultant on-Call	Audit and Datix	3 yearly and on case by case basis on daily ward round	Consultant Paediatrician	All Consultant Paediatricians and Middle Grade paediatricians	All Consultant Paediatricians and Middle Grade paediatricians, Ward Matrons, Practice Educator

11. Equality and Human Rights Statement

An Equality and Human Rights Statement has been completed for this document. Children with suspected food allergy will be managed according to this protocol. Protected characteristics will be taken into consideration when planning their future management

12. Competencies and Training Requirements

The Paediatric Consultant/Associate Specialist with a Specialist Interest in food allergy in children will have received training in the appropriate management of these children and young people.
Staff performing skin prick tests must have had the relevant training in use of the equipment and substances, and have had Anaphylaxis training.

13. Evidence Base/References

NICE Clinical Guidelines CG 116 Food allergy in under 19s: assessment and diagnosis. Feb 2011.

EAACI Food Allergy and Anaphylaxis Guidelines Group. EAACI food allergy and anaphylaxis guidelines: diagnosis and management of food allergy. Allergy. 2014 Aug;69(8):1008-25. doi: 10.1111/all.12429. Epub 2014 Jun 9.

Bird JA, Leonard S, Groetch M, Assa'ad A, Cianferoni A, Clark A, Crain M, Fausnight T, Fleischer D, Green T, Greenhawt M, Herbert L, Lanser BJ, Mikhail I, Mustafa S, Noone S, Parrish C, Varshney P, Vlieg-Boerstra B, Young MC, Sicherer S, Nowak-Wegrzyn A. Conducting an Oral Food Challenge: An Update to the 2009 Adverse Reactions to Foods Committee Work Group Report. J Allergy Clin Immunol Pract. 2020 Jan;8(1):75-90.e17. doi: 10.1016/j.jaip.2019.09.029. PMID: 31950914.

Heinzerling L, Mari A, Bergmann KC, Bresciani M, Burbach G, Darsow U, Durham S, Fokkens W, Gjomarkaj M, Haahtela T, Bom AT, Wöhrl S, Maibach H, Lockey R. The skin prick test - European standards. Clin Transl Allergy. 2013 Feb 1;3(1):3. doi: 10.1186/2045-7022-3-3. PMID: 23369181; PMCID: PMC3565910.

Heidi Ball ,David Luyt Food Challenges for Children: A Practical Guide, Edition 4, September 2019

RCPCH, Allergy Care pathway for food allergy,2011,
https://www.rcpch.ac.uk/resources/allergy-care-pathway-food-allergy

NICE guideline (NG43) Transition from children's to adults' services for young people using health or social care services, 24.02.2016

Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers , Resuscitation Council UK, May 2021

Ewan, Pamela & Brathwaite, Nicola & Leech, Susan & Luyt, David & Powell, David & Till, Stephen & Nasser, Shuaib & Clark, Andrew. (2016). BSACI guideline: Prescribing an adrenaline auto-injector. Clinical & Experimental Allergy. 46. 1258-1280.

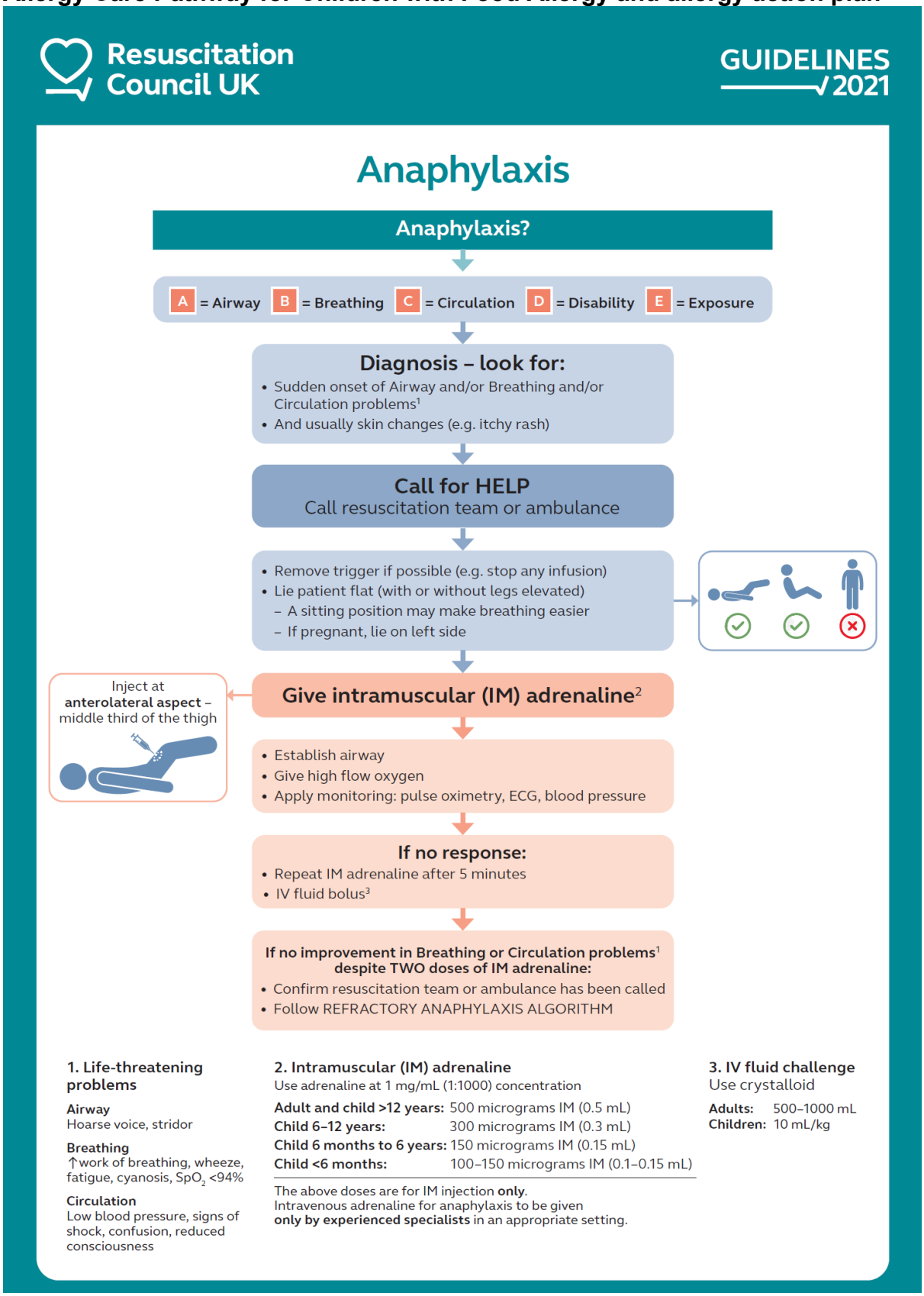
Appendix A: Due Regard, Equality & Human Rights Analysis

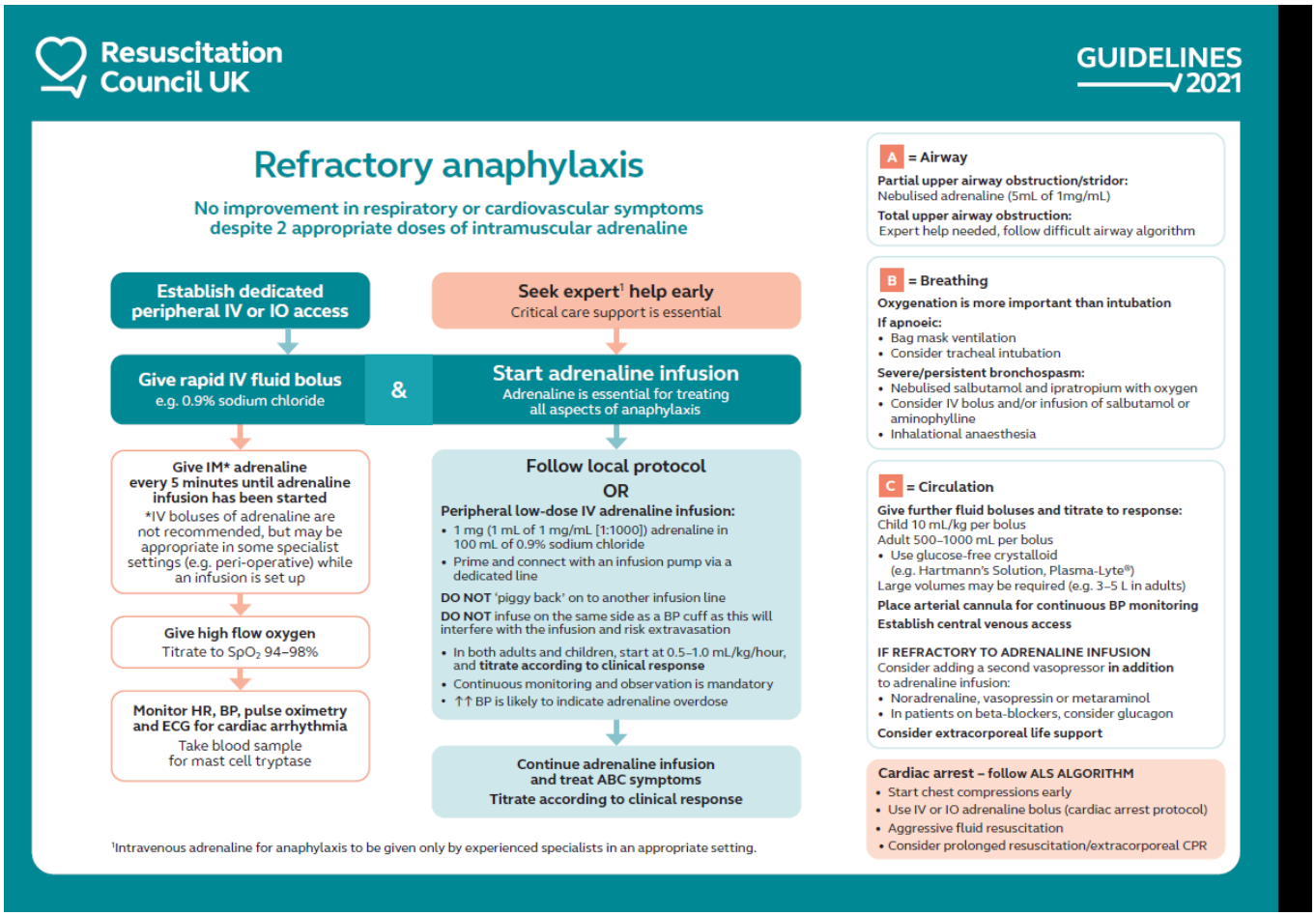
Title of document: CLINICAL GUIDELINE – FOOD ALLERGY IN CHILDREN AND YOUNG PEOPLE
Who will be affected by this work? Staff, patients, service users.
Please include a brief summary of intended outcome: To ensure that children with suspected or proven food allergy will be managed consistently and safely.

		Yes/No	Comments, Evidence & Link to main content
1.	**Does the work affect one group less or more favourably than another on the basis of:** (Ensure you comment on any affected characteristic and link to main policy with page/paragraph number)		
	• Age	No	
	• Disability (including carers)	No	
	• Race	No	
	• Religion & Belief	No	
	• Gender	No	
	• Sexual Orientation (LGBT)	No	
	• Pregnancy & Maternity	NA	
	• Marriage & Civil Partnership	NA	
	• Gender Reassignment	No	
	• Other Identified Groups	No	
2.	**Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?**	Yes	People of some religious groups will have their dietary preferences taken into consideration
3.	**What are the impacts and alternatives of implementing / not implementing the work / policy?**	This policy ensures that children and young people with suspected or proven food allergy are able to identify the allergen, undertake necessary avoidance strategies and maintain their safety.	
4.	**Please evidence how this work / policy seeks to "eliminate unlawful discrimination, harassment and victimisation" as per the Equality Act 2010?**	NA	
5.	**Please evidence how this work / policy seeks to "advance equality of opportunity between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?**	NA	
6.	**Please evidence how this work / policy will "Foster good relations between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?**	NA	
7.	**Has the policy/guidance been assessed in terms of Human Rights to ensure service users, carers and staff are treated in line with the FREDA principles**	NA	

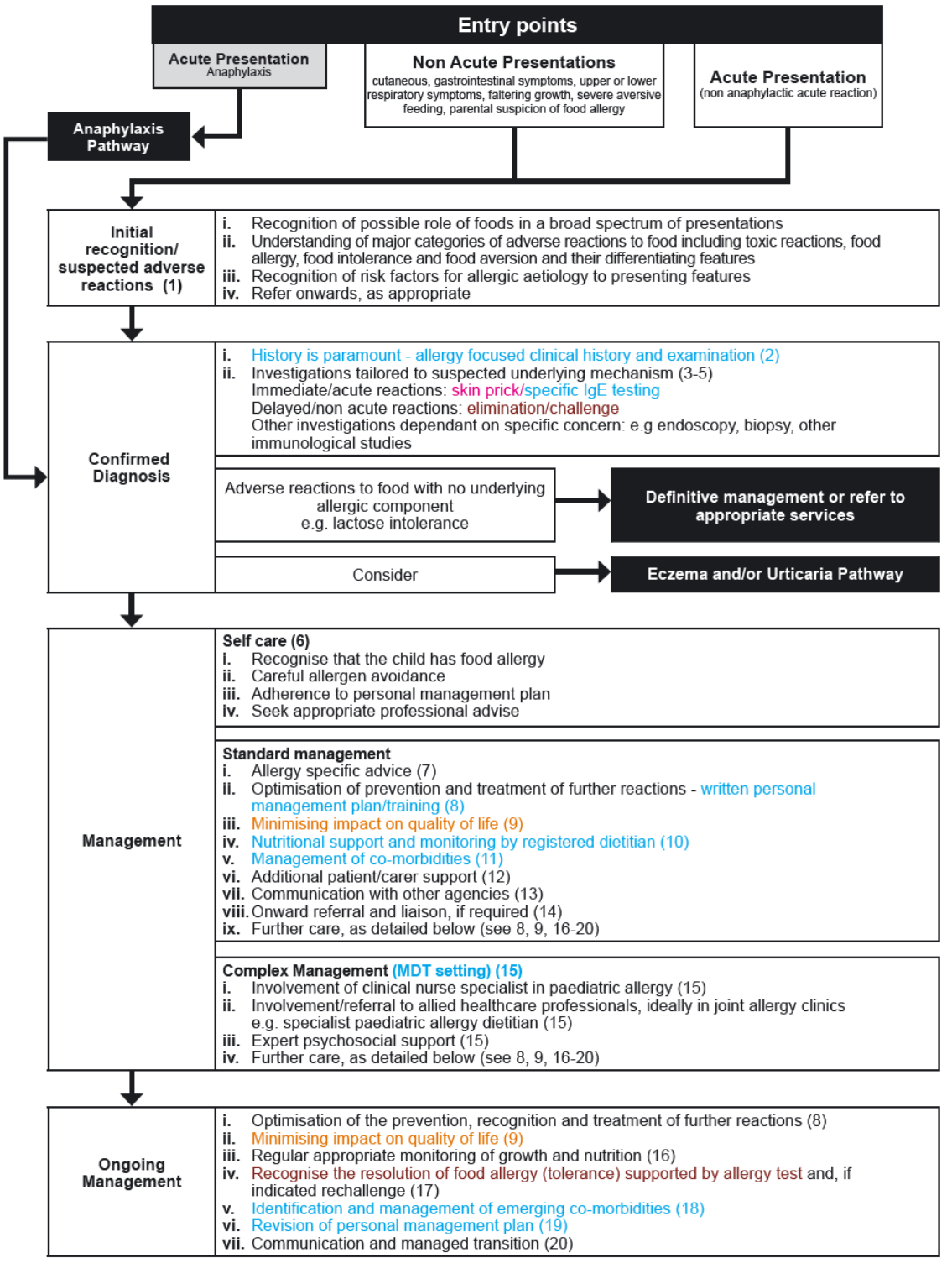
	(fairness, respect, equality, dignity and autonomy)	
8.	**Please evidence how have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available?**	NA
9.	**Have you have identified any negative impacts or inequalities on any protected characteristic and others? (Please attach evidence and plan of action ensure this negative impact / inequality is being monitored and addressed).**	No

Appendix B: Anaphylaxis algorithm, refractory anaphylaxis algorithm, RCPCH Allergy Care Pathway for Children with Food Allergy and allergy action plan




Resuscitation Council UK
GUIDELINES 2021
Refractory anaphylaxis
No improvement in respiratory or cardiovascular symptoms despite 2 appropriate doses of intramuscular adrenaline
Establish dedicated peripheral IV or IO access
Seek expert[1] help early
Critical care support is essential
Give rapid IV fluid bolus
e.g. 0.9% sodium chloride
&
Start adrenaline infusion
Adrenaline is essential for treating all aspects of anaphylaxis
Give IM* adrenaline every 5 minutes until adrenaline infusion has been started
*IV boluses of adrenaline are not recommended, but may be appropriate in some specialist settings (e.g. peri-operative) while an infusion is set up
Give high flow oxygen
Titrate to SpO2 94–98%
Monitor HR, BP, pulse oximetry and ECG for cardiac arrhythmia
Take blood sample for mast cell tryptase
Follow local protocol
OR
Peripheral low-dose IV adrenaline infusion:
• 1 mg (1 mL of 1 mg/mL [1:1000]) adrenaline in 100 mL of 0.9% sodium chloride
• Prime and connect with an infusion pump via a dedicated line
DO NOT 'piggy back' on to another infusion line
DO NOT infuse on the same side as a BP cuff as this will interfere with the infusion and risk extravasation
• In both adults and children, start at 0.5–1.0 mL/kg/hour, and titrate according to clinical response
• Continuous monitoring and observation is mandatory
• ↑↑ BP is likely to indicate adrenaline overdose
Continue adrenaline infusion and treat ABC symptoms
Titrate according to clinical response
[1]Intravenous adrenaline for anaphylaxis to be given only by experienced specialists in an appropriate setting.
A = Airway
Partial upper airway obstruction/stridor:
Nebulised adrenaline (5mL of 1mg/mL)
Total upper airway obstruction:
Expert help needed, follow difficult airway algorithm
B = Breathing
Oxygenation is more important than intubation
If apnoeic:
• Bag mask ventilation
• Consider tracheal intubation
Severe/persistent bronchospasm:
• Nebulised salbutamol and ipratropium with oxygen
• Consider IV bolus and/or infusion of salbutamol or aminophylline
• Inhalational anaesthesia
C = Circulation
Give further fluid boluses and titrate to response:
Child 10 mL/kg per bolus
Adult 500–1000 mL per bolus
• Use glucose-free crystalloid (e.g. Hartmann's Solution, Plasma-Lyte®)
Large volumes may be required (e.g. 3–5 L in adults)
Place arterial cannula for continuous BP monitoring
Establish central venous access
IF REFRACTORY TO ADRENALINE INFUSION
Consider adding a second vasopressor in addition to adrenaline infusion:
• Noradrenaline, vasopressin or metaraminol
• In patients on beta-blockers, consider glucagon
Consider extracorporeal life support
Cardiac arrest – follow ALS ALGORITHM
• Start chest compressions early
• Use IV or IO adrenaline bolus (cardiac arrest protocol)
• Aggressive fluid resuscitation
• Consider prolonged resuscitation/extracorporeal CPR

RCPCH Allergy Care Pathway for Children with Food Allergy



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

bsaci ALLERGY ACTION PLAN

RCPCH Anaphylaxis Campaign AllergyUK

This child has the following allergies:

Name:

.....

DOB:

.....

Photo

Mild/moderate reaction:

- Swollen lips, face or eyes
- Itchy/tingling mouth
- Hives or itchy skin rash
- Abdominal pain or vomiting
- Sudden change in behaviour

Action to take:

- Stay with the child, call for help if necessary
- Locate adrenaline autoinjector(s)
- **Give antihistamine:**

CETIRIZINE 2.5mg (If vomited, can repeat dose)

- Phone parent/emergency contact

Watch for signs of ANAPHYLAXIS

(life-threatening allergic reaction)

Anaphylaxis may occur without skin symptoms: ALWAYS consider anaphylaxis in someone with known food allergy who has **SUDDEN BREATHING DIFFICULTY**

A AIRWAY	B BREATHING	C CONSCIOUSNESS
• Persistent cough	• Difficult or noisy breathing	• Persistent dizziness
• Hoarse voice	• Wheeze or persistent cough	• Pale or floppy
• Difficulty swallowing		• Suddenly sleepy
• Swollen tongue		• Collapse/unconscious

IF ANY ONE (OR MORE) OF THESE SIGNS ABOVE ARE PRESENT:

1. **Lie child flat with legs raised** (if breathing is difficult, allow child to sit)

2. **Use Adrenaline autoinjector without delay** (eg. EpiPen®) (Dose: . 0.15 . mg)
3. **Dial 999** for ambulance and say ANAPHYLAXIS ("ANA-FIL-AX-IS")

***** IF IN DOUBT, GIVE ADRENALINE *****

AFTER GIVING ADRENALINE:

1. Stay with child until ambulance arrives, **do NOT stand child up**
2. Commence CPR if there are no signs of life
3. Phone parent/emergency contact
4. If no improvement **after 5 minutes, give a further adrenaline dose** using a second autoinjectilable device, if available.

You can dial 999 from any phone, even if there is no credit left on a mobile. Medical observation in hospital is recommended after anaphylaxis.

Emergency contact details:

1) Name: .....

.....

2) Name: .....

.....

Parental consent: I hereby authorise school staff to administer the medicines listed on this plan, including a 'spare' back-up adrenaline autoinjector (AAI) if available, in accordance with Department of Health Guidance on the use of AAIs in schools.

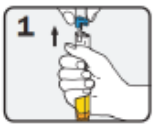
Signed: .....

Print name: .....

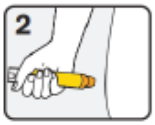
Date: .....

For more information about managing anaphylaxis in schools and "spare" back-up adrenaline autoinjectors, visit:
sparepensinschools.uk

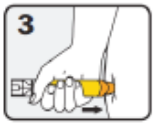
How to give EpiPen®



PULL OFF BLUE SAFETY CAP and grasp EpiPen. Remember: "blue to sky, orange to the thigh"



Hold leg still and PLACE ORANGE END against mid-outer thigh "with or without clothing"



PUSH DOWN HARD until a click is heard or felt and hold in place for **3 seconds**. Remove EpiPen.

Additional instructions:

If wheezy, GIVE ADRENALINE FIRST, then asthma reliever (blue puffer) via spacer

This is a medical document that can only be completed by the child's healthcare professional. It must not be altered without their permission. This document provides medical authorisation for schools to administer a 'spare' back-up adrenaline autoinjector if needed, as permitted by the Human Medicines (Amendment) Regulations 2017. During travel, adrenaline auto-injector devices must be carried in hand-luggage or on the person, and **NOT** in the luggage hold. **This action plan and authorisation to travel with emergency medications has been prepared by:**

Sign & print name: .....

Hospital/Clinic: .....

..... **Date:** .....

Appendix C Skin prick test request form and parents information

SKIN PRICK TEST REQUEST FORM

Child's Name:..... Unit No.:.....

Is the child: Male / Female* (*Please delete} DOB:.....

Address:..... Tel no.:.....

..... GP:.....

..... Consultant:.....

..... Date requested:.....

Name and bleep/ext of Doctor completing form:.....

Date of test:..... Weight:.....

Please outline the reasons for skin prick testing, including a summary of the reaction (if appropriate):

Is there a history of anaphylaxis? Yes / No* (*Please delete)
If yes, to what?

Does the child have any known allergies? Yes / No* (*Please delete)
If yes, to what?

Positive control:..... Negative control:.....

FOOD	REQUEST	RESULT		INHALANT	REQUEST	RESULT
Orange				Dog		
Strawberry				Cat		
Tomato				Rabbit		
Walnut				Horse		
Peanut				House Dust Mite		
Brazil Nut				Tree Mix (Early)		
Almond				Tree Mix (Mid)		
Hazelnut				Silverbirch		
Cashew				Grass Mix		
Pistachio				Timothy Grass		
Coconut				Weeds		
Sesame				Mugwort		
Wheat				Rape		
Cows Milk				Aspergillus Fumigatus		
Soya				Alernaria Tenuis		
Egg White				Cladosporium Herbarum		
Egg Yolk				Mould Mix 1		
Hens Egg				Mould Mix 2		
Other				Other		
				Latex		

Skin Prick Testing Parent Information Sheet

Further to your recent clinic visit, an appointment has been made for:

Child's Name: ……..
Date of Test: ……..
Place of test: ……
Contact telephone number: …….

The skin prick tests will allow us to give you further advice regarding your child's allergies.

Before the test:

You must not give your child any medication containing anti-histamine for at least 3 days prior to the test. If antihistamines are long acting such as Cetirizine or Loratadine they should be stopped for 7 days. Steroids (e.g. Prednisolone) should not be taken for at least three days to a week prior to the test. The child should be off Omalizumab for a month. Your pharmacist will be able to advise as to whether a medication contains anti histamine or steroids. Inhaled steroids for asthma do not need to be stopped. If your child has to take one of these medications in the lead up to the test please ring us on the number above and another appointment will be made.

During the test:

The skin test involves placing a drop of a number of solutions on the forearm, in young children the back may be used instead. Each solution contains an allergen (something your child may be allergic to). The drop is then gently pricked into the skin, this is not painful, but your child may feel a little prick. The drops are then dabbed with a tissue and you will need to wait 10-15 minutes for the results to show. The test may cause the arm to itch, but it is very important that your child does not touch or scratch the arm.

After the required time any reactions are measured and you will usually receive further advice on managing your child's allergies. If the skin is very itchy, anti-histamine cream may be given.

Appendix D Parents information regarding the food challenge procedure

Food challenge: Information for parents

Name of child: …….
Food to be challenged: …….
Date of challenge: …….
Place of challenge: ……..

Time of challenge: 09.00 a.m.

Please telephone [redacted] (Eastbourne Short Stay Assessment Unit) to confirm that you have received this information and that the date is convenient. If you need to change the date or have any other questions please ring as soon as possible.

Why does my child need to attend hospital for the challenge?
It has been recommended by your child's consultant that he/she has a food challenge in order to see if they react to certain food/s. By coming to hospital if your child does have a reaction we can quickly give them some medication to treat this and a doctor can see them straight away. We may also want to observe the types of symptoms your child has.

How long will it take?
The challenge usually lasts about 4 hours; this includes 2 hours observation at the end in case of a delayed reaction. So it is best to allow for staying most of the day. It may take longer if your child has a reaction or has difficulty eating the challenge food.

What should I bring?
1. The food to be challenged: ……..
2. A drink and packed lunch: Please bring only food your child has safely eaten in the past. No additional food will be allowed until all the challenge food has been eaten
3. Any favourite toys/books/games: Although toys are available on the ward, you may wish to bring any favourites from home to entertain your child

What will happen when we arrive on the day?
Before the challenge starts your child will need to have their weight, blood pressure and pulse, they will also be examined by a doctor for any existing patches of eczema. You will need to sign a consent form for the challenge to go ahead.

How is the food given?
The challenge begins by rubbing a small amount of the food onto your child's lip. After this your child will begin to eat small amounts of the challenge food, the dose will be doubled at 15-20 minute intervals, until a standard portion is eaten. The challenge will be stopped if your child shows any sign of a reaction. If your child is a fussy eater or you are worried if they will eat the foods please discuss this with the dietitian before the challenge day – it may be possible to disguise the food. Before going home you will usually be seen by the consultant and the dietitian to discuss the outcome and future plan.

Other information:

- Please ensure that your child is well on the day of the challenge. The challenge will not be able to go ahead if your child has sickness, diarrhoea, wheeze, a cold or rash. If this occurs please ring the SSPAU as early as possible.
- Your child must stop taking any anti-histamine medication **3 days** prior to the challenge (e.g. Chlorphenamine, promethazine). Cetirizine and Loratadine must be stopped 7 days prior to the challenge and steroids (e.g. prednisolone) should be stopped 7 days before the challenge. Child should be off Omalizumab for at least a month. Inhaled steroids for asthma do not need to be stopped.
- There is a waiting list for food challenges so please give us as much notice as possible if you are unable to attend so that another child can have the place.

Appendix E Food challenge procedures

Whole egg challenge

NAME: HOSPITAL NUMBER:
DATE OF CHALLENGE:
REQUIREMENT: 1 hard-boiled egg

PROCEDURE:
If patient is showing any signs of an adverse reaction do not proceed to the next stage, but treat according to guidelines.

Each stage to include a mixture of egg yolk and egg white

1) Piece of egg yolk and white to be rubbed across the lower oral mucosa 5-6 times, 15 minute observation
2) Crumb of egg yolk and white to be eaten, 15 minute observation
3) 1/64 of whole egg to be eaten, 15 minute observation
4) 1/32 of whole egg to be eaten, 15 minute observation
5) 1/16 of whole egg to be eaten, 15 minute observation
6) 1/8 of whole egg to be eaten, 15 minute observation
7) ¼ of whole egg to be eaten, 15 minute observation
8) ½ of whole egg to be eaten, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION.

Cooked egg challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

REQUIREMENT: Sponge cake, made as per recipe, 1 slice is equal to 1/8 of cake

PROCEDURE:
If patient is showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) Piece of sponge to be rubbed across the lower oral mucosa 5-6 times, 15 minute observation
2) Small crumb of sponge to be eaten, 15 minute observation
3) Large crumb of sponge to be eaten, 15 minute observation
4) 1/16 of a slice of sponge to be eaten, 15 minute observation
5) 1/8 of a slice of sponge to be eaten, 15 minute observation
6) ¼ of a slice of sponge to be eaten, 15 minute observation
7) ½ of a slice of sponge to be eaten, 15 minute observation
8) 1 slice of sponge to be eaten, 15 minute observation

CHILD TO REMAIN ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION

Wheat challenge bread

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

REQUIREMENT: 2 slices bread, crusts removed, *may be spread with margarine or jam etc. if normally tolerated*

PROCEDURE:
If patient is showing any signs of an adverse reaction do not proceed to next stage but treat according to protocol guidelines.

1) Piece of bread to be rubbed across the lower oral mucosa 5-6 times, 15 minute observation
2) Small crumb of bread to be eaten, 15 minute observation
3) Large crumb of bread to be eaten, 15 minute observation
4) 1/16 of a slice of bread to be eaten, 15 minute observation
5) 1/8 of a slice of bread to be eaten, 15 minute observation
6) ¼ of a slice of bread to be eaten, 15 minute observation
7) ½ of a slice of bread to be eaten, 15 minute observation
8) 1 slice of bread to be eaten, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION

Wheat challenge Weetabix

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

REQUIREMENT: 2 Weetabix biscuits, *may be mixed with water (or a milk that is normally tolerated) and sugar if desired.*

PROCEDURE:
If patient showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) Piece of Weetabix to be rubbed across the lower oral mucosa 5-6 times, 15 minute observation
2) Small crumb of Weetabix to be eaten, 15 minute observation
3) Large crumb of Weetabix to be eaten, 15 minute observation
4) 2 large crumbs of Weetabix to be eaten, 15 minute observation
5) 1/16 of a Weetabix to be eaten, 15 minute observation
6) 1/8 of a Weetabix to be eaten, 15 minute observation
7) ¼ of a Weetabix to be eaten, 15 minute observation
8) ½ of a Weetabix to be eaten, 15 minute observation
9) 1 Weetabix to be eaten, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION

Cow's milk challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

REQUIREMENT: 200ml cow's milk, *may be flavoured with milkshake syrup if desired*

PROCEDURE:
If patient is showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) 1 drop of cow's milk placed on lower oral mucosa, 15 minute observation
2) 0.5ml of cow's milk to be drunk from a syringe, 15 minute observation
3) 1.0ml of cow's milk to be drunk from a syringe, 15 minute observation
4) 2.5ml of cow's milk to be drunk, 15 minute observation
5) 5ml of cow's milk to be drunk, 15 minute observation
6) 10ml of cow's milk to be drunk, 15 minute observation
7) 25ml of cow's milk to be drunk, 15 minute observation
8) 50ml of cow's milk to be drunk, 15 minute observation
9) 100ml of cow's milk to be drunk, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Soya milk challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

REQUIREMENT: 200ml of soya milk (formula or calcium enriched, depending on age and adequacy of remainder of diet), *may be flavoured with cow's milk free milkshake flavouring if desired.*

PROCEDURE:
If patient showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) 1 drop of soya milk placed on lower oral mucosa, 15 minute observation

2) 0.5ml of soya milk to be drunk from a syringe, 15 minute observation

3) 1.0ml of soya milk to be drunk from a syringe, 15 minute observation

4) 2.5ml of soya milk to be drunk, 15 minute observation

5) 5ml of soya milk to be drunk, 15 minute observation

6) 10ml of soya milk to be drunk, 15 minute observation

7) 25ml of soya milk to be drunk, 15 minute observation

8) 50ml of soya milk to be drunk, 15 minute observation

9) 100ml of soya milk to be drunk, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION

Banana challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

PROCEDURE:
If patient showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1. 1 slice of banana to touch lower oral mucosa
   10 minute observation

2. Pinhead size piece of banana to be eaten
   15 to 30 minute observation

3. ⅛ of 2cm slice of banana to be eaten
   15 to 30 minute observation

4. 1/4 of 2cm slice of banana to be eaten
   15 to 30 minute observation

5. ½ of 2cm slice of banana to be eaten
   15 to 30 minute observation

6. Whole slice of banana to be eaten
   15 to 30 minute observation

7. 2 slices of banana to be eaten
   15 to 30 minute observation

8. 4 slices of banana to be eaten (or ¼ medium whole banana)
15 to 30 minute observation

9. ½ medium whole banana to be eaten
Minimum 60 minute observation

Footnotes
• Wrap banana in tin foil between doses to prevent it going brown.

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Single/Mixed nuts challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

NUT/S TO BE CHALLENGED:

REQUIREMENT: 3 Single or mixed nut cookies, made as per recipe

PROCEDURE:
If patient is showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) Piece of cookie to be rubbed across the lower oral mucosa 5-6 times, 15 minute observation

2) Small crumb of cookie to be eaten, 15 minute observation

3) Large crumb of cookie to be eaten, 15 minute observation

4) 1/16 of a cookie to be eaten, 15 minute observation

5) 1/8 of a cookie to be eaten, 15 minute observation

6) ¼ of a cookie to be eaten, 15 minute observation

7) ½ of a cookie to be eaten, 15 minute observation

8) 1 cookie to be eaten, 15 minute observation

9) 1 cookie to be eaten, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS, IN CASE OF DELAYED REACTION

Strawberry challenge

NAME: **HOSPITAL NUMBER:**
DATE OF CHALLENGE:

REQUIREMENT: 120g (approx. 10) strawberries
PROCEDURE:
If patient showing any signs of an adverse reaction do not proceed to next stage, but treat according to protocol guidelines.

1) A cut slice of strawberry to be rubbed across the lower inner oral mucosa 5-6 times, 15 minute observation

2) 1/16 of a strawberry (1g) to be eaten, 15 minute observation

3) 1/8 of a strawberry (2g) to be eaten, 15 minute observation

4) ¼ of a strawberry (3g) to be eaten, 15 minute observation

5) ½ of a strawberry (6g) to be eaten, 15 minute observation

6) 1 ¼ strawberries (15g) to be eaten, 15 minute observation

7) 2 ½ strawberries (30g) to be eaten, 15 minute observation

8) 5 strawberries (60g) to be eaten, 15 minute observation

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Sponge cake recipe –For cooked egg challenge

EGG CHALLENGE - FAIRY CAKE RECIPE

MAKES ONE 7-INCH (20 CM) LARGE CAKE OR 8 FAIRY CAKES

Ingredients
100g (4oz) self-rising flour
100g (4oz) margarine
100g (4oz) caster sugar
1 or 2 medium egg
• Use 1 or 2 eggs as advised by the dietitian.
• Makes 1 x 7 inch single layer of sponge cake. A slice equalling 1/8 of the cake (or 1/8 of the above quantity if different sized fairy cakes are made) is to be eaten in a cooked egg challenge.
• Recipe can be halved to make 4 fairy cakes.

Preparation and cooking
1. Line an 8” cake tin with grease-proof paper.
2. Cream together margarine and sugar in a bowl until smooth and creamy.
3. Add eggs one at a time and beat into mixture (add a little flour if the mixture begins to curdle).
4. Add flour a little at a time and slowly fold in using a metal spoon.
5. Smooth mixture into tin and cook for 30-40 minutes at 180°C Gas 4 until firm to touch. Turn out onto a cooking rack and allow to cool (see illustration on back cover).

Notes
• Use milk-free margarine for children on milk free diets.
• 2oz of flour can be replaced with cocoa for chocolate cake, if preferred.

Fish cake challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

Food to be challenged: FISH (e.g. Cod, Salmon) as 90g portion of cooked fish.

1. 1 piece of fish cake the size of small button
15 minute observation

2. 2 pieces of fish cake the size of a small button
15 to 30 minute observation

3. 1/32 of fish cake to be eaten
15 to 30 minute observation

4. 1/16 of fish cake to be eaten
15 to 30 minute observation

5. ⅛ of fish cake to be eaten
15 to 30 minute observation

6. ¼ of fish cake to be eaten
15 to 30 minute observation

7. 1/2 of fish cake to be eaten
15 to 30 minute observation

8. 1 whole fish cake to be eaten

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Fish cake recipe

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

FISH CHALLENGE

Ingredients

90g fish to be challenged e.g. cod, salmon, shellfish

1 medium potato (approximately 200g)

20g Butter or margarine

30ml milk

2 tablespoons of bread crumbs

1 small egg

Oil for frying

Preparation and cooking

1. Check patient is able to tolerate all ingredients and adjust recipe as required (see *Alterations to recipe* below).

2. Check all equipment is clean and free from contamination.

3. Peel, chop and boil potato until soft. Mash with butter and milk.

4. Put fish on tin foil and grill both sides until cooked. Mash into potato mixture.

5. Shape mixture into 1 or 2 balls and flatten to fishcake shape.

6. Dip in beaten egg, roll in breadcrumbs and fry both sides in a frying pan.

Alterations to recipe

• For milk allergy use dairy free margarine and milk substitute.

• For egg allergy use lemonade or fry without breadcrumbs.

• For wheat allergy use wheat free breadcrumbs or fry without breadcrumbs.

Mixed Tree Nut cookie recipe
BISCUIT RECIPE

Ingredients (approximate weight)

1 level tablespoon self-rising flour	20g
1 level teaspoon of margarine	5g
1½ teaspoons caster sugar	6g
½ teaspoon golden syrup (optional)	3g
2 *Brazil nuts	8g
5 *almonds	8g
7 *hazelnuts	8g
7 *cashew nuts	8g
3 *small walnut halves	8g

1-2 flat teaspoons water to mix.

Preparation and cooking

Ensure all equipment is clean and free from contamination.

1. Grind nuts to a coarse powder by using an electric coffee bean grinder or manually grinding with pestle and mortar or cheese grater. Rub between fingers and remove and regrind any nut chunks.
2. Place flour into bowl, add margarine and rub into flour.
3. Add sugar, syrup and nut powder and mix well.
4. Add the water and mix to stiff dough. Roll into a ball, place on greased tray and flatten to a biscuit shape (see illustration on back cover).
5. Bake in a hot oven at 200°C Gas 6 for 12 minutes until lightly brown.

Notes

- For milk allergy use dairy free margarine.
- For wheat allergy use flour from wheat free baking mix.
- For fussy eaters or blind challenges, substitute 10g of flour with 10-20g of cocoa powder.
- Recipe can be used for single or multiple nuts.
- For peanut biscuit or all nut challenge (tree nut and peanut) add 8g ground peanuts (approximately 8 peanuts) or 1 heaped teaspoon of peanut butter.

Standard nut spread challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

1. Cut nut to touch lower oral mucosa
   10 minute observation

2. Pinhead* size portion of nut butter to be eaten
   15 to 30 minute observation

3. Larger scrape of nut butter to be eaten
   15 to 30 minute observation

4. ⅛ flat teaspoon of nut butter to be eaten
   15 to 30 minute observation

5. flat teaspoon of nut butter to be eaten
   15 to 30 minute observation

6. flat teaspoon of nut butter to be eaten
   15 to 30 minute observation

7. 1 flat teaspoon of nut butter to be eaten
   15 to 30 minute observation

8. 2 flat teaspoons of nut butter to be eaten
   Minimum 60 minute observation

Footnotes
* Pin head dose = tiny piece of peanut small enough to sit on the end of an opened paperclip
• Nut butter can be given on chocolate buttons, bread or crackers.

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Shellfish challenge

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

Food to be challenged: PRAWN / SHRIMP (ensure to use correct prawn species)

1. Pinhead* size piece of prawn to be eaten
   15 minute observation

2. 1/16 of one prawn to be eaten
   15 to 30 minute observation

3. ⅛ of one prawn to be eaten
   15 to 30 minute observation

4. ¼ of one prawn to be eaten
   15 to 30 minute observation

5. 1/2 of one prawn to be
   15 to 30 minute observation

6. 1 whole prawn to be eaten
   15 to 30 minute observation

7. 3 whole prawns to be eaten
   15 to 30 minute observation

8. 6 whole prawns to be eaten
Minimum 60 minute observation

Footnotes

* Pin head dose = tiny piece of prawn small enough to sit on the end of an opened paperclip.
• Portion sizes should be adjusted for king prawn and other larger species of prawns.
• Prawns can also be chopped and given in fishcakes (see Fishcake challenge) as an alternative.
• Refrigerate at all times

CHILD TO BE OBSERVED ON WARD FOR 2 HOURS IN CASE OF DELAYED REACTION

Any food challenge template

NAME: **HOSPITAL NUMBER:**

DATE OF CHALLENGE:

Food to be challenged: .ENTER FOOD TO BE CHALLENGED

1. Small crumb /1/4 fingernail size portion
   15 to 30 minute observation

2. Large crumb or double dose 1 to be eaten]
   15 to 30 minute observation

3. 1/16 of portion to be eaten
   15 to 30 minute observation

4. 1/8 of portion to be eaten
   15 to 30 minute observation

5. 1/4 of portion to be eaten
   15 to 30 minute observation

6. 1/2 of portion be eaten
   15 to 30 minute observation

7. Optional extra portion (whole dose) be eaten
   Minimum 60 minute observation

Footnotes
• This is a generic 'any allergen or food item containing allergen' plan to be used for less common allergens that require supervised challenges.
• It should **not** be used for food challenges that have plans e.g. peanut, sesame as the doses maybe too high (see index for list of specific challenge plans).

Appendix F Delayed reaction parent information sheet

POSSIBLE SYMPTOMS OF ADVERSE REACTION TO FOOD

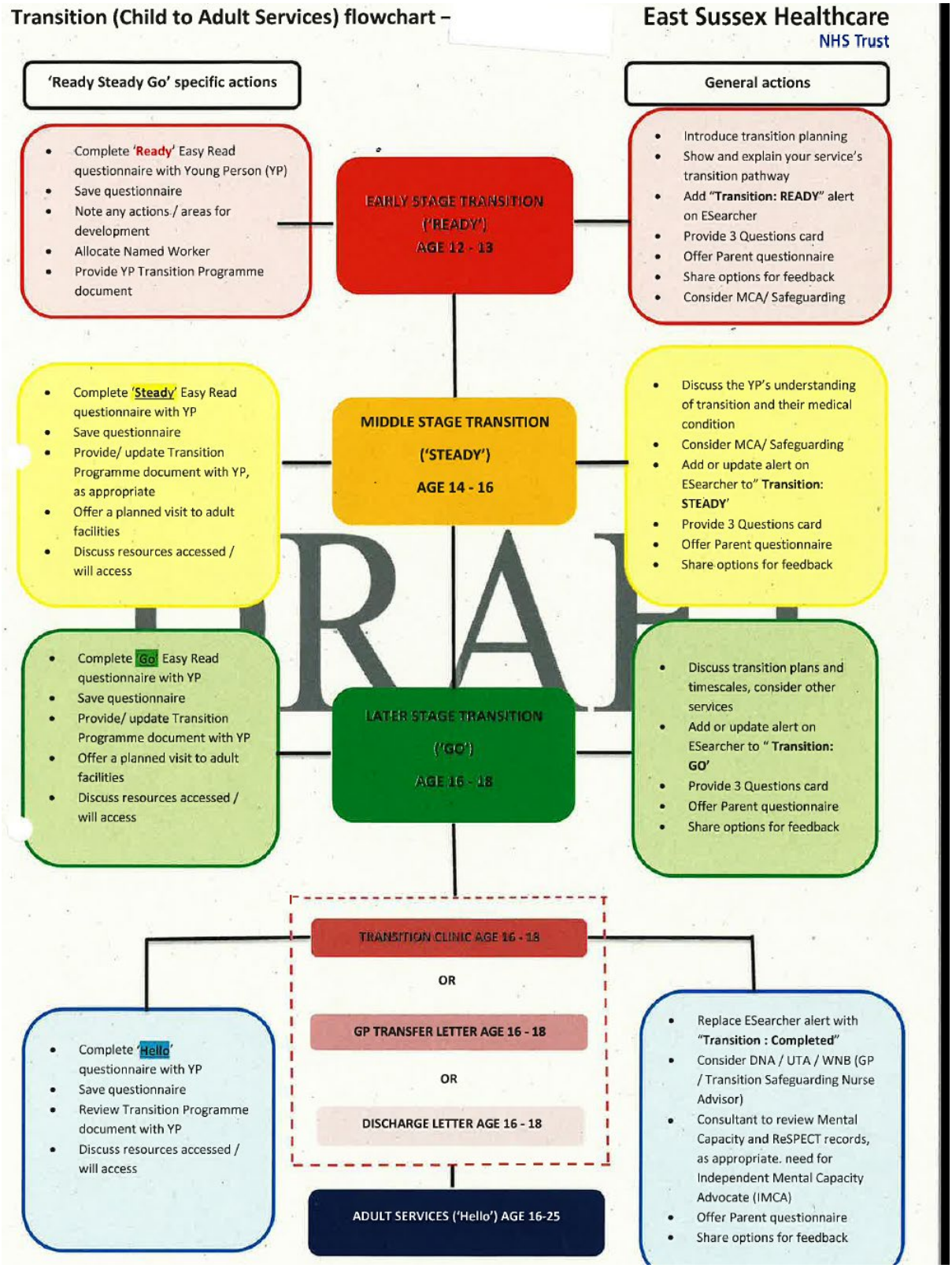
Whilst your child is undergoing a food challenge please look out for the following symptoms:

- Swelling of the lips, tongue or face
- Itchy inside of mouth
- Itchy “nettle” rash on the trunk or limbs
- Wheezing or shortness of breath
- Runny nose or inflamed eyes
- Abdominal pain
- Nausea or vomiting or diarrhoea
- Collapse with shock (anaphylaxis)

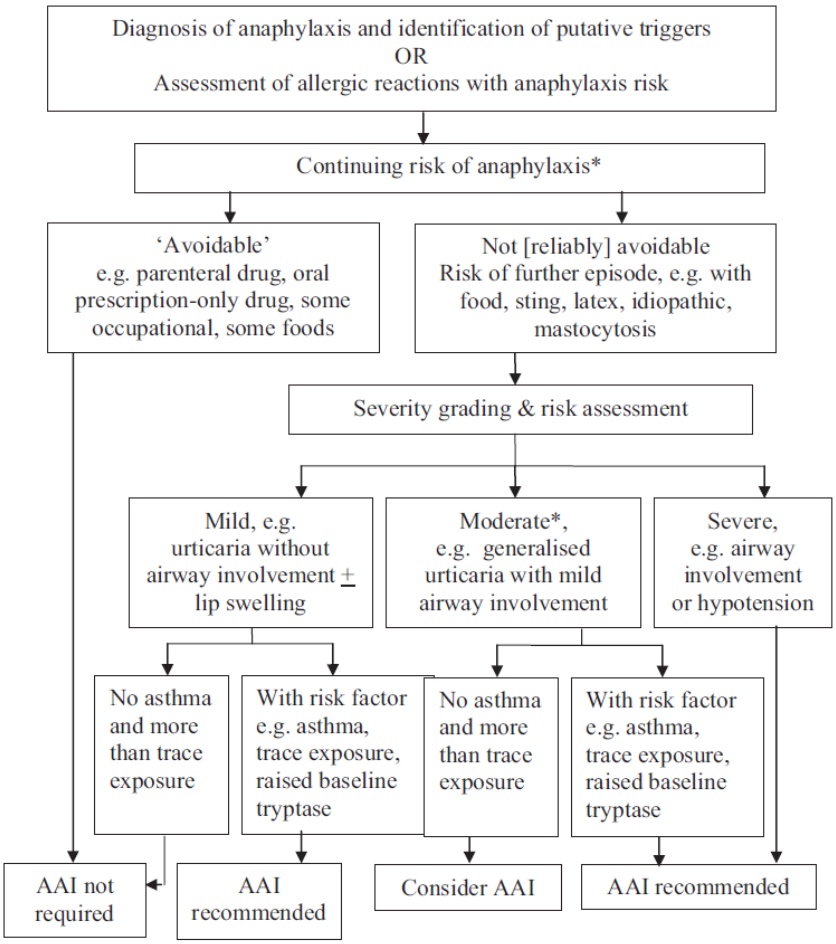
If you notice any of the above symptoms please alert the nurse looking after your child immediately.

If once your child has been discharged they develop any of the above symptoms and you feel they are having a delayed, adverse reaction please contact Kipling Ward (Tel: 03001314558) or Short stay unit at Eastbourne District General Hospital (Tel: 03001314899). If it is a severe reaction, dial 999 and ask for an ambulance or take your child to Accident and Emergency.

Addendum G Generic transition pathway



Appendix H Flow chart summarizing BSACI's guideline on prescribing AAI (adrenaline auto-injector)



g. 1. When to prescribe adrenaline for patient administration. (AAI, adrenaline auto-injector).
n the absence of additional risk factors, GI symptoms in infants and young children do not usually require adrenaline auto-injectors.

East Sussex Healthcare NHS Trust

Management of Cow's Milk Allergy

Document ID Number	1490
Version:	V2
Ratified by:	Women and Children's Governance and Accountability Members
Date ratified:	November 2022
Name of author and title:	[redacted] & [redacted] Lead Paediatric Dietitians
Date Originally Written:	January 2015
Date of current version was completed	September 2022
Name of responsible committee/individual:	Chair of the Guideline Implementation Group for Women and Children's Division
Date issued:	13 January 2023
Review date:	September 2025
Target audience:	All Staff
Compliance with CQC Fundamental Standard	Regulation 9 Person centred Care Regulation 11 Need for Consent Regulation 12 Safe Care and Treatment Regulation 14 Meeting Nutritional and Hygiene Needs
Compliance with any other external requirements (e.g. Information Governance)	NICE Food Allergy Quality Standard 118 (2016)
Associated Documents:	Nutrition for infants: A guide to dietetic management (under review) iMAP milk allergy guideline (2017)

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1.0 2015012	January 2015	[redacted]	New document	
	December 2017	Wendy Thompset	Updated	Minimal Changes
V1.0	February 2019	[redacted] Victoria Morris	N/A	N/A
V2	September 2022	[redacted] Victoria Morris	Clinical Review	Minor amendments

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
[redacted]	Prescribing Support Dietitian	September 2018
[redacted]	Health Visitor	November 2018
Dr Fox	GP	November 2018
Dr Gill	Consultant Paediatrician	November 2018
Dr Lytton	GP	November 2018
Women and Children's Guideline Implementation group		March 2019
Women and Children's Governance and Accountability		March 2019
Women and Children's Guideline Implementation group		November 2022
Women and Children's Governance and Accountability Members		November 2022

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

The information in this clinical guideline aims to give **initial** guidance and recommendations on managing suspected cow's milk allergy, to ensure appropriate prescribing of alternative formulae and to reduce delays in treatment.

2. Rationale

To bring local management of cow's milk allergy (CMA) in line with iMAP guidance.

2-3% of infants have a proven CMA – this means 97-98% of infants do not have a milk allergy.

A planned re-introduction of cow's milk allergy 2-4 weeks after initially initiating a cow's milk free diet is now a NICE Food allergy Quality Standard requirement, this will confirm or exclude the diagnosis of CMA. Current local practice is not in line with this requirement.

3. Scope

Whilst aimed mainly at primary care staff, the information provided is equally appropriate for secondary care staff to follow.
This clinical guideline is not for use with infants with suspected lactose intolerance. Lactose intolerance does not usually present until later childhood, or adulthood, with the exception of a temporary secondary lactose intolerance following a severe gastro-intestinal illness.

4. Definitions

For the purpose of this clinical guideline all adverse reactions (whether thought to be IgE mediated or non-IgE mediated) which are suspected to be due to cow's milk will be referred to as cow's milk allergy, whether immediate or delayed.

5. Accountabilities

Infants presenting with a suspected/proven cow's milk allergy may present in any healthcare sector, including Acute Hospitals, GP surgeries, Health Visiting baby clinics or dietetic led clinics. Healthcare professionals that may be involved are:

- Paediatric Dietitians
- Consultant Paediatricians
- GP's
- Health Visitors/Nursery Nurses
- Pharmacists

Below are the key responsibilities for each professional:

Paediatric Dietitians will provide training to other Healthcare Professionals as required and ensure that this clinical guideline is kept up to date. When receiving a referral for an infant with a **proven** cow's milk allergy (i.e. re-introduction has failed, and the diagnosis is confirmed) the Paediatric Dietitian will ensure that advice is provided in a timely manner. They will continue to monitor and advise the infant's family on the management of this condition as necessary.

Consultant Paediatricians, GP's and Health Visiting staff should ensure that a referral is sent to the Paediatric Dietitian for assessment and advice **once diagnosis of CMA is confirmed**. Prescribing doctors should be familiar with this clinical guideline and prescribe appropriately.

Pharmacists should be familiar with this clinical guideline and ensure that the correct alternative formula has been prescribed.

6. Process

If a cow's milk allergy is suspected take an allergy focused clinical history:

imap-allergy-focused_history_original.pdf (wordpress.com)

Having taken an allergy focused clinical history and physically examined the patient use the presentation algorithm
iMAP presentation algorithm (wordpress.com)
to identify whether the reaction is mild to moderate Non-IgE-mediated CMA, Severe Non-IgE-mediated CMA, Mild to moderate IgE-mediated CMA or severe IgE CMA:

- **Those with an IgE mediated cow's milk allergy should be referred to the Paediatric Dietitian and the Consultant led paediatric allergy clinic**
- **Those with a non-IgE mediated cow's milk allergy should only be referred to the Paediatric Dietitian**

Advise on the initial treatment and /or initial diagnostic trial elimination diets and on the indications for early referral to more specialist care
iMAP treatment algorithm (wordpress.com)

The Extensively Hydrolysed Formula and Amino Acid formula used locally can be found in the local formulary http://www.eastsussexformulary.co.uk/therapeutic-sections/9-nutrition-and-blood/94-oral-nutrition/944-infant-feeds/

Provide the parent with the Patient Factsheet –
imap_patient_factsheet_original.pdf (wordpress.com)
If mother is partially or exclusively breast feeding, provide the following factsheet as well:
imap-supporting-breastfeeding-factsheet.pdf (wordpress.com)
and the Home Reintroduction Protocol to confirm or exclude diagnosis
home_reintroduction_protocol_to_confirm_or_exclude_diagnosis_original.pdf (wordpress.com)

If symptoms have not reappeared within 2 weeks of reintroduction of cow's milk the child does not have a Cow's milk Allergy.

If symptoms do return with the reintroduction of cow's milk a diagnosis of cow's milk allergy is confirmed. The child and/or mother should go back onto a strict milk free diet as per the initial exclusion period. A referral must be made to the Paediatric Dietitian for further management advice and ongoing support.

7. Special Considerations

This clinical guideline outlines the recommended initial management of proven/suspected cow's milk allergy in infants. However, all infants are individuals, and their needs should be considered on an individual basis. Treatment may vary in length of time and the Paediatric Dietitian will advise on this as appropriate.

8. Evidence Base/References

MAP guideline - The Milk Allergy in Primary Care (MAP) Guideline 2019 | The GP Infant Feeding Network (UK) (gpifn.org.uk)

NICE: Quality Standard for food allergy NICS Quality Standard 118 (2016) – available from www.nice.org.uk/guidance/qs118

NICE Guidance "Food allergy in under 19's: assessment and diagnosis" CG116, February 2011 - https://www.nice.org.uk/Guidance/CG116

Venter C, Brown T et al. Clin Transl Allergy (2017) 7:26
https://ctajournal.biomedcentral.com/articles/10.1186/s13601-017-0162-y

9. Competencies and Training Requirements

Clinical Leads and Line Managers are responsible for ensuring their staff are competent with regards to advising on the appropriate treatment for infants with proven/suspected cow's milk allergy. This may be achieved through becoming familiar with this clinical guideline. If it is highlighted that staff require additional training the Paediatric Dietitians may provide this as required.

10. Monitoring Arrangements

Compliance with this clinical guideline will be monitored by audit, on an annual basis, by the ESHT Paediatric Dietetic Team. The audit will look at whether infants have already been prescribed an appropriate formula on receipt of a referral. Concerns identified from these audits will be formulated into an action plan and progress monitored.

11. Document Monitoring Table:

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Datix episodes of children with newly identified milk allergy	Governance lead	Datix system	On going	Children's risk meeting	Children's risk meeting Head of Nursing Paediatric Matrons	Children's risk meeting Head of Nursing Paediatric Matrons

Appendix A: EIA Form

Equality Impact Assessment Form

1. Cover Sheet

Please refer to the accompanying guidance document when completing this form.

Strategy, policy or service name	Management of Cow's Milk Allergy
Date of completion	November 2022
Name of the person(s) completing this form	[redacted] Lead Paediatric Dietitians
Brief description of the aims of the Strategy/ Policy/ Service	The information in this clinical guideline aims to give **initial** guidance and recommendations on managing suspected cow's milk allergy, to ensure appropriate prescribing of alternative formulae and to reduce delays in treatment.
Which Department owns the strategy/ policy/ function	Women and Children's
Version number	V2
Pre Equality analysis considerations	
Who will be affected by this work? **E.g. staff, patients, service users, partner organisations etc.**	Whilst aimed mainly at primary care staff, the information provided is equally appropriate for secondary care staff to follow.
Review date	November 2025
If negative impacts have been identified that you need support mitigating please escalate to the appropriate leader in your directorate and contact the EDHR team for further discussion.	Name: Date:
Have you sent the final copy to the EDHR Team?	

2. EIA Analysis

<table>
<tr><td></td><td>☺ 😐 ☹</td><td>Evidence:</td></tr>
<tr><td>Will the proposal impact the safety of patients', carers' visitors and/or staff?

Safe: Protected from abuse and avoidable harm.</td><td>Choose:
Positive
Neutral
Negative</td><td>Following the guideline will ensure patients are managed equitably and in line with national guidance</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
<tr><td>Is the proposal of change effective?

Effective: Peoples care, treatment and support achieves good outcomes, that staff are enabled to work in an inclusive environment. That the changes are made on the best available evidence for all involved with due regards across all 9 protected Characteristics</td><td>Choose:
Positive
Neutral
Negative</td><td>Following the guideline will ensure patients are managed equitably and in line with national guidance</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>What impact will this have on people receiving a positive experience of care?</td><td>Choose:
Positive
Neutral
Negative</td><td>Following the guideline will ensure patients are managed equitably and in line with national guidance</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td><table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table></td></tr>
<tr><td>Does the proposal impact on the responsiveness to people's needs?</td><td>Choose:
Positive
Neutral
Negative</td><td>Following the guideline will ensure patients are managed equitably and in line with national guidance</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td><table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table></td></tr>
<tr><td>What considerations have been put in place to consider the organisations approach on improving equality and diversity in the workforce and leadership?</td><td>Choose:
Positive
Neutral
Negative</td><td>N/A</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td><table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table></td></tr>
<tr><td colspan="3">Access
Could the proposal impact positively or negatively on any of the following:</td></tr>
</table>

<table>
<tr><td>• Patient Choice</td><td>Choose:
Positive
Neutral
Negative</td><td></td></tr>
<tr><td>• Access</td><td>Choose:
Positive
Neutral
Negative</td><td>Patients will receive access to equitable treatment in line with national guidance</td></tr>
<tr><td>• Integration</td><td>Choose:
Positive
Neutral
Negative</td><td></td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
<tr><td>Engagement and Involvement
How have you made sure that the views of stakeholders, including people likely to face exclusion have been influential in the development of the strategy / policy / service:</td><td>Choose:
Positive
Neutral
Negative</td><td>Guideline approved by the MDT</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income, or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>☐</td><td>☐</td><td>☐</td><td>☐</td><td>☐</td></tr>
</table>
</td></tr>
</table>

Duty of Equality Use the space below to provide more detail where you have identified how your proposal of change will impact.	Choose: Positive Neutral Negative	
Characteristic	**Rating** ☺ ☹ 😐	**Description**
Race	Choose: Positive Neutral Negative	N/A
Age	Choose: Positive Neutral Negative	All young people will receive access to equitable treatment in line with national guidance
Disability and Carers	Choose: Positive Neutral Negative	N/A
Religion or belief	Choose: Positive Neutral Negative	N/A
Sex	Choose: Positive Neutral Negative	N/A
Sexual orientation	Choose: Positive Neutral Negative	N/A

Gender re-assignment	Choose: Positive Neutral Negative	N/A
Pregnancy and maternity	Choose: Positive Neutral Negative	N/A
Marriage and civil partnership	Choose: Positive Neutral Negative	N/A

Human Rights

Please look at the table below to consider if your proposal of change may potentially conflict with the Human Right Act 1998

A2	Right to life	**Y/N**
A3	Prohibition of torture, inhuman or degrading treatment	**Y/N**
A4	Prohibition of slavery and forced labour	**Y/N**
A5	Right to liberty and security	**Y/N**
A6 &7	Rights to a fair trial; and no punishment without law	**Y/N**
A8	Right to respect for private and family life, home, and correspondence	**Y/N**
A9	Freedom of thought, conscience, and religion	**Y/N**
A10	Freedom of expression	**Y/N**
A11	Freedom of assembly and association	**Y/N**
A12	Right to marry and found a family	**Y/N**
Protocols		
P1.A1	Protection of property	**Y/N**
P1.A2	Right to education	**Y/N**
P1.A3	Right to free elections	**Y/N**

East Sussex Healthcare NHS Trust

Guidelines for Diagnosis and Management of Drug Allergy

Document ID Number:	1761
Version:	V2
Ratified by:	Medicines Optimisation Group
Date ratified:	November 2021
Name of author and title:	Jane Starr Medication Safety Officer
Date originally written:	November 2017
Date current version was completed:	November 2021
Name of responsible committee/individual:	Medicines Optimisation Group
Date issued:	24 December 2021
Review date:	November 2024
Target audience:	All staff involved with medicines
Compliance with CQC Fundamental Standard	Safer care and treatment
Compliance with any other external requirements (e.g. Information Governance)	NICE Drug allergy: diagnosis and management of drug allergy in Adults, children and young people. September 2014.
Associated Documents:	Medicines Policy [Medicines Code] Prescribing Standards [Medicines Code] Policy and Procedures for the management of Resuscitation Clinical Pharmacy Endorsement Standards Policy for the Management and Administration of Injectable Medicines Procedure for Transcribing Information about Medicines by Nursing, Community-based services, and Social services staff (Community Health Services) Guidelines for the completion of patient held medication record charts (community services)

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1.0 2018277	November 2017	James Wilkinson Jane Starr	New Guideline	
V2	November 2021	Jane Starr	Review content with national guidance	Updates for anaphylaxis assessment and referral from NICE guidance added.

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Dr A Leonard	Consultant Physician (Acute and Respiratory)	June 2018
Dr P Cornelius	Consultant Physician (Acute)	June 2018
Dr M Liebenberg	Chief of Division (Women and Children)	June 2018
Hazel Tonge	Deputy Director of Nursing	June 2018
Medicines Optimisation Group	Medicines Optimisation Group	July 2018
Nick Watson	Consultant Anaesthetist	Nov 2021
Steve Rochester	Trust Resuscitation Officer	Nov 2021
Medicines Optimisation Group		Nov 2021

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

About half a million people admitted to NHS Hospitals each year have a diagnostic “label” of drug allergy, with the most common being Penicillin allergy. About 10% of the general population claim to have a penicillin allergy; this is often due to a skin rash that occurred in childhood. It is thought that the accurate figure for penicillin allergy is 1% of the population. Studies have shown that people with a label of penicillin allergy are more likely to be treated with broad spectrum antibiotics such as, quinolones, third generation cephalosporin’s, vancomycin. Use of these antibiotics in people with unsubstantiated label of penicillin allergy may lead to antibiotic resistance and possible sub-optimal therapy.

Analysis of patient safety incidents reported to the National Reporting and Learning System between 2005 and 2013 identified 18,079 incidents involving drug allergy. These included 6 deaths, 19 'severe harms', 4980 'other harms' and 13,071 'near-misses'. The majority of these incidents involved a drug that was prescribed, dispensed or administered to a patient with a previously known allergy to that drug or drug class.
Anaphylaxis-type reactions occur in approximately 1 in 1000 of the general population. Anaphylaxis during general anaesthesia occurs in 1 in 10,000–20,000 anaesthetics. These patients may be denied general anaesthesia in the future unless a safe combination of drugs can be identified. Issues identified by NICE included poor clinical documentation of drug allergy and a lack of patient information.

2. Rationale

This guideline has been developed to improve the clinical management for people affected by drug allergy. The aim is to offer best practice advice on the diagnosis, documentation and communication of drug allergy in adults, children and young people.

All drugs have the potential to cause side effects, also known as 'adverse drug reactions', but not all of these are allergic in nature. Other reactions are idiosyncratic, pseudo-allergic or caused by drug intolerance. The British Society for Allergy and Clinical Immunology (BSACI) defines drug allergy as an adverse drug reaction with an established immunological mechanism. The mechanism at presentation may not be apparent from the clinical history and it cannot always be established whether a drug reaction is allergic or non-allergic without investigation. Therefore, this guideline has defined drug allergy as any reaction caused by a drug with clinical features compatible with an immunological mechanism.

3. Scope

This document applies to any healthcare professional involved in the prescription, dispensing, and administration or monitoring of medicines within East Sussex Healthcare NHS Trust.

4. Definitions

Allergy
This is an abnormal high immunological sensitivity to certain stimuli. These stimuli act as antigens, provoking an immunological response involving the release of inflammatory substances, such as, histamine, in the body. Allergies may be innate or acquired in genetically predisposed individuals. Common symptoms include sneezing, itching, and skin rashes, though in individuals symptoms can be very severe.

Drug allergy
Any reaction caused by a drug with clinical features compatible with an immunological mechanism.

Sensitisation
A reaction in which specific antibodies develop in response to an antigen. Allergic reactions result from excess sensitisation to a foreign protein.

Adverse drug reaction
An appreciably harmful or unpleasant reaction, resulting from an intervention related to the use of a medicinal product, which predicts hazard from future administration and warrants prevention or specific treatment, or alteration of the dosage regimen, or withdrawal of the product.

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. A rash is present in 80% of all cases.

Biphasic anaphylaxis
After complete recovery of anaphylaxis, a recurrence of symptoms on average occurs for 3-20% of all patients within 6-11hours, with no further exposure to the allergen. It is managed in the same way as anaphylaxis.

5. Accountabilities

All clinical staff are responsible for establishing and recording allergy and medicine sensitivity status.
All prescribers are responsible for reviewing allergy status before prescribing any medicines to patients.
All persons administering medicines are responsible for not administering any medicines to a patient if the prescription or accompanying information, whether written or electronic, does not have the patient's allergy and medicine sensitivity status recorded

6. Process

Prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients. Careful history taking from patients under the care of ESHT should be taken on admission along with full medicines reconciliation for people admitted to hospital in line with recommendations. Ideally this should be done within 24 hours.
Drug allergy status should be documented separately from adverse drug reactions and that it is clearly visible to all healthcare professionals who are prescribing drugs. Information about drug allergy status must be updated and included in all:

- GP referral letters
- hospital discharge letters.

6.1 Staff caring for patients with a known allergy

Each patient's drug allergy status should be checked and confirmed with them (or their family members or carers as appropriate) before prescribing, dispensing or administering any drug. Patient's records should be updated if there is a change in allergy status and their GP should be informed.

Patients should not be administered any drug to which they have a known and documented allergy.
Patients with a known allergy should have their allergy status documented in their medical records using 1 of the following:

- 'drug allergy'
- 'none known'
- 'unable to ascertain' (document it as soon as the information is available).

Drug allergy status should be transferred across all written and electronic patient documentation including patient notes, medication administration chart, discharge letters and appointment letters, patient wristbands, anaesthetic charts, etc.

Drug allergy status should have recorded, as a minimum, in paper or electronic records;

- the drug name
- the signs, symptoms and
- severity of the reaction

6.2. Process for staff caring for a patient presenting with a new allergy

6.2.1. Management

Anaphylaxis should be treated immediately according to Resuscitation Council guidelines. The suspected causative drug should be stopped immediately and avoided, pending further investigation if necessary.
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).

After a suspected drug-related anaphylactic reaction Mast Cell Tryptase samples should be taken.

The time of onset of anaphylaxis is the time when symptoms were first noticed. It is important that this time is recorded accurately.
a) Minimum: one sample, ideally within 2 h (when peak tryptase levels generally occur) and no later than 4 h after onset of symptoms.
b) Ideally: take three timed samples:
1) An initial sample as soon as feasible – but do not delay treatment to take sample.
2) A second sample 1 – 2 h (but no later than 4 h) after onset of symptoms.
3) A third sample at least 24 h after complete resolution, or in convalescence (for example, at a follow-up allergy clinic). This sample is important as it provides a baseline tryptase value – some individuals have an elevated baseline level and may be at greater risk of anaphylaxis in response to some triggers.

Mast Cell Tryptase analysis should go into an FBC (Full Blood Count) bottle labelled and sent to pathology separately, in order not to confuse it with a standard FBC.
The exact timing of the reaction, as well as the blood samples taken for mast cell tryptase, should be recorded:

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

Tryptase sampling tubes are available in all cardiac arrest trolleys.

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.

Adults and young people aged 16 years or older who have had emergency treatment for suspected anaphylaxis should be observed for 6 to 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.

If a patient has a suspected anaphylaxis outside of the acute hospitals (including ESHT community sites) they should call for an ambulance to the nearest Emergency department, where staff will perform the mast cell tryptase test as detailed above.

If the person is under 16 years of age;

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

6.2.2. Assessment

Prescribers should take a detailed history and undertake a clinical examination when assessing a person presenting with possible drug allergy. The guidance in **Appendix B** should be used when deciding whether to suspect drug allergy.

6.2.2. Documenting new suspected drug allergic reactions

When a person presents with suspected drug allergy, document their reaction in a structured approach that includes:

- the generic and proprietary name of the drug or drugs suspected to have caused the reaction, including the strength and formulation
- a description of the reaction (See 6.2.1 Assessment and Appendix B)
- the indication for the drug being taken (if there is no clinical diagnosis, describe the illness)
- the date and time of the reaction
- the number of doses taken or number of days on the drug before onset of the reaction
- the route of administration
- which drugs or drug classes to avoid in future.

This information should be documented fully in the patient notes. The allergy details should be added to the medication administration chart and written information given to the patient as well as a verbal explanation. See Table 1 for the process for documenting new allergies. All allergy documentation should be signed and dated with the position of healthcare professional reporting the allergy.

Table 1.Where drug allergies should be documented and minimal information required

Patient notes	• the generic and proprietary name of the drug or drugs suspected to have caused the reaction, including the strength and formulation • a description of the reaction (See 6.2.1 Assessment and Appendix B) • the indication for the drug being taken (if there is no clinical diagnosis, describe the illness) • the date and time of the reaction • the number of doses taken or number of days on the drug before onset of the reaction • the route of administration • which drugs or drug classes to avoid in future.

Medication Administration chart	• the generic and proprietary name of the drug or drugs suspected to have caused the reaction • a description of the reaction (See 6.2.1 Assessment and Appendix B)
Discharge letter/ GP letter	• the generic and proprietary name of the drug or drugs suspected to have caused the reaction, including the strength and formulation • a description of the reaction (See 6.2.1 Assessment and Appendix B) • the date and time of the reaction • which drugs or drug classes to avoid in future
Patient information (written and verbal) See patient leaflet Appendix C	• the generic and proprietary name of the drug or drugs suspected to have caused the reaction, including the strength and formulation • a description of the reaction (See 6.2.1 Assessment and Appendix B) • the date and time of the reaction • which drugs or drug classes to avoid in future

If patients report adverse reactions or side effects to medicines we can either report these as healthcare professionals, or encourage the patient to report to the MHRA via Yellow card reporting via: https://yellowcard.mhra.gov.uk/ or the mobile app.
Reports can be made for all medicines including vaccines, blood factors and immunoglobulins, herbal medicines and homeopathic remedies, and all medical devices available on the UK market.

6.2.3 Provision of information to patients

- All ESHT patients that are prescribed an AAI should be referred to the Resuscitation Department using the form available on the Trust's extranet (link below) to provide educational support.
http://nww.esht.nhs.uk/task/resuscitation/
- The patient's suspected drug allergy should be discussed with them (and their family members or carers as appropriate) and they should be given structured written information (Table 1 in 6.2.2). Record who provided the information and when.
- Ensure that the patient (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.

A healthcare professional must offer the following to people who have had an anaphylactic reaction to a medicine (or, as appropriate, their parent and/or carer):

- 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
- a prescription for 2 adrenaline injectors, with advice to carry the injectors with them at all times

Information for specific allergies:
For people who have had a mild allergic reaction to aspirin or any other non-selective NSAID but need an anti-inflammatory the benefits and risks of selective cyclooxygenase 2 (COX-2) inhibitors should be discussed (including the low risk of drug allergy) and consideration can be given to introducing a selective COX-2 inhibitor at the lowest starting dose with only a single dose on the first day.

6.3. Referral to allergy specialists

Patients should be referred to a specialist allergy to a specialist drug allergy service if they have had:

- a suspected anaphylactic reaction, or
- a severe non-immediate cutaneous reaction (for example, drug reaction with eosinophilia and systemic symptoms [DRESS], Stevens–Johnson Syndrome, toxic epidermal necrolysis).

Beta lactam Antibiotics
Patients should be referred antibiotics to a specialist drug allergy service if they have a suspected allergy to beta-lactam, if they:

- need treatment for a disease or condition that can only be treated by a beta-lactam antibiotic, or
- are likely to need beta-lactam antibiotics frequently in the future (for example, people with recurrent bacterial infections or immune deficiency).

General anaesthesia
Patients should be referred to a specialist drug allergy service if they have had anaphylaxis or another suspected allergic reaction during or immediately after general anaesthesia.

Anaphylaxis reactions can be referred to:

- Royal Sussex County Hospital
  Eastern Road
  Brighton BN2 5BE
  Tel: 01273 696955

- Guy's Hospital
  Great Maze Pond
  London SE1 9RT
  Tel: 020 7188 7188

Cutaneous reactions should be referred to the Dermatology department at ESHT.

7. Special Considerations

Treatment and care should take into account individual needs and preferences. Patients should have the opportunity to make informed decisions about their care and treatment, in partnership with their healthcare professionals. If the patient is under 16, their family or carers should also be given information and support to help the child or young person to make decisions about their treatment.

8. Evidence Base/References

- *NICE Drug allergy: diagnosis and management of drug allergy in adults, children and young people (CG 183). September 2014*
- *NICE Drug Allergy. Quality Standard 97. July 2015.*
- *NICE Anaphylaxis: assessment and referral after emergency treatment (CG134). Updated August 2020.*

9. Competencies and Training Requirements

Foundation (Year 1) Prescribing doctors undertake a prescribing assessment when they start at ESHT. Nursing staff are assessed as competent in medicine administration and are expected to follow a validation process prior to undertaking injections.
The Trust training needs analysis comprehensively defines the staff training that is undertaken, by relevant staff group, with respect to medicines management.

10. Monitoring Arrangements

Reactive monitoring through the Trust incident reporting system, with medicine related incidents being reviewed regularly by the Medication Safety Officer, Medicines Safety Group and subsequently by the relevant Division risk management groups. The Medication Safety Thermometer audit reviews allergy documentation on medication administration charts on a monthly basis.

Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Incidents	Medication Safety Officer	Datix reports	Monthly	Medicines Safety Group	Medicines Optimisation Group	Medicines Optimisation Group
Documentation on Medication Administration charts	Medication Safety Officer	Medication Safety Thermometer Audit/ EPMA	Monthly	Medicines Optimisation Group	Medicines Optimisation Group	Medicines Optimisation Group
Guidelines and Procedure	Medication Safety Officer	Review	3 yearly or as warranted	Medicines Optimisation Group	Medicines Optimisation Group	Medicines Optimisation Group

11. Equality and Human Rights Statement

Clinical staff must ensure they consider religious observances, equality, human rights and the promotion of dignity and respect in relation to prescribing, administering, dispensing and monitoring of medicines. The principles of informed consent and the Mental Capacity Act should be followed. Refer to the full statements within the medicines policy.
ESHT has equality impact assessed this procedure. The assessment was submitted with this procedure during the ratification process.

Appendix A: EIA Form

Equality Impact Assessment Form

1. Cover Sheet

Please refer to the accompanying guidance document when completing this form.

Strategy, policy or service name	Guidelines for Diagnosis and Management of Drug Allergy
Date of completion	November 2021
Name of the person(s) completing this form	Jane Starr
Brief description of the aims of the Strategy/ Policy/ Service	This Guideline is intended to provide guidance on the procedures to follow when a patient has a known allergy to a drug, or when a new allergy is identified whilst a patient is in the care of the Trust
Which Department owns the strategy/ policy/ function	Pharmacy
Version number	V1.1
Pre Equality analysis considerations	
Who will be affected by this work? **E.g. staff, patients, service users, partner organisations etc.**	All staff and patients
Review date	November 2024
If negative impacts have been identified that you need support mitigating please escalate to the appropriate leader in your directorate and contact the EDHR team for further discussion.	To whom has this been escalated? N/A Name: Click here to enter text. Date: Click here to enter a date.
Have you sent the final copy to the EDHR Team?	No

2. EIA Analysis

<table>
<tr><td></td><td>☺ 😐 ☹</td><td>Evidence:</td></tr>
<tr><td>Will the proposal impact the safety of patients', carers' visitors and/or staff?

Safe: Protected from abuse and avoidable harm.</td><td>Choose: Positive</td><td>The guideline aims to reduce harm to patients by ensuring allergies are documented, reviewed, monitored and treated appropriately</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td>Choose: Neutral</td><td>
<table>
<tr><th>Race</th><th>Gender</th><th>Sexual orientation</th><th>Age</th><th>Disability & carers</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><th>Gender reassignment</th><th>Marriage & Civil Partnership</th><th>Religion and faith</th><th>Maternity & Pregnancy</th><th>Social economic</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Is the proposal of change effective?

Effective: Peoples care, treatment and support achieves good outcomes, That staff are enabled to work in an inclusive environment. That the changes are made on the best available evidence for all involved with due regards across all 9 protected Characteristics</td><td></td><td>All patients are treated equally in terms of allergy treatment. Follows national (NICE) Guidance.</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td><table>
<tr><th>Race</th><th>Gender</th><th>Sexual orientation</th><th>Age</th><th>Disability & carers</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><th>Gender reassignment</th><th>Marriage & Civil Partnership</th><th>Religion and faith</th><th>Maternity & Pregnancy</th><th>Social economic</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table></td></tr>
<tr><td>What impact will this have on people receiving a positive experience of care?</td><td>Choose: Positive</td><td>The guideline aims to reduce harm to patients by ensuring allergies are documented, reviewed, monitored and treated appropriately</td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td><table>
<tr><th>Race</th><th>Gender</th><th>Sexual orientation</th><th>Age</th><th>Disability & carers</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><th>Gender reassignment</th><th>Marriage & Civil Partnership</th><th>Religion and faith</th><th>Maternity & Pregnancy</th><th>Social economic</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table></td></tr>
</table>

<table>
<tr><td>Does the proposal impact on the responsiveness to people's needs?</td><td>Choose: Positive</td><td>Follows national guidance</td></tr>
<tr><td>Equality Consideration Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table>
</td></tr>
<tr><td>What considerations have been put in place to consider the organisations approach on improving equality and diversity in the workforce and leadership?</td><td>Choose: Neutral</td><td>All patients treated equally. No characteristics excluded. Written information available to support</td></tr>
<tr><td>Equality Consideration Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td>
<table>
<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><td>Gender reassignment</td><td>Marriage & Civil Partnership</td><td>Religion and faith</td><td>Maternity & Pregnancy</td><td>Social economic</td></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table>
</td></tr>
<tr><td colspan="3">Access
Could the proposal impact positively or negatively on any of the following:</td></tr>
<tr><td>• Patient Choice</td><td>Choose: Neutral</td><td></td></tr>
<tr><td>• Access</td><td>Choose: Neutral</td><td></td></tr>
<tr><td>• Integration</td><td>Choose: Neutral</td><td></td></tr>
</table>

<table>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td>
<table>
<tr><th>Race</th><th>Gender</th><th>Sexual orientation</th><th>Age</th><th>Disability & carers</th></tr>
<tr><td>X</td><td>x</td><td>X</td><td>X</td><td>x</td></tr>
<tr><th>Gender reassignment</th><th>Marriage & Civil Partnership</th><th>Religion and faith</th><th>Maternity & Pregnancy</th><th>Social economic</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table>
</td></tr>
<tr><td>Engagement and Involvement
How have you made sure that the views of stakeholders, including people likely to face exclusion have been influential in the development of the strategy / policy / service:</td><td>Choose: Positive</td><td>Take from National recommendations and guidance which has been reviewed and scrutinised by multiple groups.</td></tr>
<tr><td>Equality Consideration Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td>
<table>
<tr><th>Race</th><th>Gender</th><th>Sexual orientation</th><th>Age</th><th>Disability & carers</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
<tr><th>Gender reassignment</th><th>Marriage & Civil Partnership</th><th>Religion and faith</th><th>Maternity & Pregnancy</th><th>Social economic</th></tr>
<tr><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td></tr>
</table>
</td></tr>
<tr><td>Duty of Equality

Use the space below to provide more detail where you have identified how your proposal of change will impact.</td><td>Choose: Neutral</td><td>The guideline aims to reduce harm to patients by ensuring allergies are documented, reviewed, monitored and treated appropriately</td></tr>
<tr><td>Characteristic</td><td>Rating

☺ ☹ 😐</td><td>Description</td></tr>
<tr><td>Race</td><td>Choose: Neutral</td><td></td></tr>
<tr><td>Age</td><td>Choose: Neutral</td><td></td></tr>
<tr><td>Disability and Carers</td><td>Choose: Neutral</td><td></td></tr>
</table>

Religion or belief	Choose: Neutral	
Sex	Choose: Neutral	
Sexual orientation	Choose: Neutral	
Gender re-assignment	Choose: Neutral	
Pregnancy and maternity	Choose: Neutral	
Marriage and civil partnership	Choose: Neutral	

Human Rights

Please look at the table below to consider if your proposal of change may potentially conflict with the Human Right Act 1998

Articles		Y/N
A2	Right to life	**~~Y~~/N**
A3	Prohibition of torture, inhuman or degrading treatment	**~~Y~~/N**
A4	Prohibition of slavery and forced labour	**~~Y~~/N**
A5	Right to liberty and security	**~~Y~~/N**
A6 &7	Rights to a fair trial; and no punishment without law	**~~Y~~/N**
A8	Right to respect for private and family life, home and correspondence	**~~Y~~/N**
A9	Freedom of thought, conscience and religion	**~~Y~~/N**
A10	Freedom of expression	**~~Y~~/N**
A11	Freedom of assembly and association	**~~Y~~/N**
A12	Right to marry and found a family	**~~Y~~/N**
Protocols		
P1.A1	Protection of property	**~~Y~~/N**
P1.A2	Right to education	**~~Y~~/N**
P1.A3	Right to free elections	**~~Y~~/N**

Appendix B- Assessment of allergy

Boxes 1–3 Signs and allergic patterns of suspected drug allergy with timing of onset[1]

Box 1 Immediate, rapidly evolving reactions

Anaphylaxis – a severe multi-system reaction characterised by: • erythema, urticaria or angioedema **and** • hypotension and/or bronchospasm	Onset usually less than 1 hour after drug exposure (previous exposure not always confirmed)
Urticaria or angioedema without systemic features	
Exacerbation of asthma (for example, with non-steroidal anti-inflammatory drugs [NSAIDs])	

Box 2 Non-immediate reactions without systemic involvement

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

Box 3 Non-immediate reactions with systemic involvement

Drug reaction with eosinophilia and systemic symptoms (DRESS) or drug hypersensitivity syndrome (DHS) characterised by: • widespread red macules, papules or erythroderma • fever • lymphadenopathy • liver dysfunction • eosinophilia	Onset usually 2–6 weeks after first drug exposure or within 3 days of second exposure
Toxic epidermal necrolysis or Stevens–Johnson syndrome characterised by: • painful rash and fever (often early signs) • mucosal or cutaneous erosions • vesicles, blistering or epidermal detachment • red purpuric macules or erythema multiforme	Onset usually 7–14 days after first drug exposure or within 3 days of second exposure
Acute generalised exanthematous pustulosis (AGEP) characterised by: • widespread pustules • fever • neutrophilia	Onset usually 3–5 days after first drug exposure
Common disorders caused, rarely, by drug allergy: • eczema • hepatitis • nephritis • photosensitivity • vasculitis	Time of onset variable

East Sussex Healthcare NHS Trust

Appendix C- Patient Information

Drug Allergy

Drug	Date of reaction	Description of reaction	Other related medicines I should avoid?

Why have I been given this leaflet?

You have been given this leaflet as we think that you have experienced an allergy to a medicine while you have been in our care.

What is an Allergy?

An allergy is a reaction the body has to a particular food or substance. Allergies are very common. They're thought to affect more than one in four people in the UK at some point in their lives.

Symptoms of an allergic reaction

Allergic reactions usually happen quickly within a few minutes of exposure to an allergen.
They can cause:

- sneezing
- a runny or blocked nose
- red, itchy, watery eyes
- wheezing and coughing
- a red, itchy rash
- worsening of asthma or eczema symptoms

Most allergic reactions are mild, but occasionally a severe reaction called anaphylaxis or anaphylactic shock can occur. This is a medical emergency and needs urgent treatment.
If your allergy is particularly severe or it's not clear what you're allergic to, your GP may refer you to an allergy specialist for testing and advice about treatment

How to manage an allergy?

In many cases, the most effective way of managing an allergy is to avoid the allergen that causes the reaction whenever possible.

You will need to tell healthcare professionals (nurses, doctors, dentists, pharmacists) that you have an allergy so they can avoid prescribing, administering or providing the medicine you are allergic to or similar medicines.

What causes allergies?

Allergies occur when the body's immune system reacts to a particular substance as though it's harmful. It's not clear why this happens.

Is it an allergy, sensitivity or intolerance?

Allergy – a reaction produced by the body's immune system when exposed to a normally harmless substance
Sensitivity – the exaggeration of the normal effects of a substance; for example, the caffeine in a cup of coffee may cause extreme symptoms, such as palpitations and trembling
Intolerance – where a substance causes unpleasant symptoms, such as diarrhea or indigestion, but doesn't involve the immune system.

Sources of information

Further information can be obtained from:

- Medicines Information Conquest Hospital 01424 757067
- Medicines Information Eastbourne DGH 01323 413785
- Pharmacy Department, East Sussex Healthcare NHS Trust
- NHS 111
- Your GP
- Your Local Pharmacy

Important information

This patient information is for guidance purposes only and is not provided to replace professional clinical advice from a qualified practitioner.

Your comments

We are always interested to hear your views about our leaflets. If you have any comments, please contact the Patient Experience Team – Tel: 0300 131 4731 (direct dial) or by email at: esh-tr.patientexperience@nhs.net

Hand hygiene

The trust is committed to maintaining a clean, safe environment. Hand hygiene is very important in controlling infection. Alcohol gel is widely available at the patient bedside for staff use and at the entrance of each clinical area for visitors to clean their hands before and after entering.

Other formats

If you require any of the Trust leaflets in alternative formats, such as large print or alternative languages, please contact the Equality and Human Rights

Tel: 0300 131 4434 Email: esh-tr.AccessibleInformation@nhs.net

After reading this information are there any questions you would like to ask? Please list below and ask your nurse or doctor.

_____
_____
_____
_____

Reference

The following clinicians have been consulted and agreed this patient information:
The Clinical Specialty/Unit that have agreed this patient information leaflet:
Medicines Optimisation Group

Next review date:
Responsible clinician/author: Jane Starr, Medication Safety Officer