Patient Group Direction (PGD) for

The Administration of Adrenaline (Epinephrine) 1 in 1000 by Registered Nurses/Allied Health Professionals employed or commissioned by NHS Rotherham who have been certified after completing an agreed training plan.

PGD Number:	ED 1
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Key Words:	Adrenaline / (Epinephrine) / Patient Group Direction / Anaphylaxis / Emergency Treatment
Date Uploaded & By Whom:	

Patient Group Directions are written instructions for the supply or administration of medicines to groups of patients who may not be individually identified before presentation for treatment.

The majority of clinical care should be provided on an individual, patient-specific basis. The supply and administration under a PGD should be reserved for those limited situations where this offers an advantage for patient care (without compromising patient safety), and where it is consistent with appropriate professional relationships and accountability.

- Each PGD has a unique identifier allocated by the Prescribing Adviser responsible for the management of Patient Group Directions for the organisation.
- Once a PGD has been given approval, the date on which the PGD comes into effect will be inserted by the Prescribing Adviser prior to submission onto the NHS Rotherham intranet.
- The PGD must be reviewed within two years of authorisation.
- PGDs that have failed to be reviewed and re-ratified ***must not*** be used past their expiry date and patient specific direction (prescriptions) must be used to authorise supply of medicines.

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1. Clinical Condition or situation to which the direction applies

Dial 999 immediately if anaphylaxis suspected and seek assistance.

Advise patient before administration of any agent that adrenaline will be administered in the case of an anaphylactic reaction and obtain consent for administration.

Drug Name: **(Adrenaline (Epinephrine) 1 in 1000)**

Clinical Indications	• Emergency treatment of acute anaphylactic reaction (a severe allergic reaction).

Criteria for Inclusion	**IF IN DOUBT, IT IS SAFER TO ASSUME ANAPHYLAXIS AND TREAT.** • Anaphylactic reaction to an immunisation or other agent **Anaphylaxis is likely when all of the following 3 criteria are met:** • Sudden onset and rapid progression of symptoms • Life-threatening Airway and/or Breathing and/or Circulation problems • Skin and/or mucosal changes (flushing, urticaria, angioedema) **The following supports the diagnosis:** • Exposure to a known allergen for the patient **Remember:** • Skin or mucosal changes alone are not a sign of an anaphylactic reaction • Skin and mucosal changes can be subtle or absent in up to 20% of • reactions (some patients can have only a decrease in blood pressure, i.e., a Circulation problem) • There can also be gastrointestinal symptoms (e.g. vomiting, abdominal pain, incontinence). **NB.** Onset of anaphylaxis **could be up to 72 hours** following exposure to allergen.

Criteria for Exclusion	• The absence of an anaphylactic reaction e.g. fainting, panic attack. • **Previous allergy to epinephrine (adrenaline)** • If there is uncertainty as to whether anaphylaxis is present, seek immediate advice.
Action if Excluded	• Lay patient down with feet raised and call 999
Action if Patient declines Treatment	• Not Applicable
Notes for doctors /	Caution should be exercised in patients known to be

drug interactions	taking anaesthetics, Digoxin, Quinidine, Fluorohydrocarbons, Cocaine, ergot alkaloids, Oxytocin, Thyroxine or Guanethidine. Half dosages of Epinephrine (Adrenaline) may be safer for patients known to be taking the following: Tricyclic anti-depressants e.g. Amitriptyline, Imipramine (as they have an increased risk of arrhythmias) Beta-blockers e.g. Atenolol. Propranolol, Metoprolol Monoamine oxidase inhibitors (Anti-depressants) e.g. Phenelzine, Isocarboxazid, Tranylcypromine, Moclobemide (increase the pressor effect and decrease the bronchodilatory effect of adrenaline) **<u>Caution should be exercised in patients with:</u>** Known sensitivity to Adrenaline(Epinephrine) Patients with heart disease or hypertension Glaucoma Previous CVA Pregnancy Breast feeding Diabetes Elderly patients Hypotension Hyperthyroidism **In the case of confirmed anaphylaxis, the benefits of administering adrenaline should be weighed against the risk. Cautions and contra-indications are relative as the use is intended for use in life-threatening emergencies. Seek medical assistance in these instances, if possible. Arrange referral to hospital managing as appropriate until ambulance arrives.**

2.Description of treatment

Drug Name: (Adrenaline [Epinephrine] 1 in 1000

Name, strength and formulation of drug	Adrenaline (Epinephrine) 1 in 1000 (1mg per ml) for intramuscular (i.m.) injection
Legal status	Prescription Only Medicine (POM) restriction does not apply when administration is for saving life in emergency.
Storage	• Store upright below 25^{o}C • Must be readily accessible at room temperature whenever and wherever immunisations and other procedures are undertaken.

	• Check expiry dates regularly • Syringes and needles of suitable size and capacity for dose should be available.
Dose/dose range	• Children under 6 years 0.15ml (150 micrograms) • Children 6 – 12 years 0.3ml (300 micrograms) • Adults and children over 12 years 0.5ml (500 micrograms)
Method /route	• Anterolateral aspect of the thigh • Intramuscular or deep subcutaneous injection (for those with a bleeding disorder).
Frequency of administration	• These doses may be repeated if necessary at 5-minute intervals according to blood pressure, pulse and respiratory function. • **Maximum of three doses.**
Total dose number	Up to a maximum of **Three**.
Patient/carer advice and follow-up treatment	• As a precaution the patient should be advised to attend A and E. • Patient must be observed for at least 6 hours in case of any delayed reaction-this can be performed by a friend/relative. • Explain the current course of action to patient/ significant other, and the need for urgent medical attention. Highlight any known medical history to emergency services at hand over. • Patient must be fully informed of the reaction when sufficiently recovered and advised to avoid further exposure to the antigen causing anaphylaxis. • Advise patient of possible side effects. Patient may experience anxiety, difficulty breathing, high blood sugar levels, restlessness, weakness, dizziness, tremor, headache, cold extremities, sweating, nausea, vomiting or palpitations after this medication. • Advise to carry alerting information on person.

3. Records

1. The following records should be kept either paper or computer based
   For all vaccinations, the following information should be entered on all manual records including the Personal Child Health Record (PCHR-red book), computerised records and data collection for Child Health Information Services (CHIS):

Records should be kept at …… and information passed to patient and GP.

- Complete Record of Attendance documentation and if appropriate enter on record 'Protocol fulfilled'
- Patient's name, address, date of birth and consent given
- Diagnosis
- Name of medication
- Dose given.
- Brand, Batch Number and Expiry Date (if supplied)
- Signature & name of staff who administered or supplied the medication, and also, if relevant, signature & name of staff who removed/discontinued the treatment
- Route and site of administration (record all sites of administration to allow any reactions to be related to the site of the injection
- Contact details of GP (if registered)
- Information & advice given to patient (including side effects)
- Details of any adverse drug reaction and actions taken, including documentation in the patient's medical record. Any adverse reaction must be notified to GP.
- Referral arrangements (including self care)
- Date administered / supplied
- Any serious adverse events that may be attributable to black triangled drugs ▼ should be reported via Serious Untoward Incident procedure and then to the MHRA using the yellow card system.

2. **Audit Trail Data Collection**

- A record of all individuals receiving treatment under this Patient Group Direction should also be kept for audit purposes within each practice/service.
- **Reconciliation**: Stock balances should be reconcilable with Receipts, Administration, Records and Disposals on a patient-by-patient basis
- **Storage**: Standards must be consistent with the Summary of Product Characteristics. All medication must be stored in a secure locked environment away from the direct patient care area

4. Anaphylaxis - Emergency Treatment

Before administering any medication the possibility of anaphylaxis must be discussed and documented with the patient/carer prior to administration of any medication, which may produce an anaphylactic reaction.
When giving any medication the following should always be readily available:

- Access to the patients notes
- Adrenaline (Epinephrine) 1 in 1000 for intramuscular (i.m.) injection for use in emergency (NB: **check expiry dates** regularly)
- Syringes and needles of **suitable size** and capacity for dose.
- Patient Group Direction for the Administration of Adrenaline (Epinephrine) 1 in 1000.
- Access to a telephone

PLEASE BE AWARE OF CURRENT RESUSCITATION COUNCIL GUIDELINES.

Adrenaline (Epinephrine) 1 in1000 (1mg/ml)	**For intramuscular injection**	
Age	Dose	Volume
Children under 6 years	150 micrograms	0.15ml
Children 6 – 12 years	300 micrograms	0.3ml
Adults and adolescents (over 12s)	500 micrograms	0.5ml
These doses may be repeated if necessary at 5-minute intervals according to blood pressure, pulse and		

respiratory function.		
Special cautions: see BNF 3.4.3	Epinephrine/ Adrenaline	

BNF (62nd edition) section 3.4.3 page 199-202

(Updated Jan 2008)

Professional Responsibility All practitioners

- The practitioner will ensure he/she has the relevant training and is competent, including contra-indications. He/she will attend training updates as appropriate. **Details of the competency programme developed for use with this PGD must be attached (see PGD process above).**
- The practitioner will have due regard for the their Professional Conduct and Guidelines for the Administration / Supply of Medicines
- It is the responsibility of the individual practitioner to ensure that he/she has appropriate knowledge of the product prior to proceeding. Refer to the Summary of Product Characteristics (SPC) or current BNF for further details on the product.
- Each individual must have received a personal copy of the PGD and signed on the list of individual professionals who may work within this PGD (kept with master copy of this PGD)
- Must be competent in the recognition and management of anaphylaxis.
- Must have access to all relevant DH advice, including the relevant CMO letters o*r* training and competent in all aspects of immunisation including contraindications and recognition and treatment of anaphylaxis where appropriate.
- Must have access to a current copy of the BNF and *Immunisation against infectious disease* (The 'Green book') and comply with its recommendations (available on DH website – www.dh.gov.uk/greenbook) where appropriate.
- Annual attendance at the NHS Rotherham's or workplace update on resuscitation skills and the management of anaphylaxis within the community.
- Maintenance of own level of updating with evidence of continued professional development (PREP requirements).
- Regular updates in immunisation, vaccination, anaphylaxis and cardiopulmonary resuscitation where appropriate.
- To reinforce and update knowledge and skills in this area of practice, including basic resuscitation and anaphylaxis training, with particular reference to changes and national directives.
- Such practitioners that meet the above criteria for training have NHS Rotherham approval to administer/supply Adrenaline 1 in 1000 injection in accordance with this PGD without a doctor's prescription, and with the patient's informed consent.
- Storage and handling of medicines should be carried out accordance with NHS Rotherham's Medicines Policy.
- The EC Labelling and Leaflet Directive 92/27 applies to all supplies of medicine, including those supplied under Patient Group Directions and all products other than those immediately administered must be labelled for supply to patients.

Sources: HSC 200/026 Patient Group Directions; BNF 62nd Edition (Sep 2011); Current Summary of Product Characteristics for product.

Refer to NHS Rotherham Procedure N1 Procedure for Emergency Treatment of Anaphylactic Reactions in the **Community (link http://websrv.rotherhampct.nhs.uk/?FileID=16296) UK Resuscitation Council (January 2008).**

5. Management of Patient Group Direction

Prepared and approved by: *Name and title in block capitals*			
Lead doctor/dentist			
Advice sought from	Suzanna Matthews		
Lead pharmacist	*Lisa Murray*		
Health Protection and Infection Prevention Manager	*Kathy Wakefield*		

This patient group direction is to be read, agreed to and signed by all healthcare professionals to whom it applies. One copy should be given to each practitioner with the original signed with a copy being kept by the nominated doctor with responsibility for PGDs within the organisation.

The Administration of Adrenaline (Epinephrine) 1 in 1000 by Registered Nurses/Allied Health Professionals employed or commissioned by NHS Rotherham who have been certified after completing an agreed training plan			
This Patient Group Direction for use in NHS Rotherham is authorised by us			
Job Title	**Name**	**Signed**	**Date**
Director of Public Health	*Dr. John Radford*		
Medical Director	*Dr. David Plews*		
Head of Medicines Management	*Stuart Lakin*		
TRFT Chief of Community Service			
Senior Partner (or delegate) - for GP employed nurses only			

The …… named below, being employees or contractee's of

NHS Rotherham based at……..*Clinic

OR GP Employer Name* ……..……..
***delete/complete as appropriate**

are authorised to administer Adrenaline (Epinephrine) 1 in 1000 Injection for the Treatment of Anaphylaxis as specified under this Patient Group Direction

Register of Staff Trained and Assessed to Administer or Supply this Medicine:
(additional sheets may be attached)

"I confirm that I have read and understood the content of this patient group direction and that I am willing and competent to work under it within my professional code of conduct".

Name of authorised practitioner	Signature of authorised practitioner	Clinical manager or GP	Signature of clinical manager or GP	Date