Department of Health

Guidance on the use of adrenaline auto-injectors in schools

Title: Guidance on the use of adrenaline auto-injectors in schools
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Document purpose: Guidance
Publication date: 15 September 2017
Target audience: Schools, School Governors, Parents and Young People
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Published to gov.uk, in PDF format only.

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Recognition and management of an allergic reaction/anaphylaxis

Signs and symptoms include:

Mild-moderate allergic reaction:

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

ACTION:

- Stay with the child, call for help if necessary
- Locate adrenaline autoinjector(s)
- Give antihistamine according to the child's allergy treatment plan
- Phone parent/emergency contact

Watch for signs of ANAPHYLAXIS (life-threatening allergic reaction):

AIRWAY:	Persistent cough Hoarse voice Difficulty swallowing, swollen tongue
BREATHING:	Difficult or noisy breathing Wheeze or persistent cough
CONSCIOUSNESS:	Persistent dizziness Becoming pale or floppy Suddenly sleepy, collapse, unconscious

IF ANY ONE (or more) of these signs are present:

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

2. **Use Adrenaline autoinjector* without delay**
3. **Dial 999** to request ambulance and say ANAPHYLAXIS

***** 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 dose** of adrenaline using another autoinjector device, if available.

Anaphylaxis may occur without initial mild signs: **ALWAYS use adrenaline autoinjector FIRST in someone with known food allergy who has SUDDEN BREATHING DIFFICULTY** (persistent cough, hoarse voice, wheeze) – even if no skin symptoms are present.

Schools may administer their "spare" adrenaline auto-injector (AAI), obtained, without prescription, for use in emergencies, if available, but only to a pupil at risk of anaphylaxis, where both medical authorisation and written parental consent for use of the spare AAI has been provided.

The school's spare AAI can be administered to a pupil whose own prescribed AAI cannot be administered correctly without delay.

AAIs can be used through clothes and should be injected into the upper outer thigh in line with the instructions provided by the manufacturer.

If someone appears to be having a severe allergic reaction (anaphylaxis), you MUST call 999 without delay, even if they have already used their own AAI device, or a spare AAI.

In the event of a possible severe allergic reaction in a pupil who does not meet these criteria, emergency services (999) should be contacted and advice sought from them as to whether administration of the spare emergency AAI is appropriate.

Practical points:

- When dialling 999, give clear and precise directions to the emergency operator, including the postcode of your location.
- If the pupil's condition deteriorates and a second dose adrenaline is administered after making the initial 999 call, make a second call to the emergency services to confirm that an ambulance has been dispatched.
- Send someone outside to direct the ambulance paramedics when they arrive.
- Tell the paramedics:
  - if the child is known to have an allergy;
  - what might have caused this reaction e.g. recent food;
  - the time the AAI was given.

The guidance in this document has been developed in conjunction with representatives of the following organisations:

- British Society for Allergy & Clinical Immunology (Paediatric Allergy Group)
- British Paediatric Allergy, Immunity and Infection Group
- Royal College of Paediatrics and Child Health
- Allergy UK
- Anaphylaxis Campaign.

The Department of Health would like to thank Dr. Paul J. Turner for his work on this guidance.

Executive summary

From 1 October 2017 the Human Medicines (Amendment) Regulations 2017 will allow all schools to buy adrenaline auto-injector (AAI) devices without a prescription, for emergency use in children who are at risk of anaphylaxis but their own device is not available or not working (e.g. because it is broken, or out-of-date).

The school's spare AAI should only be used on pupils known to be at risk of anaphylaxis, for whom both medical authorisation and written parental consent for use of the spare AAI has been provided.

The school's spare AAI can be administered to a pupil whose own prescribed AAI cannot be administered correctly without delay.

An anaphylactic reaction always requires an emergency response

Any AAI(s) held by a school should be considered a spare / back-up device and not a replacement for a pupil's own AAI(s). Current guidance from the Medicines and Healthcare Products Regulatory Agency (MHRA) is that anyone prescribed an AAI should carry two of the devices at all times. This guidance does not supersede this advice from the MHRA,[1] and any spare AAI(s) held by a school should be in addition to those already prescribed to a pupil.

This change applies to all primary and secondary schools (including independent schools) in the UK. Schools are not required to hold AAI(s) – this is a discretionary change enabling schools to do this if they wish. Those facilities choosing to hold a spare AAI(s) should establish a policy or protocol for their use in line with "Supporting pupils at school with medical conditions: Statutory guidance for governing bodies of maintained schools and proprietors of academies in England"[2] (*Supporting Pupils*), and with reference to the guidance in this document.

The protocol could be incorporated into the wider medical conditions policy required by *Supporting Pupils*. An effective protocol should include the following – on which this guidance provides advice:

- arrangements for the supply, storage, care, and disposal of spare AAI(s) in line with *Supporting Pupils*.

1 https://www.gov.uk/drug-safety-update/adrenaline-auto-injector-advice-for-patients

2 https://www.gov.uk/government/publications/supporting-pupils-at-school-with-medical-conditions--3

- a register of pupils who have been prescribed an AAI(s) (or where a doctor has provided a written plan recommending AAI(s) to be used in the event of anaphylaxis).
- written consent from the pupil's parent/legal guardian for use of the spare AAI(s), as part of a pupil's individual healthcare plan.
- ensuring that any spare AAI is used only in pupils where both medical authorisation and written parental consent have been provided.
- appropriate support and training for staff in the use of the AAI in line with the schools wider policy on supporting pupils with medical conditions.
- keeping a record of use of any AAI(s), as required by *Supporting Pupils* and informing parents or carers that their pupil has been administered an AAI and whether this was the school's spare AAI or the pupil's own device.

1. About this guidance

From 1 October 2017 the Human Medicines (Amendment) Regulations 2017 will allow schools to obtain, without a prescription, adrenaline auto-injector (AAI) devices, if they wish, for use in emergencies. This will be for any pupil who holds both medical authorisation and parental consent for an AAI to be administered. The AAI(s) can be used if the pupil's own prescribed AAI(s) are not immediately available (for example, because they are broken, out-of-date, have misfired or been wrongly administered).

This change applies to all primary and secondary schools (including independent schools) in the UK. Schools are not required to hold spare AAI(s) – this is a discretionary change enabling schools to do this if they wish. Only those institutions described in regulation 22 of the Human Medicines (No.2) Regulations 2014, which amends regulation 213 of the Human Medicines Regulations 2012 may legally hold spare AAIs.

Regulation 8 of the Human Medicines (Amendment) Regulations 2017 amends schedule 17 of the Human Medicines Regulations 2012, and sets out the principles of supply to schools.

Guidance on the use of AAIs in schools

This guidance is non-statutory, and has been developed by the Department of Health with key stakeholders, to capture the good practice which schools in England should observe in using spare AAIs. Schools may wish to use this as the basis of any protocol or policy. This guidance does not apply to schools and childcare facilities in Wales, Northern Ireland and Scotland, which as devolved administrations have responsibility for issuing their own guidance for those facilities which wish to make use of this power (and have their own distinct policies on how staff may support children's health needs in the school setting). The principles of safe usage of AAI(s) in this guidance however are universal and based on recognised good practice.

The Children and Families Act 2014 requires governing bodies of English schools to make arrangements for supporting pupils with medical conditions. This duty came into force on 1st September 2014 and is supported by the statutory guidance *Supporting Pupils.*[3] This guidance is therefore designed to be read in conjunction with *Supporting Pupils*, and every school's protocol or policy on use of the AAI should have regard to it.

3 https://www.gov.uk/government/publications/supporting-pupils-at-school-with-medical-conditions--3

Supporting Pupils expects schools to:

- develop policies for supporting pupils with medical conditions and review them regularly.
- develop individual healthcare plans for pupils with medical conditions that identify the pupil's medical condition, triggers, symptoms, medication needs and the level of support needed in an emergency.
- have procedures in place on managing medicines on the premises.
- ensure staff are appropriately supported and trained.

2. Introduction

Anaphylaxis is a severe and often sudden allergic reaction. It can occur when a susceptible person is exposed to an allergen (such as food or an insect sting). Reactions usually begin within minutes of exposure and progress rapidly, but can occur up to 2-3 hours later. **It is potentially life threatening and always requires an immediate emergency response**.

What can cause anaphylaxis?

Common allergens that can trigger anaphylaxis are:

- foods (e.g. peanuts, tree nuts, milk/dairy foods, egg, wheat, fish/seafood, sesame and soya)
- insect stings (e.g. bee, wasp)
- medications (e.g. antibiotics, pain relief such as ibuprofen)
- latex (e.g. rubber gloves, balloons, swimming caps).

The severity of an allergic reaction can be influenced by a number of factors including minor illness (like a cold), asthma, and, in the case of food, the amount eaten. It is very unusual for someone with food allergies to experience anaphylaxis without actually eating the food: contact skin reactions to an allergen are very unlikely to trigger anaphylaxis.

The time from allergen exposure to severe life-threatening anaphylaxis and cardio-respiratory arrest varies, depending on the allergen:

- **Food:** While symptoms can begin immediately, severe symptoms often take 30+ minutes to occur. However, some severe reactions can occur within minutes, while others can occur over 1-2 hours after eating.[4] Severe reactions to dairy foods are often delayed, and may mimic a severe asthma attack without any other symptoms (e.g. skin rash) being present.
- Severe reactions to **insect stings** are often faster, occurring within 10-15 minutes.[4]

[4] Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers. Resuscitation Council (UK). Available at: https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/

Why does anaphylaxis occur?

An allergic reaction occurs because the body's immune system reacts inappropriately to a substance that it wrongly perceives as a threat. The reaction is due to an interaction between the substance ("allergen") and an antibody called Immunoglobulin E (IgE). This results in the release of chemicals such as histamine which cause the allergic reaction. In the skin, this causes an itchy rash, swelling and flushing. Many children (not just those with asthma) can develop breathing problems, similar to an asthma attack. The throat can tighten, causing swallowing difficulties and a high pitched sound (stridor) when breathing in.

In severe cases, the allergic reaction can progress within minutes into a life-threatening reaction. Administration of adrenaline can be lifesaving, although severe reactions can require much more than a single dose of adrenaline. **It is therefore vital to contact Emergency Services as early as possible**. Delays in giving adrenaline are a common finding in fatal reactions. Adrenaline should therefore be administered immediately, at the first signs of anaphylaxis.

How common is anaphylaxis in schools?

Up to 8% of children in the UK have a food allergy.[5] However, the majority of allergic reactions to food are not anaphylaxis, even in children with previous anaphylaxis. Most reactions present with mild-moderate symptoms, and do not progress to anaphylaxis. Fatal allergic reactions are rare, but they are also very unpredictable. In the UK, 17% of fatal allergic reactions in school-aged children happen while at school.[6] Schools therefore need to consider how to reduce the risk of an allergic reaction, in line with *Supporting Pupils*. Box 1 provides a list of actions that schools and parents can take to reduce the risk of exposure to allergens.

5 UK Food Standards Agency. https://www.food.gov.uk/science/allergy-intolerance

6 Turner PJ, Gowland MH, Sharma V et al. Increase in hospital admissions due to anaphylaxis but no increase in fatalities: an analysis of UK national anaphylaxis data, 1992–2012. J Allergy Clin Immunol 2015;135:956-63. Available at: http://www.jacionline.org/article/S0091-6749(14)01516-4/fulltext

Box 1: Reducing the risk of allergen exposure in children with food allergy[7]

- Bottles, other drinks and lunch boxes provided by parents for children with food allergies should be clearly labelled with the name of the child for whom they are intended.
- If food is purchased from the school canteen, parents should check the appropriateness of foods by speaking directly to the catering manager. The child should be taught to also check with catering staff, before purchasing.
- Where food is provided by the school, staff should be educated about how to read labels for food allergens and instructed about measures to prevent cross-contamination during the handling, preparation and serving of food. Examples include: preparing food for children with food allergies first; careful cleaning (using warm soapy water) of food preparation areas and utensils.
- Food should not be given to food-allergic children in primary schools without parental engagement and permission (e.g. birthday parties, food treats).
- Implement policies to avoid trading and sharing of food, food utensils or food containers.
- Unlabelled food poses a potentially greater risk of allergen exposure than packaged food with precautionary allergen labelling suggesting a risk of contamination with allergen.
- Use of food in crafts, cooking classes, science experiments and special events (e.g. fetes, assemblies, cultural events) needs to be considered and may need to be restricted depending on the allergies of particular children and their age.
- In arts/craft, an appropriate alternative ingredient can be substituted (e.g. wheat-free flour for play dough or cooking). Consider substituting non-food containers for egg cartons.
- When planning out-of-school activities such as sporting events, excursions (e.g. restaurants and food processing plants), school outings or camps, think early about the catering requirements of the food-allergic child and emergency planning (including access to emergency medication and medical care).

Treatment

While “allergy” medicines such as antihistamines can be used for mild allergic reactions, they are ineffective in severe reactions – only adrenaline is recommended for severe reactions (anaphylaxis). The adrenaline treats both the symptoms of the reaction, and also stops the reaction and the further release of chemicals causing anaphylaxis. However, severe reactions may require more than one dose of adrenaline, and children can initially improve but then deteriorate later. **It is therefore essential to always call for an ambulance to provide further medical attention, whenever anaphylaxis occurs.** The use of adrenaline as an injection into the muscle is safe and can be life-saving.

7 Vale S, Smith J, Said M, Mullins RJ, Loh R. ASCIA guidelines for prevention of anaphylaxis in schools, pre-schools and childcare: 2015 update. J Paediatr Child Health. 2015 Oct;51(10):949-54.

Children and young people diagnosed with allergy to foods or insect stings are frequently prescribed AAI devices, to use in case of anaphylaxis. AAIs (current brands available in the UK are EpiPen®, Emerade®, Jext®) contain a single fixed dose of adrenaline, which can be administered by non-healthcare professionals such as family members, teachers and first-aid responders.

Children at risk of anaphylaxis should have their prescribed AAI(s) at school for use in an emergency. The MHRA recommends that those prescribed AAIs should carry TWO devices at all times, as some people can require more than one dose of adrenaline and the AAI device can be used wrongly or occasionally misfire.

Depending on their level of understanding and competence, **children and particularly teenagers should carry their AAI(s) on their person at all times or they should be quickly and easily accessible at all times.** If the AAI(s) are not carried by the pupil, then they should be kept in a central place in a box marked clearly with the pupil's name but **NOT** locked in a cupboard or an office where access is restricted.

It is not uncommon for schools (often primary schools) to request a pupil's AAI(s) are left in school to avoid the situation where a pupil or their family forgets to bring the AAI(s) to school each day. Where this occurs, the pupil must still have access to an AAI when travelling to and from school.

Further Information

There are a number of resources which provide information on allergies and anaphylaxis, and how they can be treated listed in section 7 together with contact details for support organisations. This guidance is not intended to be a detailed guide to the diagnosis or treatment of anaphylaxis in general. If any member of staff has reason to suspect a pupil has an allergy, they should notify the parents, so they can take their child to a doctor. Section 5 gives advice on what to do in the event of an allergic reaction.

Incorporating into existing School Policy

A school's medical conditions policy or allergy policy may already cover elements of the AAI protocol, for example ensuring appropriate support and training for teachers. Policies will likely already cover elements such as arrangements for storage, care and disposal of medication, ensuring written consent for administration or supervision of administration of medication, keeping a record of administration of medication, and informing parents in relation to children's own inhalers, and could simply be expanded to cover the emergency AAI.

3. Arrangements for the supply, storage, care and disposal of AAIs

Supply

Schools can purchase AAIs from a pharmaceutical supplier, such as a local pharmacy, without a prescription, provided the general advice relating to these transactions are observed: i.e. small quantities on an occasional basis and the school does not intend to profit from it. A supplier will need a request signed by the principal or head teacher (ideally on appropriate headed paper) stating:

- the name of the school for which the product is required;
- the purpose for which that product is required, and
- the total quantity required.

A template letter which can be used for this purpose is provided in Appendix 1, and can also be downloaded at: www.sparepensinschools.uk Please note that pharmacies are not required to provide AAIs free of charge to schools: the school must pay for them as a retail item.

A number of different brands of AAI are available in different doses depending on the manufacturer. It is up to the school to decide which brand(s) to purchase. Schools are advised to hold an appropriate quantity of a single brand of AAI device to avoid confusion in administration and training. Where all pupils are prescribed the same device, the school should obtain the same brand for the spare AAI. If two or more brands are currently held by the school, the school may wish to purchase the brand most commonly prescribed to its pupils. However, the decision as to how many devices and brands to purchase will depend on local circumstances and is left to the discretion of the school.

AAIs are available in different doses, depending on the manufacturer. The Resuscitation Council (UK) recommends that healthcare professionals treat anaphylaxis using the age-based criteria,[8] as follows:

- For children age under 6 years: a dose of 150 microgram (0.15 milligram) of adrenaline is used (e.g. using an Epipen Junior (0.15mg), Emerade 150 or Jext 150 microgram device).
- For children age 6-12 years: a dose of 300 microgram (0.3 milligram) of adrenaline is used (e.g. using an Epipen (0.3mg), Emerade 300 or Jext 300 microgram device).

[8] Emergency treatment of anaphylactic reactions: Guidelines for healthcare providers. Resuscitation Council (UK). Available at: https://www.resus.org.uk/anaphylaxis/emergency-treatment-of-anaphylactic-reactions/

- For teenagers age 12+ years: a dose of 300 or 500 microgram (Emerade 500) can be used.

In the context of supplying schools rather than individual pupils with AAIs for use in an emergency setting, using these same age-based criteria avoids the need for multiple devices/doses, thus reducing the potential for confusion in an emergency. Schools should consider the ages of their pupils at risk of anaphylaxis, when deciding which doses to obtain as the spare AAI. Schools may wish to seek appropriate medical advice when deciding which AAI device(s) are most appropriate.

The emergency anaphylaxis kit

It is good practice for schools holding spare AAIs to store these as part of an emergency anaphylaxis kit which should include:

- 1 or more AAI(s).
- Instructions on how to use the device(s).
- Instructions on storage of the AAI device(s).
- Manufacturer's information.
- A checklist of injectors, identified by their batch number and expiry date with monthly checks recorded.
- A note of the arrangements for replacing the injectors.
- A list of pupils to whom the AAI can be administered.
- An administration record.

Schools might like to keep the emergency kit together with an "emergency asthma inhaler kit" (containing a salbutamol inhaler device and spacer).[9] Many food-allergic children also have asthma, and asthma is a common symptom during food-induced anaphylaxis.

Severe anaphylaxis is an extremely time-critical situation: delays in administering adrenaline have been associated with fatal outcomes. **Schools should ensure that all AAI devices** – including those belonging to a younger child, and any spare AAI in the Emergency kit – **are kept in a safe and suitably central location:** for example, the school office or staffroom to which all staff have access at all times, but in which the AAI is out of the reach and sight of children. **They must not be locked away** in a cupboard or an office where access is restricted. Schools should ensure that AAIs are accessible and available for use at all times, and **not** located more than 5 minutes away from where they may be needed. In larger schools, it may be prudent to locate a kit near the central dining area and another near the playground; more than one kit may be needed.

Any spare AAI devices held in the Emergency Kit should be kept separate from any pupil's own prescribed AAI which might be stored nearby; the spare AAI should be clearly labelled to avoid confusion with that prescribed to a named pupil.

[9] https://www.gov.uk/government/publications/emergency-asthma-inhalers-for-use-in-schools

Storage and care of the AAI

A school's allergy/anaphylaxis policy should include staff responsibilities for maintaining the spare anaphylaxis kit. It is recommended that at least two named volunteers amongst school staff should have responsibility for ensuring that:

- on a monthly basis the AAIs are present and in date.
- that replacement AAIs are obtained when expiry dates approach (this can be facilitated by signing up to the AAI expiry alerts through the relevant AAI manufacturer).

The AAI devices should be stored at room temperature (in line with manufacturer's guidelines), protected from direct sunlight and extremes of temperature.

Schools may wish to require parents to take their pupil's own prescribed AAIs home before school holidays (including half-term breaks) to ensure that their own AAIs remain in date and have not expired.

Disposal

Once an AAI has been used it cannot be reused and must be disposed of according to manufacturer's guidelines. Used AAIs can be given to the ambulance paramedics on arrival or can be disposed of in a pre-ordered sharps bin for collection by the local council.

School trips including sporting activities

Schools should conduct a risk-assessment for any pupil at risk of anaphylaxis taking part in a school trip off school premises, in much the same way as they already do so with regards to safe-guarding etc. Pupils at risk of anaphylaxis should have their AAI with them, and there should be staff trained to administer AAI in an emergency. Schools may wish to consider whether it may be appropriate, under some circumstances, to take spare AAI(s) obtained for emergency use on some trips.

4. Children to whom a spare AAI can be administered

The spare AAI in the Emergency Kit should only be used in a pupil where both medical authorisation and written parental consent have been provided for the spare AAI to be used on them. This includes children at risk of anaphylaxis who have been provided with a medical plan confirming this, but who have not been prescribed AAI. In such cases, specific consent for use of the spare AAI from both a healthcare professional and parent/guardian must be obtained. Such a plan is available from the British Society for Allergy and Clinical Immunology (BSACI).[10]

The school's spare AAI can be used instead of a pupil's own prescribed AAI(s), if these cannot be administered correctly, without delay

This information should be recorded in a pupil's individual healthcare plan. Where a pupil has no other healthcare needs other than a risk of anaphylaxis, schools may wish to consider using the BSACI Allergy Action Plan[10]. All children with a diagnosis of an allergy and at risk of anaphylaxis should have a written Allergy Management Plan.

Procedures should already be in place to ensure that schools are notified of pupils that have additional health needs, and this information will enable them to compile an allergy register. Some schools will already have such a register as part of their medical conditions policy.

The register could include:

- Known allergens and risk factors for anaphylaxis.
- Whether a pupil has been prescribed AAI(s) (and if so what type and dose).
- Where a pupil has been prescribed an AAI whether parental consent has been given for use of the spare AAI which may be different to the personal AAI prescribed for the pupil.
- A photograph of each pupil to allow a visual check to be made (this will require parental consent).

The register is crucial as in larger schools (and secondary schools in particular), it may not be feasible for individual members of staff to be aware of which pupils have been prescribed AAIs. Consequently, schools should ensure that the register is easy to access and easy to read. Schools will also need to ensure they have a proportionate and flexible approach to checking the register. **DELAYS IN ADMINISTERING ADRENALINE HAVE BEEN**

10 http://www.sparepensinschools.uk/plans or http://www.bsaci.org/about/pag-allergy-action-plans-for-children

ASSOCIATED WITH FATAL OUTCOMES. Allowing pupils to keep their AAIs with them will reduce delays, and allows for confirmation of consent without the need to check the register.

Schools will want to consider when consent for use of the AAI is best obtained but the most appropriate time would be as part of the introduction or development of the individual care plan. Consent should be updated regularly – ideally annually – to take account of changes to a pupil's condition.

5. Responding to the symptoms of an allergic reaction

AAIs are intended for use in emergency situations when an allergic individual is having a reaction consistent with anaphylaxis, as a measure that is taken until an ambulance arrives. Therefore, unless directed otherwise by a healthcare professional, the spare AAI should only be used on pupils known to be at risk of anaphylaxis, where both medical authorisation and written parental consent for use of the spare AAI ha been provided.

This information should be recorded in a pupil's individual healthcare plan which should be signed by a healthcare professional and kept in the schools allergy register.

In the event of a possible severe allergic reaction in a pupil who does not meet these criteria, emergency services (999) should be contacted and advice sought from them as to whether administration of the spare emergency AAI is appropriate.

It is recommended the school allergy policy includes general information on how to recognise and respond to an allergic reaction, and what to do in emergency situations. Some schools will already have this information in an allergy policy or medical conditions policy. Staff should be aware of the difficulties younger children may have in explaining how they feel.

Further information and film clips showing adrenaline being administered can be found at: http://www.sparepensinschools.uk

The signs of an allergic reaction are:

Mild-moderate allergic reaction:

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

ACTION:

- Stay with the child, call for help if necessary
- Locate adrenaline autoinjector(s)
- Give antihistamine according to the child's allergy treatment plan
- Phone parent/emergency contact

Watch for signs of ANAPHYLAXIS (life-threatening allergic reaction):

AIRWAY:	Persistent cough Hoarse voice Difficulty swallowing, swollen tongue
BREATHING:	Difficult or noisy breathing Wheeze or persistent cough
CONSCIOUSNESS:	Persistent dizziness Becoming pale or floppy Suddenly sleepy, collapse, unconscious

IF ANY ONE (or more) of these signs are present:

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

2. **Use Adrenaline autoinjector* without delay**
3. **Dial 999** to request ambulance and say ANAPHYLAXIS

***** 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 dose** of adrenaline using another autoinjector device, if available.

Anaphylaxis may occur without initial mild signs: **ALWAYS use adrenaline autoinjector FIRST in someone with known food allergy who has SUDDEN BREATHING DIFFICULTY** (persistent cough, hoarse voice, wheeze) – even if no skin symptoms are present.

Mild-moderate symptoms are usually responsive to an antihistamine. The pupil does not normally need to be sent home from school, or require urgent medical attention. However, mild reactions can develop into anaphylaxis: children having a mild-moderate (non-anaphylactic) reaction should therefore be monitored for any progression in symptoms.

What to do if any symptoms of anaphylaxis are present

Anaphylaxis commonly occurs together with mild symptoms or signs of allergy, such as an itchy mouth or skin rash. Anaphylaxis can also occur on its own without any mild-moderate signs. In the presence of any of the severe symptoms listed in the red box on page 1, it is vital that an adrenaline auto-injector is administered without delay, regardless of what other symptoms or signs may be present.

Always give an adrenaline auto-injector if there are ANY signs of anaphylaxis present.

You should administer the pupil's own AAI if available, if not use the spare AAI. The AAI can be administered through clothes and should be injected into the upper outer thigh in line with the instructions issued for each brand of injector.

IF IN DOUBT, GIVE ADRENALINE

After giving adrenaline **do NOT move the pupil**. Standing someone up with anaphylaxis can trigger cardiac arrest. Provide reassurance. The pupil should lie down with their legs raised.[11] **If breathing is difficult, allow the pupil to sit.**

If someone appears to be having a severe allergic reaction, it is vital to call the emergency services without delay – even if they have already self-administered their own adrenaline injection and this has made them better. A person receiving an adrenaline injection should always be taken to hospital for monitoring afterwards.

ALWAYS DIAL 999 AND REQUEST AN AMBULANCE IF AN AAI IS USED.

Practical points:

- Try to ensure that a person suffering an allergic reaction remains as still as possible, and does not get up or rush around. Bring the AAI to the pupil, not the other way round.
- When dialling 999, say that the person is suffering from anaphylaxis ("ANA-FIL-AX-IS").
- Give clear and precise directions to the emergency operator, including the postcode of your location.
- If the pupil's condition does not improve 5 to 10 minutes after the initial injection you should administer a second dose. If this is done, make a second call to the emergency services to confirm that an ambulance has been dispatched.
- Send someone outside to direct the ambulance paramedics when they arrive.
- Arrange to phone parents/carer.

[11] In a young pregnant person, the advice is to lie the person on their left side.

- Tell the paramedics:
  - if the child is known to have an allergy;
  - what might have caused this reaction e.g. recent food;
  - the time the AAI was given.

Recording use of the AAI and informing parents/carers

In line with *Supporting Pupils*, use of any AAI device should be recorded. This should include:

- Where and when the REACTION took place (e.g. PE lesson, playground, classroom).
- How much medication was given, and by whom.
- Any person who has been given an AAI must be transferred to hospital for further monitoring. The pupil's parents should be contacted at the earliest opportunity. The hospital discharge documentation will be sent to the pupil's GP informing them of the reaction.

6. Staff

Any member of staff may volunteer to take on the responsibilities set out in this guidance, but they cannot be *required* to do so. These staff may already have wider responsibilities for administering medication and/or supporting pupils with medical conditions.

SEVERE ANAPHYLAXIS IS AN EXTREMELY TIME-CRITICAL SITUATION: DELAYS IN ADMINISTERING ADRENALINE HAVE BEEN ASSOCIATED WITH FATAL OUTCOMES. It is therefore appropriate for as many staff as possible to be trained in how to administer AAI.

In the following advice, the term 'designated members of staff' refers to any member of staff who has responsibility for helping to administer a spare AAI (e.g. they have volunteered to help a pupil use the emergency AAI, and been trained to do this, and are identified in the school's medical conditions or allergy policy as someone to whom all members of staff may have recourse in an emergency.)

Schools will want to ensure there are a reasonable number of designated members of staff to provide sufficient coverage, including when staff are on leave. In many schools, it would be appropriate for there to be multiple designated members of staff who can administer an AAI to avoid any delay in treatment.

Schools should ensure staff have appropriate training and support, relevant to their level of responsibility. *Supporting Pupils* requires governing bodies to ensure that staff supporting children with a medical condition should have appropriate knowledge, and where necessary, support.

It would be reasonable for **ALL** staff to:

- be trained to recognise the range of signs and symptoms of an allergic reaction;
- understand the rapidity with which anaphylaxis can progress to a life-threatening reaction, and that anaphylaxis may occur with prior mild (e.g. skin) symptoms;
- appreciate the need to administer adrenaline without delay as soon as anaphylaxis occurs, before the patient might reach a state of collapse (after which it may be too late for the adrenaline to be effective);
- be aware of the anaphylaxis policy;
- be aware of how to check if a pupil is on the register;
- be aware of how to access the AAI;

- be aware of who the designated members of staff are, and the policy on how to access their help.

Schools must arrange specialist anaphylaxis training for staff where a pupil in the school has been diagnosed as being at risk of anaphylaxis. The specialist training should include practical instruction in how to use the different AAI devices available. Online resources and introductory e-learning modules can be found at http://www.sparepensinschools.uk, although this is NOT a substitute for face-to-face training.

As part of the medical conditions policy, the school should have agreed arrangements in place for all members of staff to summon the assistance of a designated member of staff, to help administer an AAI, as well as for collecting the spare AAI in the emergency kit. These should be proportionate, and flexible – and can include phone calls being made to another member of staff or responsible secondary school-aged children asking for the assistance of another member of staff and/or collecting the AAI (but not checking the register), and procedures for supporting a designated staff member's class while they are helping to administer an AAI.

DELAYS IN ADMINISTERING ADRENALINE HAVE BEEN ASSOCIATED WITH FATAL OUTCOMES. Thought should be given to where delays could occur (for example, a phone call is made to summon help but there is no answer).

The school's policy should include a procedure for allowing a quick check of the register as part of initiating the emergency response. This does not necessarily need to be undertaken by a designated member of staff, but there may be value in a copy of the register being held by at least each designated member. If the register is relatively succinct, it could be held in every classroom. Alternatively, allowing pupils to keep their AAI(s) with them will reduce delays, and allows for confirmation of consent without the need to check the register.

Designated members of staff should be trained in:

- recognising the range of signs and symptoms of severe allergic reactions;
- responding appropriately to a request for help from another member of staff;
- recognising when emergency action is necessary;
- administering AAIs according to the manufacturer's instructions;
- making appropriate records of allergic reactions.

Training material

It is recommended that schools should also ensure that:

- a named individual is responsible for overseeing the protocol for use of the spare AAI, and monitoring its implementation and for maintaining the allergy register;
- at least two individuals are responsible for the supply, storage care and disposal of the AAI.

Liability and indemnity

Supporting pupils requires that governing bodies ensure that when schools are supporting pupils with medical conditions, they have appropriate levels of insurance in place to cover staff, including liability cover relating to the administration of medication. The only exception will be where the actions of the employee amount to serious and wilful misconduct. Carelessness, inadvertence or a simple mistake do not amount to serious and wilful misconduct.

Local Authorities may provide schools which are administering AAIs with appropriate indemnity cover; however schools will need to agree any such indemnity cover directly with the relevant authority. Proprietors of academies should ensure that either the appropriate level of insurance is in place or that the academy is a member of the Department for Education's Risk Protection Arrangement (RPA).

7. Useful Links

- Spare Pens in Schools http://www.sparepensinschools.uk
- Official guidance relating to supporting pupils with medical needs in schools:
  - Supporting pupils at school with medical conditions. Statutory guidance for governing bodies of maintained schools and proprietors of academies in England (Department for Education, 2014). https://www.gov.uk/government/publications/supporting-pupils-at-school-with-medical-conditions--3
  - Supporting Learners with Healthcare Needs. (Welsh Government, 2017). http://learning.gov.wales/resources/browse-all/supporting-learners-with-healthcare-needs/?lang=en
  - The Administration of Medicines in Schools (Scottish Executive, 2001). http://www.scotland.gov.uk/Publications/2001/09/10006/File-1
  - Supporting Pupils with Medication Needs, (Department of Education, Department of Health, Social Services and Public Safety Northern Ireland, 2008) https://www.education-ni.gov.uk/articles/support-pupils-medication-needs
- Allergy UK https://www.allergyuk.org/
  - Whole school allergy and awareness management (Allergy UK) https://www.allergyuk.org/schools/whole-school-allergy-awareness-and-management
- Anaphylaxis Campaign https://www.anaphylaxis.org.uk
  - AllergyWise training for schools https://www.anaphylaxis.org.uk/information-training/allergywise-training/for-schools/
  - AllergyWise training for school nurses (Anaphylaxis Campaign) http://www.anaphylaxis.org.uk/information-resources/allergywise-training/for-healthcare-professionals/
- Education for Health http://www.educationforhealth.org

- Food allergy quality standards (The National Institute for Health and Care Excellence, March 2016)
  https://www.nice.org.uk/guidance/qs118
- Anaphylaxis: assessment and referral after emergency treatment (The National Institute for Health and Care Excellence, 2011)
  https://www.nice.org.uk/guidance/cg134?unlid=22904150420167115834

ANNEX: Letter template to Pharmacy to obtain an AAI

Schools must provide a written letter when ordering “spare” back-up adrenaline auto-injector devices.

A sample letter is provided below, which can be printed on the school’s headed paper and signed by the principal or head teacher at the school. Ideally appropriate headed paper should be used, although this is not a legislative requirement.

In line with legislation, the order must state:

- the name of the school for which the adrenaline auto-injector devices are required;
- the purpose for which that devices are required; and
- the total quantity required for each device.

[To be completed on headed school paper]

[Date]

We wish to purchase emergency Adrenaline Auto-injector devices for use in our school/ college.

The adrenaline auto-injectors will be used in line with the manufacturer's instructions, for the emergency treatment of anaphylaxis in accordance with the Human Medicines (Amendment) Regulations 2017. This allows schools to purchase "spare" back-up adrenaline auto-injectors for the emergency treatment of anaphylaxis. (Further information can be found at https://www.gov.uk/government/consultations/allowing-schools-to-hold-spare-adrenaline-auto-injectors).

Please supply the following devices:

Brand name*		**Dose* (state milligrams or micrograms)**	**Quantity required**
	Adrenaline auto-injector device		
	Adrenaline auto-injector device		

Signed: _____ Date: _____

Print name:
Head Teacher/Principal

*AAIs are available in different doses and devices. Schools may wish to purchase the brand most commonly prescribed to its pupils (to reduce confusion and assist with training). Guidance from the Department of Health to schools recommends:

For children age under 6 years:	**For children age 6-12 years:**	**For teenagers age 12+ years:**
Epipen Junior (0.15mg) **or**	Epipen (0.3 milligrams) **or**	Epipen (0.3 milligrams) **or**
Emerade 150 microgram **or**	Emerade 300 microgram **or**	Emerade 300 microgram **or**
Jext 150 microgram	Jext 300 microgram	Emerade 500 microgram **or**
		Jext 300 microgram

Further information can be found at http://www.sparepensinschools.uk

Department
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