



St Louise de Marillac Primary School

Drumfinn Road, Ballyfermot

Dublin 10

Managing Chronic Health Conditions at School

ANAPHYLAXIS

What is anaphylaxis?

Anaphylaxis is a severe and potentially life-threatening allergic reaction. It may occur within minutes of exposure to the allergen although sometimes it can take hours. It must be treated quickly with adrenaline.

Any allergic reaction including anaphylaxis occurs when the body's immune system overreacts to a substance that it perceives as a threat. On rare occasions there may be no obvious trigger.

Common triggers of anaphylaxis include:

- Peanuts and tree nuts
- Sesame and other seeds
- Fish
- Shellfish
- Dairy products
- Egg
- Soya
- Wasp or bee stings
- Natural latex rubber
- Penicillin and other drugs

To download information sheets on these and other allergens visit

www.anaphylaxisireland.ie

Allergies are increasingly common and it is likely that there will be students in your school with allergies and some may be at risk of anaphylaxis. 1 in 50 children are allergic to peanuts or tree nuts.

Signs and symptoms

Allergy has a wide range of symptoms. Any of the following may be present in an anaphylactic reaction:

- Difficult/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Difficulty talking and/or hoarse voice
- Loss of consciousness and/or collapse
- Pale and floppy
- Wheeze or persistent cough
- Condition steadily worsening

What to do in an emergency

If a student with allergies shows any possible symptoms of a reaction, immediately seek help from a member of staff trained in anaphylaxis emergency procedures. Ensure all members of staff know who is trained.

The trained member of staff should:

- Assess the situation
- Administer appropriate medication in line with perceived symptoms
- If symptoms suggest it is a severe reaction:
 - give the student their adrenaline injector into the outer aspect of their thigh
 - make safe the used injector by putting it in a rigid container
 - give the used injector to the ambulance crew
- Note the time the adrenaline was given in case a second dose is required and to tell the ambulance crew
- **Call for an ambulance and state**
 - the name and age of the student
 - that you believe them to be suffering from anaphylaxis and that adrenaline has been administered
 - the cause or trigger (if known)
 - the name, address and telephone number of the school
- Call the student's parents
- If there is no improvement after 5 minutes give the second adrenaline injector
- While awaiting medical assistance the designated trained staff member should:
 - Continue to assess the student's condition
 - Position the student in the most suitable position according to their symptoms
(See section on recovery position later in this section)

After the emergency

- Carry out a debriefing session with all members of staff involved
- Parents are responsible for replacing any used medication

Medications and treatments

Injectable Adrenaline

Adrenaline is prescribed by doctors to individuals who have an increased risk of anaphylaxis. Every student who is at risk of anaphylaxis should carry two adrenaline injectors. The student (depending on their age) and their carers should be trained in how to use them. Treatment involves intramuscular adrenaline i.e. an injection of adrenaline into the muscle. The student may be prescribed one of two types of adrenaline injectors, either the Anapen (most common in Ireland) or the EpiPen/Jext. Both injectors are pre-measured and contain a single dose. Adrenaline is the same drug as Epinephrine which is the US term.

When to administer adrenaline

Follow directions from the student's **Anaphylaxis Emergency Plan**. If the student shows any of the following symptoms then it suggests a serious allergic reaction is developing and adrenaline should be given without delay:

- Difficult/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Difficulty talking and/or hoarse voice
- Loss of consciousness and/or collapse
- Pale and floppy
- Wheeze or persistent cough
- Condition steadily worsening

Once the injection is given, signs of improvement should be seen fairly rapidly. If there is no improvement or symptoms are getting worse a second injection should be administered after 5 minutes. That is why it is best practice to have two injections available. **When adrenaline has been given, an ambulance must be called and the student taken to hospital.**

Should I give the Adrenaline or not?

If there is any doubt about whether to give Adrenaline or not, the medical consensus is GIVE IT. In a scenario where anaphylaxis is possible, a student is better off receiving adrenaline (even if in retrospect it wasn't required) than not. Allergy doctors agree it is wiser to over react than to under react. Most students tolerate the effects of adrenaline very well even if they are not having a serious allergic reaction.

Intra-muscular adrenaline (i.e. Anapen or Jext)

How to use the Anapen

Requires the user to push a firing button on the pen

(For images, please see Sample Anaphylaxis Emergency Plan on page 95, Resource Pack)

1. The Anapen is administered into the upper outer area of the thigh
 2. Remove the black needle cap
 3. Remove the black safety cap from the firing button
- Place the pen on the upper outer aspect of the thigh

4. Place the pen on the upper outer aspect of the thigh
5. Press the firing button
6. Hold in place for 10 seconds then remove
7. Massage the injection site for 10 seconds
8. Place the used device in a rigid container to give to the ambulance crew
9. Call an ambulance to take the student to hospital

How to use the Jext

1. Grasp the Jext injector in your dominant hand (the one you use to write with) with your thumb closest to the yellow cap
2. Pull off the yellow cap with your other hand.
3. Place the black injector tip against your outer thigh, holding the injector at a right angle (approx 90°) to the thigh
4. Push the black tip firmly into your outer thigh until you hear a 'click' confirming the injection has started, then keep it pushed in. Hold the injector firmly in place against the thigh for 10 seconds (a slow count to 10) then remove. The black tip will extend automatically and hide the needle.
5. Massage the injection area for 10 seconds. Seek immediate medical help.
6. Place the used device in a rigid container to give to the ambulance crew
7. Call an ambulance to take the student to hospital

Anti-histamines

Students with allergies may also have been prescribed anti-histamines to relieve mild symptoms or as part of their Anaphylaxis Emergency Plan for a severe reaction. They are available in either liquid or tablet form (liquids are easier to take in an emergency and work faster than tablets). Directions on when to give anti-histamines should be taken from the student's Anaphylaxis Emergency Plan. Directions may vary from one student to another. If anti-histamines are prescribed as part of the Anaphylaxis Emergency Plan, they should be kept together with the student's adrenaline.

Recovery positions

When symptoms suggest anaphylactic shock, the student will need to be placed in a suitable recovery position. As the symptoms can vary from person to person the following points should be observed:

- Due to a drop in blood pressure, the student may be feeling faint or weak, look pale or beginning to go floppy. In this instance, lay them down with their legs raised. They should not stand up.
- If there is vomiting lay them on their side to avoid choking
- If they are having difficulty breathing caused by asthma symptoms and/or by swelling of the airways, they are likely to feel more comfortable sitting up. However, keep their legs raised, if possible

Students who are wheezing can also be given up to 10 puffs of their reliever inhaler (Salbutamol-Ventolin or Terbutaline-Bricanyl). In the worst case scenario, use someone else's inhaler if the student does not have their own.

Managing anaphylaxis in school

Staff administering medication

When school staff agree to administer treatment and medication to a student in an emergency, training sessions must be arranged. In some areas this can be arranged by contacting your region's Area Medical Officer.

The training session should include:

- What is anaphylaxis?
- How to manage the condition
- Signs and symptoms -how to recognise allergic reactions and anaphylaxis
- **Anaphylaxis Emergency Plans** including where and how to administer the student's prescribed adrenaline injector.

Important facts about Adrenaline for the school

- Students at risk of anaphylaxis will normally be prescribed two adrenaline injectors to keep near them at all times. A second dose is required in over 20% of cases
- The number of injectors prescribed is at the discretion of the student's doctor, not the school, but in large schools it might be necessary to have more than one set of adrenaline injectors. Each case needs to be taken on its own merits
- Adrenaline injectors should be kept in a medical kit. This kit will normally contain two adrenaline injectors. It may also include anti-histamines, reliever inhaler (for asthma symptoms), the written Anaphylaxis Emergency Plan, emergency contact telephone numbers and anything else prescribed by the student's doctor
- Adrenaline injectors should always be accessible – **never in a locked room or cupboard**
- Store injectors at room temperature out of direct sunlight and away from radiators
- Keep the student's medical kit together in one container such as a plastic box with a lid or a specially designed container. Mark the outside of the container clearly with the student's name, a green cross indicating its medical content and possibly a photograph of the student. Keep the kit in a place where it is clearly seen
- When going outdoors for PE or other activities, the student's emergency medical kit should be kept close at hand at all times. A good place is in the 'valuables' box with a teacher
- Parents are responsible for checking expiry dates of all medication and should replace them as necessary. The ideal time to do this is at the end of each term when the kit should be taken home. Medication should not be left on school premises during school holidays. Parents must also ensure, with their doctor, that the dose prescribed is adequate (the dose usually increases from .15mg to .3mg at around 8-10 years of age)
- Depending on the student's age, they may be responsible for their own injectors. This means carrying adrenaline on their person and being confident in knowing when to use it
- Trainer Adrenaline Pens, which are useful for training can be obtained at a charge from your local Pharmacy

Day to day management to avoid allergic reactions

Allergen avoidance

- It may sound simple, but if a student with allergies does not come into contact with their particular allergen, then they will not have a reaction

Risk assessment

- Along with your school's Health & Safety risk assessment, a formal allergen risk assessment needs to be carried out and measures taken to reduce risks of an anaphylactic reaction for the student with allergies

Regular communication with the student with allergies and their parents

- The family are living with this condition and know a great deal about daily management. Let them help you

Kitchens and dining areas should be kept clean of food allergens

- Attention should be paid to hygiene and cross-contamination risks. Hot soapy water is good for cleaning surfaces and utensils

Knowledge of food ingredients at meal and snack times

- Students with food allergies may often ask about ingredients. If staff keep ingredients lists to hand then these questions can be answered easily and without fuss. Even tiny traces of an allergen can trigger a life-threatening reaction for students with severe allergies.
- All students should be discouraged from sharing food

Easy access to emergency medicines

- Know at all times, where the student's medicines can be found and who is trained to administer them

Regular staff training

- Training should be given (where possible) by a healthcare professional to all staff at least once a year. Staff who may have to administer an adrenaline injector should have training so they understand when and how to give adrenaline plus training in daily management techniques

Medical Jewellery

- If a student wears medical alert jewellery, they should not be asked to remove it. However, to avoid injuries it could be covered whilst playing sports

NON-FOOD ALLERGENS

Wasp and bee stings

Most people known to be at risk of a severe allergic reaction to stings are scared of being stung. The risks can be minimised with precaution.

- Take special care outdoors and wear shoes at all times
- Make sure any food or drink is covered and kept in sight. Cans of soft drinks should not be used as the student cannot see the drink. Sports bottles with nozzles are best
- Ensure suitable medication is on hand at all times

Latex

- Students diagnosed with this allergy may suffer from nasal irritation, rashes, asthma and anaphylaxis. Latex allergy may be significant but it can be managed and controlled
- There are numerous everyday items to be avoided including rubber gloves, balloons, pencil erasers, rubber bands, rubber balls, tubes and stoppers used for science experiments
- Even if a student only has a mild allergy to latex, they should try as much as possible to avoid contact with it. This is because with each contact, the allergic reaction may increase in severity and symptoms may get worse. Students who have a severe allergy should not use any latex products
- Some students with latex allergy may also have a food allergy to kiwi and very rarely to avocado, banana and sweet chestnut

Cookery, Science, Art & Craft Risks

- Ensure the teacher is aware of any students with allergies and their particular triggers (allergens)
- Wherever possible, do not use ingredients that students in your school/class are known to be allergic to
- Ensure that work areas and utensils are washed thoroughly in hot soapy water before and after use. Remember other classes may have been using allergens
- Be aware of experiments using latex gloves
- In cooking, egg allergic students are particularly at risk of reaction as raw egg is more allergenic than cooked egg. Students with egg allergy should not participate in cooking with eggs

Other Daily Potential Risks

1. Pet/wild bird food

Especially a problem for peanut allergic students

Food for pets (such as hamsters, guinea pigs and rabbits) and wild birds often include potential allergens. Buy separate ingredients and mix your own, excluding any possible allergens (e.g. peanuts)

2. Birthday and end of term treats

Especially for milk, egg, peanut and tree nut allergic students

Suggest having a 'treat box' in the classroom that is supplied with 'safe' food by the student's parents. The student can then use one of their own treats instead. Older students may choose to simply go without

3. Contaminated materials

For example cereal boxes (low risk) and egg cartons (high risk)

If there is a student with severe allergies in your class, do not use containers or boxes that may have been in contact with their particular allergen during lessons (e.g. junk art, craft or technology)

4. Musical Instruments

Students with allergies should never share musical instruments like recorders or tin whistles

5. Sports Water bottles

Students with allergies should not share sports water bottles

Exercise Induced Anaphylaxis

A few students have exercise-induced anaphylaxis. This is very rare but can be caused by exercise alone or a combination of food and exercise. It is vital that the parents of students with exercise-induced anaphylaxis have input as to which activities are acceptable and which are not.

Bullying & Anaphylaxis

About a third of students with food allergies experience some form of teasing, bullying, exclusion or harassment related to their allergy. Bullying can include physical and verbal incidents.

The warning signs are similar to other forms of bullying: the student may appear sad, upset, withdrawn and anxious or say that he or she doesn't want to go to school. There may be changes in eating habits like an untouched lunchbox.

Parents should inform teachers right away if an incident occurs. The incident should be investigated and dealt with in accordance with the school's anti-bullying policy.

Nut Free Schools

The question whether to ban nuts or not from a particular class or from an entire school may arise. This decision must be made on a case by case basis taking into account health and safety considerations and will also depend on the age of the student. Remember too, that students in the school may be severely allergic to foods other than nuts.

It is ideal if the school can develop a supportive environment where the allergic student and the wider school population become educated about managing allergy. The school can help an allergic student grow and learn how to handle risks and peer pressure, how to handle social situations, to speak up and to read labels. This must be done without stigmatising the student. Practices like "the nut free table" at lunch time should be avoided. Enlisting class mates or the student's friends to help in managing the allergy can be encouraged at primary level.

A well thought out and implemented programme will keep a student safe while teaching them to manage their allergy thus becoming independent and self-reliant. Older children may choose to be more private about their allergy and while this need for privacy is to be respected, teaching staff should be aware of the allergy, its management, symptoms and treatments. A few close friends

should be encouraged to be supportive of food decisions and label reading, to know how to use the adrenaline kit and if a reaction occurs, be able to call an ambulance and their friend's parents.

The Board of Management have responsibility to:

- Promote a supportive learning environment for students with severe allergies
- Develop school guidelines for allergy management during school and school outings
- Ensure students at risk of anaphylaxis are identified during the registration process
- Delegate a staff member to maintain the school chronic conditions register
- Arrange and attend meetings with the student (if appropriate), family, teacher(s) and other staff members who have primary responsibility for the student. This should take place at the start of the school year or when the student is newly diagnosed. Discuss related services to meet the student needs and complete a Healthcare Plan including the student's Emergency plan
- Identify all staff members who have responsibility for the student with severe allergies
- Ensure substitute personnel are aware of the needs and emergency procedures for students with severe allergies
- Arrange anaphylaxis training for staff members who are in contact with students who have severe allergies
- Ensure staff members are aware of and recognise students with life threatening allergies and are familiar with emergency procedures
- Designate a location where emergency medication is to be stored. The best place to keep medication is with the student. Adrenaline must always be easily accessible
- Inform staff where emergency medication is stored
- Include allergy awareness as part of health education
- Support and facilitate ongoing communication between parents/guardians of students with allergies and school staff
- Support the Healthcare Plan agreed by the school and the student's parents
- Develop and implement a health and safety policy to reduce exposure to allergen which may cause anaphylaxis in the student

The teachers and SNAs have responsibility to:

- Participate in the school meeting with the parent(s) and the relevant staff
- Work with the school team and the parents to develop a written Healthcare Plan including the Anaphylaxis Emergency Plan specific for the student
- Attend anaphylaxis management training. Be prepared to recognize and respond to the signs and symptoms of anaphylaxis and know what to do in an emergency
- Maintain effective communication with parents including informing them if their child has become unwell at school
- Provide a supportive environment for the student to manage their allergy effectively and safely at school
- Be aware of allergic triggers that may cause a student to experience an anaphylactic reaction and minimise the risk for the student by reviewing class activities, supplies and materials to ensure they are allergen free
- Treat the student with allergies the same as other students
- Discourage students from sharing lunches or trading snacks
- Reinforce hand washing before and after eating

- Provide alternative options for edible treats
- Discuss activities involving food with parents before they take place
- Provide information for substitute teachers that communicate the day-to-day needs of the student with allergies and the Anaphylaxis Emergency Plan
- Ensure the student's emergency medical kit and a mobile phone is taken on all outings and trips off the school premises
- Review the materials in the Anaphylaxis section of these guidelines to learn more about severe allergies and anaphylaxis

The parents/guardians of a student with severe allergies have responsibility to:

- Inform the Board of Management, the school principal and their child's teacher that their child has a severe allergy as soon as possible
- Attend and participate in the school meeting to develop a written Healthcare Plan to meet their child's healthcare needs
- Provide accurate emergency contact details and develop an Anaphylaxis Emergency Plan for their child
- Inform school staff of any changes in their child's health management needs
- Provide the school with a labelled emergency medical kit containing two auto injectors and the Emergency Plan including contact numbers. The kit may also contain antihistamine, asthma inhalers and other medications as prescribed
- Bring this medication home from school on the last day of each term and return it to the school on the first day of each new term
- Ensure medication has not exceeded the expiry date
- Ensure with their doctor, that the Adrenaline injector dose prescribed is adequate. The dose usually increases from .15mg to .3mg at around 8-10 years of age
- Provide the teacher with safe treats/snacks as an alternative during class parties and other activities involving food
- Educate the student to wash their hands before eating

Sample Anaphylaxis Emergency Plan WHEN USING ANAPEN / JEXT (See Emergency Plan sheet p. 95 of Resource Pack)

Each student's doctor will provide an emergency plan specifically for the student. What follows is a sample plan.

Student's Name:

Class:

Family Contact:

Siblings in the School:

Allergic to: _____

Symptoms of mild to moderate allergic reaction

- Swelling of lips, face, eyes
- Hives, welts, itchy skin, rash
- Tingling mouth, abdominal pain, vomiting, nausea

Action for mild to moderate reaction

- Stay with student and call for help
- Give antihistamine if available
- Locate Anapen
- Contact family/carer
- If condition worsens follow actions for severe reaction below

ANAPHYLAXIS

SEVERE ALLERGIC REACTION

Look for any ONE of the following

- Difficult/noisy breathing
- Swelling of tongue
- Swelling/tightness in throat
- Difficulty talking and/or hoarse voice
- Loss of consciousness and/or collapse
- Pale and floppy
- Wheeze or persistent cough

- Condition steadily worsening

Action for severe reaction

- Give Anapen or Anapen Junior as per instructions immediately
- Call ambulance (dial 112 or 999) without delay
- Lay flat and elevate legs. If breathing is difficult, allow to sit but not stand
- If conscious and able to swallow give _____ of antihistamine
- If wheezy administer inhaler _____ puffs using aerochamber (if available)
- Contact family/carer
- A second Anapen may be given if no response after 5 minutes

IF IN DOUBT USE THE ANAPEN / JEXT

How to administer the ANAPEN

1. Remove the black needle cap
2. Remove the black safety cap from the red firing button
3. Hold Anapen against the outer thigh and press red firing button
4. Hold Anapen in position for 10 seconds

How to administer JEXT

1. Grasp the Jext injector in your dominant hand (the one you use to write with) with your thumb closest to the yellow cap.
2. Pull off the yellow cap with your other hand.
3. Place the black injector tip against your outer thigh, holding the injector at a right angle (approx 90°) to the thigh.
4. Push the black tip firmly into your outer thigh until you hear a 'click' confirming the injection has started, then keep it pushed in. Hold the injector firmly in place against the thigh for 10 seconds (a slow count to 10) then remove. The black tip will extend automatically and hide the needle.
5. Massage the injection area for 10 seconds. Seek immediate medical help.

Resources

Anaphylaxis Ireland

www.anaphylaxisireland.ie

Anaphylaxis Ireland is a charity with the following aims:

- To support those living with severe allergies by raising public awareness of anaphylaxis, by improving the quality of life of people at risk and by acting as a support network for people affected by anaphylaxis
- To advance the education and general understanding of those living with anaphylaxis, as well as the public, concerning anaphylaxis

Anaphylaxis Ireland

PO Box 542, Ballinlough, Cork. Email: Info@anaphylaxisireland.ie

Tel: 0818 300 238 Website: www.anaphylaxisireland.ie

UK Anaphylaxis Campaign

Download information and read the latest news and advice about anaphylaxis and severe allergy.

Purchase the UK Campaign's training DVD which provides a wealth of guidance on how to care for students who are at risk of severe allergic reactions. To order, visit their website and click on 'products'.

Website: www.anaphylaxis.org.uk

Anapen

Download a video and a leaflet on 'How to use Anapen' free of charge from

www.anapen.co.uk

Jext

For further information and instructional videos on Anaphylaxis and how to use Jext see

www.jext.ie

Be Allergy Aware

A website created by two Irish sisters aimed at a younger audience which promotes awareness of allergies and anaphylaxis.

Website: www.beallergyaware.ie

Allergy Northern Ireland

Website: www.allergyni.co.uk

Registered charity number CHY19374