ALLERGY AND ANAPHYLAXIS IDENTIFICATION AND MANAGEMENT POLICY

POLICY

Reference	CPG-TW-AAAIMP
Approving Body	Resuscitation Advisory Group
Date Approved	August 2018
Issue Date	12th November 2018
Version	1.0
Summary of Changes from Previous Version	• Information in the previous Anaphylaxis Policy (v5.0) reviewed/ updated and now included in this new policy to cover both allergy and anaphylaxis identification and management. • Increased information in the introduction gives the background to anaphylaxis and allergy management. • Increased roles and responsibilities for Healthcare professionals dealing with allergy • Introduction of a combined care pathway for use in ED and inpatient management. • Introduction of a referral pathway to AECU (formally CDU) from ED • Information included for the criteria for referral to speciality allergy clinics. • Change in the referral process to the allergy clinic. • Change to the supply and counselling of patients requiring adrenaline auto-injectors at discharge. • Addition of patient information letter.
Supersedes	Anaphylaxis Policy (for Adult, Maternity and Paediatric Patients) v5.0, issued 16 Aug 2014 to RV date Aug 2018 (ext)
Document Category	Clinical
Consultation Undertaken	Pharmacy Paediatrics Resuscitation Advisory Group members Patient Safety Lead Divisional Governance Groups
Date of Completion of Equality Impact Assessment	4.4.18
Date of Environmental Impact Assessment (if applicable)	NA
Legal and/or Accreditation Implications	NA
Target Audience	All clinical staff who are employed by or on behalf of the Trust

Review Date	April 2022 (ext[3])
Sponsor (Position)	Executive Medical Director
Author (Position & Name)	Co-authors: • Resuscitation Training Manager – Christine Miles • Assistant Chief Pharmacist - Joanna Freeman • Practice Development Nurse – Medicines Management – Tracy Brown
Lead Division/ Directorate	Corporate
Lead Specialty/ Service/ Department	Corporate Training & Development/ Resuscitation Team
Position of Person able to provide Further Guidance/Information	Co-authors

Associated Documents/ Information	**Date Associated Documents/ Information was reviewed**
1. Adrenaline auto-injector counselling checklist 2. Patient letter following a severe allergic reaction (anaphylaxis) 3. Emergency Department and Inpatient Care Pathway for Allergy and Anaphylaxis Identification and Management 4. Emergency Department referral pathway to AECU for Anaphylaxis/ Suspected Anaphylaxis	All developed or reviewed/ updated with this policy

CONTENTS

1.0 INTRODUCTION

An allergic reaction is hypersensitivity caused by exposure to a particular antigen (allergen) resulting in a marked increase in reactivity to that antigen on subsequent exposure, sometimes resulting in harmful reactions. The reaction may range from a mild attack of asthma or hay fever to severe dermatitis, gastroenteritis or shock that may cause death from breathing difficulties, circulatory collapse, and/or heart failure.

Allergic reactions are classified into four major types: type I (anaphylactic and IgE (immunoglobulin E) dependent); type II (cytotoxic); type III (immune-complex mediated); type IV (cell mediated or delayed).

Anaphylaxis is a severe, life-threatening, generalised or systemic hypersensitivity reaction. It is characterised by rapidly developing symptoms 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.

In emergency departments a person who presents with the signs and symptoms listed above may be classified as having a 'severe allergic' reaction rather than an 'anaphylactic' reaction. Throughout this guideline, anyone who presents with such signs and symptoms is classed as experiencing a 'suspected anaphylactic reaction', and should be diagnosed as having 'suspected anaphylaxis'. [5].

People who have had a mild or moderate allergic reaction are at risk of, and may subsequently present with, suspected anaphylaxis. Certain groups may be at higher risk either because of an existing comorbidity (for example asthma) or because they are more likely to be exposed to the same allergen again (for example people with venom allergies or reactions to specific food triggers).

Anaphylaxis may be an allergic response that is immunologically mediated, or a non-immunologically mediated response, or idiopathic. Certain foods, insect venoms, some medicines and latex are common precipitants of IgE mediated allergic anaphylaxis. Many medicines can also act through non-allergic mechanisms. A significant proportion of anaphylaxis is classified as idiopathic, in which there are significant clinical effects but no readily identifiable cause. The relative likelihood of the reaction being allergic, non-allergic or idiopathic varies considerably with age.

The incidence of anaphylaxis is increasing. Recent UK data[1] indicates that approximately 1:1333 of the English population have experienced anaphylaxis at some point in their lives. Guidelines produced for the treatment of anaphylaxis which will be referenced throughout this policy, are those of the Resuscitation Council (UK) 2008.

2.0 POLICY STATEMENT

The aim of this policy is to provide clear, current guidance for the recognition and treatment of an allergic reaction plus or minus anaphylaxis.

3.0 DEFINITIONS/ ABBREVIATIONS

Allergic Reaction	An allergic reaction occurs when the immune system overreacts to a harmless substance known as an allergen. This triggers the production of antibodies called Immunoglobulin E (IgE)
Anaphylaxis	A severe, life-threatening, generalised or systemic hypersensitivity reaction
The Trust	Sherwood Forest Hospitals, NHS Foundation Trust
Clinical Staff	All employees of the Trust working in a clinical role, including those managed by a third party on behalf of the Trust
HCP	Health Care Professional for example Medical, Nursing and Allied Health staff groups
PGD	Patient Group Direction - A patient group direction (PGD) is a written direction that allows named health care professionals to supply and/or administer a named medicine in a specific clinical situation.
ABCDE	Patient clinical assessment process; Airway, Breathing, Circulation, Disability (neurological), Exposure
Biphasic	A further reoccurrence of symptoms
IgE	Immunoglobulin E
RCUK	Resuscitation Council (UK)
ADR	Adverse Drug Reaction.
BNF	British National Formulary

4.0 ROLES AND RESPONSIBILITIES

Service Directors & Heads of Nursing must:

- ensure the policy is disseminated to all relevant staff and that the policy is adhered to.

Resuscitation Advisory Group must:

- support the author(s) to ensure the policy is reviewed and updated as necessary.

Line Managers must:

- disseminate the policy to all their staff including agency staff.
- ensure their staff adhere to all aspects of the policy.
- facilitate staff access to relevant training.
- ensure anaphylaxis events and severe allergic reactions are reported on Datix.

Health Care Professionals (HCP) must:

- practice within their code of professional conduct.
- recognise the symptoms of anaphylaxis or suspected anaphylaxis and follow the Treatment Algorithm for the Emergency Management of Anaphylaxis (Appendix A), responding appropriately in accordance with their individual level of responsibility and training.
- ensure they continue to update their knowledge & skills regarding anaphylaxis treatment protocols (this information is freely available at www.resus.org.uk).
- counsel patients when they are newly started on adrenaline auto-injectors using ward /

department based counselling aids as required. See the following associated document: Adrenaline Auto-injector Counselling Checklist – available to print from the intranet for use in practice.

- ensure that all allergies are recorded in the patient's care plan or health record and on the medication administration chart (if one is in circulation) or prescription
- assess the patient's risk of developing an anaphylactic reaction prior to any treatment administration by checking allergy status.
- ensure that no patient has medicines prescribed, supplied or administered unless allergy status has been obtained. The only exception is a life threatening emergency.
    - Where there is a previous history of allergy to a particular medicine, the medicine should not be given and the authorised prescriber should be contacted for advice on alternative treatments. If at this point the prescriber wishes to proceed with the treatment, this decision must be documented in the medical record. A discussion with the patient or their carer/representative must occur prior to treatment being administered wherever possible and this conversation also documented in the medical record.
    - If a medicine has been prescribed for which there is a documented history of allergy in a particular patient a Datix form must be completed. If the medicine is actually administered then this is reported as an incident. If the routine checks prevent the medicine being given to the patient then this should be reported as a near miss.
- Ensure all patients are discharged with a Patient letter following a severe allergic reaction (anaphylaxis) for their information – available to print from the intranet for use in practice.
- The medical teams responsible for the care of the patient must ensure a referral to the appropriate allergy clinic is made prior to discharge following the guidance in this policy.

Non-Registered Healthcare Providers must:

- alert the HCP immediately if patient distress/deterioration is observed

Non-clinical staff must:

- summon assistance from a clinical member of staff and/or dial 2222 (999 for Mansfield Community Hospital & all other community care settings) to summon emergency medical assistance**.**

5.0 APPROVAL

Policy has been ratified by the Resus Advisory Group at Sherwood Forest Hospital NHS Foundation Trust following consultation with interested parties.

6.0 DOCUMENT REQUIREMENTS

6.1 Background:

Anaphylaxis can develop within a rapid time frame, and potentially with little or no warning for the victim or care provider. It is therefore essential that staff with a duty of care have the knowledge and skills to both recognise a potentially life-threatening situation and respond in a timely manner.

Examples of potential anaphylaxis triggers include:

- Foods - peanuts, fish/shellfish, eggs, milk.
- Medicines - antibiotics, vaccines, aspirin, anaesthetic agents, contrast media
- Venom - wasp & bee stings.
- Blood
- Latex

Please note this is not an exhaustive list and allergic reactions and anaphylaxis can occur to many things and when given by different routes.

In cases where anaphylaxis is fatal death usually occurs very soon after the contact with the trigger. Those caused by intravenous medication have most commonly occurred *within 5 minutes of injection.* It is therefore imperative that attending HCP's minimise the risk of anaphylaxis by taking a thorough history, assessing and documenting any previous reactions clearly within the patient's medical notes and on the medication and administration chart in accordance with the Medicines Policy

No medicines should be prescribed, administered or ordered, except in a life threatening situation, unless the allergy status of the patient has been documented. If there are no allergies then 'NKDA' may be written which means 'no known drug allergies'. Adverse drug reactions are different and relate to side effects. These may be very severe and are just as important to avoid. If the reaction is not allergic in nature but a side effect or ADR, then document this clearly by writing 'ADR' next to the drug and reaction.

Patients with a known allergy must be issued with a red hand written patient identification band, which includes the words 'Allergy Alert' (Policy & Procedure for the Positive Identification of Patients)

6.2 Recognition & Diagnosis:

The clinical features of the reaction may vary in severity and progress. It is recommended that an ABCDE clinical assessment format is used. Symptoms suggestive of the likelihood of a severe reaction may show one or several of the following signs:

Response Time	Sudden onset and rapid progression of symptoms following exposure to the trigger (more rarely several hours delay to onset of symptoms)
General Signs	Pallor, reduced level of consciousness, dyspnoea/apnoea, collapse leading to respiratory/cardiorespiratory arrest.
Airway	Angioedema - swelling of lips, face, neck, tongue, dysphagia, hoarseness and stridor.
Breathing	Chest tightness, tachypnoea, dyspnoea, bronchospasm with audible wheeze
Circulation	Profound hypotension in association with tachycardia and weak pulses. Slow capillary filling (>2 seconds).
Disability	Confusion, agitation, loss of consciousness
Exposure	**Skin** - Flushed or pale. Cold & clammy. Itchy lips, palate, eyes, hands & feet. Widespread urticarial rash. (Note: 20% of cases have no skin reaction) **Gastrointestinal** - Nausea, vomiting, abdominal pain, diarrhoea, incontinence

Caution: Anaphylaxis may be confused with a panic attack, particularly in those patients who have previously experienced an anaphylactic reaction. The absence of rash, breathing

difficulties, and swelling are useful distinguishing features, as is the slow pulse of a vasovagal (fainting) attack compared with the tachycardia present in a severe anaphylactic episode. A vasovagal episode will usually respond to lying the patient down and raising their legs, while ensuring a patent airway.

6.3 Immediate Essential Management of an Allergic reaction without life threatening symptoms:

- Remove the trigger substance if possible.
- Administer medication depending on severity of symptoms. Oral antihistamines may be sufficient for rash with no other symptoms
- It may be necessary to administer Chlorphenamine and Hydrocortisone injections immediately. These medications can be administered without a prescription for the purpose of saving life in an emergency situation by those competent to do so as described in the Medicines Policy. These medications are in the resuscitation trolley. Call the doctor for Mansfield Community Hospital & all other community care settings as an allergic reaction can progress to anaphylaxis.

	Chlorphenamine (IM or slow IV)	**Hydrocortisone** (IM or slow IV)
Adult or child more than 12 years	10 mg	200 mg
Child 6 - 12 years	5 mg	100 mg
Child 6 months to 5 years	2.5 mg	50 mg
Child less than 6 months	250 micrograms/kg	25 mg

Refer to the BNF for further dose information as required. Link: BNF

After initial management, see section 6.5 for the ongoing care and monitoring of the patient.

6.4 Immediate Essential Management of Anaphylaxis:

- Summon emergency medical assistance if necessary. In the case of Kings Mill Hospital and Newark sites do this by dialling 2222 (999 for Mansfield Community Hospital & all other community care settings).

- Remove the trigger substance if possible.

- Proceed in accordance with the Treatment Algorithm for the Emergency Management of Anaphylaxis (Appendix A)

- In the event of the patient sustaining a cardiopulmonary arrest, the Cardiopulmonary Resuscitation (CPR) Policy must be followed and the Resuscitation Council Advanced Life Support Treatment Algorithm (Adult) or Paediatric Resuscitation Council Advanced Life Support Algorithm must be implemented.

- Adrenaline is regarded as the most important medicine for any severe anaphylactic reaction. It is most effective when administered early following anaphylaxis and via the **intramuscular (IM)** route. The preferred site for the injection is the anterolateral aspect of the midpoint of the thigh. Note: the adrenaline injection strength is 1:1000 (medication dosages for both adults and children are specified in the Anaphylaxis treatment algorithm)

- Adrenaline is a prescription only medication. However, under the Human Medicines Regulations 2012 Schedule the administration of adrenaline is allowed without prescription for the purposes of saving life in an emergency anaphylaxis situation.

- When serious symptoms are present, clinical staff working within the Trust that have been trained in the administration of intramuscular injections are authorised to administer up to 2 doses of adrenaline 1:1000, as per the RCUK anaphylaxis treatment algorithm guidelines, a minimum of 5 minutes apart via the intramuscular route.

- All resuscitation trolleys contain Adrenaline, Chlorphenamine and Hydrocortisone injections.

- Some outpatient areas have adrenaline auto-injectors.

- When assessing a person presenting with possible medicine allergy, take a history and undertake a clinical examination. See Appendix B NICE 2011: Signs and allergic patterns of suspected medicine allergy with timing of onset.

After initial management, see section 6.5 for the ongoing care and monitoring of the patient.

6.5 Further Management & Discharge Requirements:

In order to promote patient safety and additionally ensure compliance with the NICE 134 Guideline (2011), the following actions must be implemented:

- All anaphylaxis or allergic reaction events must be logged as a clinical incident on the Datix reporting system even if the allergic reaction was unexpected.

- For any patient presenting with an allergic reaction or anaphylaxis, staff must follow the Emergency Department and Inpatient Care Pathway for Allergy and Anaphylaxis Identification and Management – which can be printed from the intranet for use in practice.

- For any patient with suspected anaphylactic reactions associated with anaesthesia, Anaesthetist to complete the Association of Anaesthetists of Great Britain and Ireland (AAGBI) anaphylaxis proforma: Allergies and Anaphylaxis | AAGBI

- Report medication reactions to the Medicines and Healthcare Regulatory Agency (MHRA) via the yellow card scheme

- If the patient needs observing further and admission to hospital is not necessary they may be referred to the Ambulatory Emergency Care Unit (AECU) using the Emergency Department referral pathway to AECU for Anaphylaxis / Suspected Anaphylaxis – which can be printed from the intranet for use in practice.

- **In-hospital observation for a minimum period of 6-12 hours** is warranted for those patients whose presentation involves the following factors.
    - Displaying symptoms in one or more of the A, B, & C patient assessment

criteria
- Reactions in patients with severe asthma, or with a severe asthmatic component
- Patients with a previous history of biphasic reaction

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

- **Mast cell Tryptase level blood sampling** is required to assist confirmation of diagnosis. Three samples are required if a reaction is suspected. Sample 1 is taken during resuscitation or as soon as possible afterwards. Sample two is then taken at 1-2 hours from onset of symptoms and sample three 24 hours or longer in the recovery phase. If the patient is discharged before the 24 hour sample this may be referred to the GP or allergy clinic.

- **All patients must be reviewed by a clinician prior to discharge**

- All patients must be discharged with a Patient letter following a severe allergic reaction (anaphylaxis) which gives information on what to expect post discharge. This letter can be printed from the intranet for use in practice.

- All sufferers of anaphylaxis should be advised to carry/wear an alert device to inform bystanders should a future attack occur, and be vigilant to avoid potential exposure to the trigger. The Allergy Clinic will provide this information once the diagnosis has been confirmed – see Appendix D for information on referral criteria to the allergy clinic. Prior to attendance at the clinic patients must show the patient letter issued at the point of discharge at any medical or dental appointments they go to prior to attendance at the allergy clinic.

- **All patients must be provided with 2 adrenaline auto-injector pens and instruction regarding administration prior to discharge**, as per the Adrenaline Auto-Injector Counselling Checklist – which can be printed from the intranet for use in practice. See section 6.5a for information on the supply of adrenaline auto-injectors. If the counselling occurs in pharmacy then a copy of the checklist will be stapled to the prescription and filed alongside. If the counselling occurs at ward level then this will be filed in the medical notes with the TTO paperwork. In the case of the Emergency Department, this checklist may be filed with the Emergency Department notes.

- All patients must be provided with advice regarding signs and symptoms of anaphylaxis and the importance of avoiding the trigger substance/action. This information is part of the Adrenaline Auto-Injector Counselling Checklist. If patients require further information then they may be referred to www.nhs.uk where there are a number of patient friendly leaflets on allergy and anaphylaxis. The Patient letter following a severe allergic reaction (anaphylaxis) given to patients will give information on what to expect in terms of referral and will give information on their potential allergens.

- Only new or unknown causes of severe allergy / anaphylaxis need to be referred to the Allergy clinic. Known triggers do not need routine referral, this will be at the discretion of the senior clinician.

- All patients who need a referral to a specialist allergy centre will be referred by the clinician.
    - **Patients from ED/AECU and all in-patient areas:** responsible clinician to refer via letter to the NUH allergy clinic and include a copy of the Emergency Department and Inpatient Pathway for the Allergy Identification and Management including Anaphylaxis. This may be posted to the address at the bottom of the pathway or faxed to the number provided.
    - **Anaesthetics-** Please refer via letter or email as above to the allergy clinic and send a copy of the AAGBI anaphylaxis Proforma and the anaesthetic record.
    - **Paediatric patients** will be admitted onto the paediatric ward and referral made to the paediatric allergy clinic at Sherwood Forest Hospitals NHS Trust.

- See Appendix D for the indications for referral to the specialist allergy clinic. Further advice is also available from the specialist clinic should it be required prior to patient attendance at www.nuh.nhs.uk

- In the case of the Emergency Department, where the green notes may not be available at the point of discharge this information will be put onto SystemOne for the GP.

- The Emergency Department and Inpatient Pathway for the Allergy Identification and Management including Anaphylaxis document should be filed in the patients' medical notes behind the red alert divider.

- The GP must be informed of the event on discharge and any changes to the patient's allergy status. All information should be clearly documented on the communication paperwork and a copy of the Emergency Department and Inpatient Pathway for the Allergy Identification and Management including Anaphylaxis to be sent to the GP.

6.5a Supply of adrenaline auto-injectors.

All patients must be provided with 2 adrenaline auto-injector pens and instruction regarding administration prior to discharge, as per the Adrenaline Auto-Injector Counselling Checklist. Instructions for administration can be found with each auto-injector.

During working hours, these may be supplied by the pharmacy department against either an outpatient or TTO prescription.

For adult patients out of hours, the Emergency Department will have prepacks which can be issued to patients as part of the 'Procedure for the dispensing of pre-packed medication by nursing staff' against an outpatient prescription. These will be kept in the Medstation.

Paediatric patients presenting with severe allergy or anaphylaxis will be admitted for review by the Paediatric team so supply will be made on discharge via the pharmacy department during working hours.

All areas will have training packs available to assist with the counselling of patients at ward level. The responsibility for counselling will lie with ward staff if the patient is being discharged home from the in-patient setting and with Emergency Department staff for those treated and discharged from ED and pharmacy staff for those prescriptions dispensed as out patients via the dispensary.

If a patient with an existing allergy is admitted having used their supply of adrenaline auto-injector, then they must be discharged with a new supply.

6.6 Maintaining and sharing medicines allergy information

- Prescriptions (paper or electronic) issued in any healthcare setting should record information on which medicines or medicine classes to avoid in order to reduce risk of medicine allergy.

- Documentation of a medicine allergy requires the following information as a minimum:
  - the medicine name
  - the signs, symptoms and severity of the reaction
  - the current Medication and Administration record (in-patient medicine chart) also requires the person documenting to sign and date the entry.

- The medicine allergy should be documented separately from adverse reactions and be clearly visible to all health care professionals who are prescribing medications. This is not physically possible with the current medication chart and so the letters 'ADR' should be documented to denote a side effect or adverse drug reaction as opposed to an allergy.

- The medicine allergy status should be confirmed with the patient or family members or carers as appropriate before prescribing, dispensing or administering any medicines. Unless the situation is life threatening, none of the aforementioned tasks should be undertaken until information on the patient's allergy status can be obtained.

- The information regarding allergy status should be updated and included in all GP referrals and hospital discharge letters.

- Medicines reconciliation for people admitted to hospital should be carried out in line with local policy and include the confirmation of allergy status.

- Patients admitted to hospital who have a medicine allergy must wear a red wrist band to identify and alert staff to the fact that they have an allergy, as stated in the Policy & Procedure for the Positive Identification of Patients.

7.0 MONITORING COMPLIANCE AND EFFECTIVENESS

Minimum Requirement to be Monitored (WHAT – element of compliance or effectiveness within the document will be monitored)	Responsible Individual (WHO – is going to monitor this element)	Process for Monitoring e.g. Audit (HOW – will this element be monitored (method used))	Frequency of Monitoring (WHEN – will this element be monitored (frequency/ how often))	Responsible Individual or Committee/ Group for Review of Results (WHERE – Which individual/ committee or group will this be reported to, in what format (eg verbal, formal report etc) and by who)
All anaphylaxis-related medical emergency 2222 calls audited as part of the Cardiac arrest governance process.	Resuscitation Training Manager	All calls to 2222 are audited.	As they occur	• Resus Advisory Group
Audit the usability at ward level of the resus trolleys	Medication Safety Officer	Medication Safe Storage and Security Audit	Annual	• Medicines Safety Group
All allergy related medication incidents reported on Datix are reviewed by the Medication Safety Officer (MSO) and all harms are discussed at the MedSG	Medication Safety Officer	Monthly review As the incident occurs	Monthly	• Medicines Safety Group
Ensure all pts with known allergy have a red wrist band in place.	Practice Development Nurse – Medicines Management	Monthly metrics Annual - specific audit.	Monthly – metrics Annual - audit	• Nursing & Midwifery Board • Medicines Safety Group

8.0 TRAINING AND IMPLEMENTATION

8.1 All Cardiac arrest bleep holders will have a valid Advanced Life Support (ALS) Provider certificate for the adult team, Advanced Paediatric Life Support (APLS) or European Paediatric Advanced Life Support (EPALS) certificate for the paediatric team (Course syllabus incorporates competency assessed training in the emergency management of anaphylaxis).

8.2 Anaphylaxis training is incorporated in the Immediate Life Support (ILS) and Paediatric Life Support (PILS) courses as recommended for staff in the **CPR Training Policy**

8.3 Anaphylaxis e-learning training package is available on the Trusts intranet site

8.4 Midwives access anaphylaxis training as part of their annual mandatory Emergency Skills Training Day.

8.5 All medical staff, registered nurses, midwives and allied health professionals will be responsible for ensuring they remain up to date with current, related guidelines Emergency treatment for anaphylaxis guidelines (Resus Council UK)

8.6 Anaphylaxis Algorithm posters should be displayed in the clean utility area of all clinical wards/departments and are also contained, as laminates, within the Adult and Paediatric Resuscitation Trollies.

8.7 Epi-Pen training will be provided on a 'train the trainer' basis and counselling aids will be available on all wards and departments to assist with patients counselling. The training checklist will also act as an aide memoire for those counselling patients. Alternative adrenaline auto-injectors are available when needed.

9.0 IMPACT ASSESSMENTS

- This document has been subject to an Equality Impact Assessment, see completed form at Appendix E.
- This document is not subject to an Environmental Impact Assessment

10.0 EVIDENCE BASE (Relevant Legislation/ National Guidance) AND RELATED SFHFT DOCUMENTS

Evidence Base:

Guidelines produced for the treatment of anaphylaxis referenced throughout this policy are those of the Resuscitation Council (UK) Emergency Treatment of Anaphylactic Reactions (2008)

1. Johansson SG, Bieber T, Dahl R, Friedmann PS, Lanier BQ, Lockey RF,et al. Revised nomenclature for allergy for global use: Report of the Nomenclature Review Committee of the World Allergy Organisation, October 2003 *J Allergy Clin Immunol 2004;113(5): 832-6*
2. References 18-20 of the above RCUK Guideline
3. References 12-13 of the above RCUK Guideline
4. Human Medicines Regulations 2012 Schedule, regulation 238 schedule19
5. National Institute for Health & Clinical Excellence Guideline 134: Anaphylaxis, Assessment to confirm an anaphylactic episode and the decision to refer after emergency treatment for a suspected anaphylactic episode 2011
6. National Institute for Health & Clinical Excellence Guideline (CG183);Drug allergy diagnosis and management 2014

7. Technical patient safety solutions for medicines reconciliation on admission of adults to hospital (NICE patient safety solutions guidance 1)
8. Royal College of Anaesthetists. Anaesthesia, surgery and life threatening reactions. Reports and finding of the Royal College of Anaesthetists 6th national audit project: perioperative anaphylaxis. Published May 2018

Related SFHFT Documents:

- Medicines Policy
- Transfusion Policy, Procedures and Guidelines
- Cardiopulmonary Resuscitation (CPR) Policy
- Policy & Procedure for the Positive Identification of Patients
- Procedure for the dispensing of pre-packed medication by nursing staff

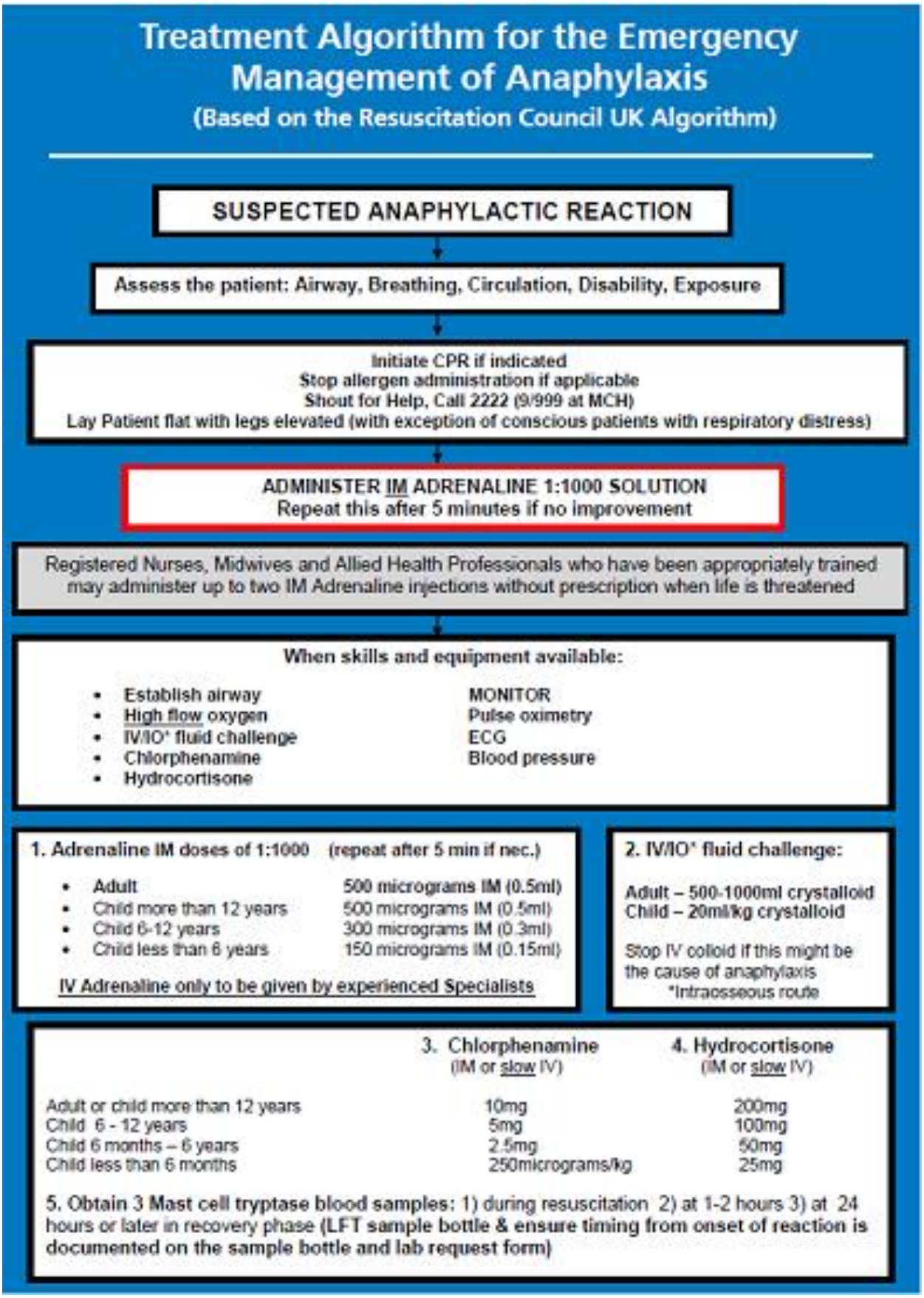
11.0 KEYWORDS

- Adverse drug reaction; ADR; anaphylactic; allergic; hypersensitivity;

12.0 APPENDICES

- Appendix A – Treatment Algorithm for the Emergency Management of Anaphylaxis
- Appendix B – NICE 2011: Signs and allergic patterns of suspected medicine allergy with timing of onset
- Appendix C – Anaphylaxis Immediate Management (Anaesthetic Department Protocol for Theatres)
- Appendix D – Indications for referral to the Specialist Allergy Clinic
- Appendix E – Equality Impact Assessment

Appendix A: Treatment Algorithm for the Emergency Management of Anaphylaxis as displayed in all clinical areas.



Appendix B – NICE 2011: Signs and allergic patterns of suspected medicine allergy with timing of onset

Use the following boxes as a guide when deciding whether to suspect drug allergy.

NICE 2011 – Boxes 1–3 Signs and allergic patterns of suspected drug allergy with timing of onset

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	

Appendix C: Anaphylaxis Immediate Management (Anaesthetic Department Protocol for Theatres)

ANAPHYLAXIS IMMEDIATE MANAGEMENT

CALL FOR HELP
EMERGENCY TROLLEY
RECORD THE TIME

USE THE WHOLE THEATRE TEAM: communicate and delegate

● Stop any likely triggers (eg antibiotics, blood, colloids, muscle relaxants Assess and treat using the ABCD approach. Start CPR if indicated

● Ventilate with 100% O2 and intubate if necessary to maintain the airway. Elevate the patient's legs

1 Life-threatening problems:

Airway:	swelling, hoarseness, stridor
Breathing:	rapid breathing, wheeze, fatigue, cyanosis, SpO_2 < 92%, confusion
Circulation:	pale, clammy, low blood pressure, faintness, drowsy/coma

2 Adrenaline *(give IM unless experienced with IV adrenaline)*
IM doses of 1:1000 adrenaline (repeat after 5 min if no better)

- Adult 500 micrograms IM (0.5 mL)
- Child more than 12 years: 500 micrograms IM (0.5 mL)
- Child 6 -12 years: 300 micrograms IM (0.3 mL)
- Child less than 6 years: 150 micrograms IM (0.15 mL)

Adrenaline IV to be given **only by experienced specialists**
Titrate: Adults 50 micrograms; Children 1 microgram/kg

3 IV fluid challenge:
Adult - 500 – 1000 mL
Child - crystalloid 20 mL/kg

Stop IV colloid
if this might be the cause
of anaphylaxis

	4 Chlorphenamine (IM or slow IV)	**5 Hydrocortisone** (IM or slow IV)
Adult or child more than 12 years	10 mg	200 mg
Child 6 - 12 years	5 mg	100 mg
Child 6 months to 6 years	2.5 mg	50 mg
Child less than 6 months	250 micrograms/kg	25 mg

●Several doses of adrenaline may be required if there is severe hypotension or bronchospasm. If several doses are required consider starting an IV infusion of adrenaline. If BP does not recover despite an adrenaline infusion, consider alternative vasopressor e;g. metaraminol.
●Treat persistent bronchospasm with IV salbutamol (consider nebuliser) consider IV aminophylline &/or Magnesium (on trust guidelines) Infusion guidelines on the intranet
http://pharmacy.sfhtr.nhs.uk/Formulary//Misc/ICCUdrugs.htm

Appendix D: Indications for referral for the Specialist Allergy Clinic

1. Any severe reaction or anaphylaxis or suspected anaphylaxis which is new or has an unknown source.

2. Suspected venom allergy- refer for possible immunotherapy

3. Severe non immediate cutaneous reaction with eosinophilia ie: Stevens Johnson Syndrome

4. Refer people who need treatment with an NSAID to a specialist medication allergy service if they have had a suspected allergic reaction to an NSAID with symptoms such as anaphylaxis, severe angioedema or an asthmatic. These patients should **NOT** be offered a selective COX-2 inhibitor in a non-specialist setting.

5. People with beta-lactam suspected allergy should be referred to a specialist centre if they have a condition which requires or may require this treatment in the future. Consider referring people to a specialist medication allergy service if they are not able to take beta-lactam antibiotics and at least 1 other class of antibiotic because of suspected allergy to these antibiotics.

6. Refer people with a suspected allergy to local anaesthetics to a specialist medication allergy service if they need a procedure involving a local anaesthetic

7. General anaesthesia- Refer people to a specialist medication allergy service if they have had anaphylaxis or another suspected allergic reaction during or immediately after general anaesthesia.

APPENDIX E – EQUALITY IMPACT ASSESSMENT FORM (EQIA)

Name of service/policy/procedure being reviewed: **Allergy and Anaphylaxis Identification and Managment Policy)**			
New or existing service/policy/procedure: Existing - updated			
Date of Assessment: 4.4.18			
For the service/policy/procedure and its implementation answer the questions a – c below against each characteristic (if relevant consider breaking the policy or implementation down into areas)			
Protected Characteristic	**a) Using data and supporting information, what issues, needs or barriers could the protected characteristic groups' experience? For example, are there any known health inequality or access issues to consider?**	**b) What is already in place in the policy or its implementation to address any inequalities or barriers to access including under representation at clinics, screening?**	**c) Please state any barriers that still need to be addressed and any proposed actions to eliminate inequality**
The area of policy or its implementation being assessed:			
Race and Ethnicity	NA	NA	NA
Gender	NA	NA	NA
Age	NA	NA	NA
Religion	NA	NA	NA
Disability	NA	NA	NA
Sexuality	NA	NA	NA
Pregnancy and Maternity	NA	NA	NA
Gender Reassignment	NA	NA	NA

Marriage and Civil Partnership	NA	NA	NA
Socio-Economic Factors (i.e. living in a poorer neighbourhood / social deprivation)	NA	NA	NA

What consultation with protected characteristic groups including patient groups have you carried out?

-

What data or information did you use in support of this EqIA?

-

As far as you are aware are there any Human Rights issues be taken into account such as arising from surveys, questionnaires, comments, concerns, complaints or compliments?

-

Level of impact

From the information provided above and following EQIA guidance document Guidance on how to complete an EIA (click here), please indicate the perceived level of impact:

High Level of Impact/Medium Level of Impact/Low Level of Impact *(Delete as appropriate)*

For high or medium levels of impact, please forward a copy of this form to the HR Secretaries for inclusion at the next Diversity and Inclusivity meeting.

Name of Responsible Person undertaking this assessment:

Signature:
JO freeman

Date:
4.5.18