

Managing Chronic Health Conditions

School Ethos

Our school is a Christian community which welcomes students in the tradition of Nano Nagle, foundress of the Presentation Order, under the trusteeship of CEIST. A primary aim of our school is the pursuit of academic excellence. We seek to develop the full potential of each person, intellectual, spiritual, emotional, social, physical and creative. To achieve this, the school strives to provide an educational environment suited to the needs of each individual, within the demands of a changing world.

Rationale

1. This school ensures that the whole school environment is inclusive and favourable to students with chronic conditions.
2. This school understands that certain chronic conditions are serious and can be potentially life threatening, particularly if ill managed or misunderstood. Parents have a duty to inform the school of such a condition and provide the necessary medical equipment to respond to emergencies.
3. This school has clear guidance on the administration and storage of medication and necessary equipment at school.
4. Staff understand the common chronic health conditions that affect students at this school. Staff receive appropriate training on chronic conditions and what to do in an emergency.

This school ensures that the whole school environment is inclusive and favourable to students with a chronic condition.

This includes the physical environment, as well as social, sporting and educational activities.

What we aim to achieve

EDUCATION AND LEARNING

- This school ensures that students with chronic conditions can participate fully in all aspects of the curriculum and does its best to provide appropriate adjustments and extra support as needed.
- If a student is missing a lot of school time, has limited concentration or is frequently tired, all teachers at this school understand that this may be due to a chronic condition.
- Staff use opportunities such as social, personal and health education lessons to raise awareness of chronic conditions amongst students and to create a positive social environment.

SOCIAL INTERACTIONS

- This school ensures the needs of students with chronic conditions are adequately considered to ensure their involvement in structured and unstructured social activities, during breaks, before and after school.
- This school ensures the needs of students with chronic conditions are adequately considered to ensure they have full access to extended school activities such as clubs and school excursions.

- Staff at this school are aware of the potential social problems that students with chronic conditions may experience. Staff use this knowledge to prevent and deal with problems in accordance with the school's anti-bullying and behaviour policies.

EXERCISE AND PHYSICAL ACTIVITY

- This school ensures all teachers and external sports coaches make appropriate adjustments to sports, games and other activities to make physical activity accessible to all students.
- This school ensures all teachers and external sports coaches understand that students should not be forced to take part in an activity if they feel unwell.
- Teachers and external sports coaches are aware of students in their care who have been advised to avoid or to take special precautions with particular activities.
- This school ensures all teachers and sports coaches are aware of the potential triggers for a student's condition(s) when exercising and how to minimise these triggers.
- This school ensures all students with chronic conditions are actively encouraged to take part in out-of-school activities and team sports.

SCHOOL EXCURSIONS

- Risk assessments are carried out by this school prior to any out-of-school visit and chronic conditions are considered during this process. Factors the school considers include: how all students will be able to access the activities proposed, how routine and emergency medication will be stored and administered and where help can be obtained in an emergency.
- This school understands that there may be additional medication, equipment or other factors to consider when planning tours.

This school understands that certain chronic conditions are serious and can be potentially life threatening, particularly if ill managed or misunderstood. Parents have a duty to inform the school of such a condition and provide the necessary medical equipment to respond to emergencies.

This school has a clear communication plan for staff and parents/*guardians* to ensure the safety of all students with a chronic condition.

What we aim to achieve

1. All parents are informed and reminded about this school's 'Managing Chronic Health Conditions' guidelines:
 - By including the guiding statement in the school's prospectus and communicating this to new parents
 - When their child is enrolled as a new student
 - Via the school's website
2. Parents of children with a chronic condition are informed and reminded about this school's 'Managing Chronic Health Conditions' guidelines:
 - At the start of the school year when communication is sent out about the Healthcare Plan
3. School staff are informed and regularly reminded about the 'Managing Chronic Health Conditions' guidelines:
 - Through updates with a copy for all staff including substitute/temporary teachers and coaches
 - At scheduled chronic conditions training sessions
 - Through key principles of the school guidelines being displayed in several prominent staff areas at school
 - Through school-wide communication about results of the monitoring and evaluation of the guidelines

4. Students are informed and regularly reminded about the 'Managing Chronic Health Conditions' guidelines in social, personal and health education (SPHE) classes.
5. The responsibilities of school staff and parents of students with a chronic condition are set out in a written format and clearly understood by all parties in the Healthcare Plan and Emergency Plan for each condition.
6. Healthcare Plans are used to create a centralised register of students with medical needs. An identified member of staff has responsibility for the register at this school.
7. The responsible member of staff follows up with the parents on any further details on a student's Healthcare Plan required, or if permission for administration of medication is unclear or incomplete.

ONGOING COMMUNICATION AND REVIEW OF HEALTHCARE PLANS

- Parents of students at this school are regularly reminded to update their child's Healthcare Plan with changes to things such as their symptoms (getting better or worse) or their medication.
- Staff at this school use opportunities such as parent-teacher meetings to check that information held by the school on a student's condition is accurate and up to date.
- All students with a Healthcare Plan at this school have their plan routinely discussed and reviewed at least once a year.

STORAGE AND ACCESS TO HEALTHCARE PLANS

- Parents of students at this school are provided with a copy of the student's current agreed Healthcare Plan.
- Healthcare Plans are kept in a secure central location at school.
- All members of staff who work with students have access to the Healthcare Plans of students in their care.
- The school ensures that substitute/temporary teachers are made aware of (and have access to) the Healthcare Plans of students in their care.
- This school ensures that all staff protect student confidentiality.

- This school seeks permission from parents to allow the Healthcare Plan to be sent ahead to emergency care staff should an emergency happen during school hours or at a school activity outside the normal school day. This permission is included on the Healthcare Plan.

USE OF HEALTHCARE PLANS

Healthcare Plans are used by this school to:

- Inform the appropriate staff and substitute/temporary teachers about the individual needs of a student with a chronic condition in their care
- Remind students with chronic conditions to take their medication when they need to and if appropriate, remind them to keep their emergency medication with them at all times and remind students of the central location of their medications in the school.
- Identify common or important individual triggers for students with chronic conditions at school that bring on symptoms and can cause emergencies. This school uses this information to help reduce the impact of common triggers

This school has clear guidance on the administration and storage of medication and necessary equipment at school.

This school understands the importance of medication being taken as prescribed and the need for safe storage of medication at school.

What we aim to achieve

ADMINISTRATION – EMERGENCY MEDICATION

- All students at this school with chronic conditions have access to their emergency medication at all times.
- This school understands the importance of medication being taken as prescribed.
- Staff are aware that there is no legal or contractual duty for a member of staff to administer medication or supervise a student taking medication. However, any teacher who is willing and confident to administer medication to a student can do so under controlled guidelines. This teacher will need to have the permission of the Board of Management, have the written approval of parents and be fully trained in procedures.
- Parents of students at this school understand that if their child's medication changes or is discontinued, they should notify the school immediately in writing to update their child's Healthcare Plan by re-filling it. The school confirms the changes are incorporated into the plan.
- Staff or other parents attending tours/off site activities are made aware of any students with chronic conditions on the visit. They will receive information about the type of condition, what to do in an emergency and any other additional support necessary, including any additional medication or equipment needed.
- If a student misuses medication, either their own or another student's, their parents are informed as soon as possible. These students are subject to the school's usual disciplinary procedures.
- Medication should be personally labelled and only taken or administered to said person.

SAFE STORAGE – EMERGENCY MEDICATION

- Emergency medication is readily available at all times during the school day or at off-site activities.
- Staff members know where emergency medication is stored.
- Where healthcare professionals and parents advise the school that the student is not yet able or old enough to self manage and carry their own emergency medication, this student's teacher knows exactly where and how to access their emergency medication.
- Staff ensures that medication is only accessible to those for whom it is prescribed.

SAFE STORAGE – GENERAL

- There is an identified member of staff who ensures the correct storage of medication at school.
- At the beginning of each term, the identified member of staff checks the expiry dates for all medication stored at school. This is the responsibility of the parent as well.
- The identified member of staff, along with the parents of students with chronic conditions, ensure that all emergency and non-emergency medication brought in to school is clearly labelled (label from pharmacist on the outside of the original packaging) with the student's name, the name and dose of the medication, the frequency of dose and the contact details of the parent/guardian. This includes all medication that students carry themselves.
- Medication is stored in accordance with instructions, paying particular note to temperature.
- Some medication for students at this school may need to be refrigerated. All refrigerated medication is stored in an airtight container and is clearly labelled with the student's name.
- All medication is sent home with parents at the end of the each academic year.
- It is the parent's responsibility to ensure new and in date medication comes into school on the first day of each new term.
- A photograph of each student with a chronic illness should be on display of the storage area along with the protocol for administration of emergency medication.

SAFE DISPOSAL

- Parents at this school are asked to ensure that an adult collects out-of-date medication.
- Sharps boxes are used for the disposal of needles. (A sharps box is a small yellow plastic container with a protective lid that is used for the disposal of used needles). All sharps boxes in this school are stored in a safe place and this can be a locked cupboard when not in use unless alternative safe and secure arrangements are put in place on a case- by-case basis.
- If a sharps box is needed on an off-site or residential visit, a named member of staff is responsible for its safe storage and returns it to school or the student's parents.
- Used Adrenalin auto injectors (Anapens) must be given to the ambulance crew.

Staff understand the common chronic health conditions that affect students at this school. Staff receive appropriate training on chronic conditions and what to do in an emergency.

What we aim to achieve

- All staff at this school are aware of the most common chronic conditions.
- Staff at this school understand their duty of care to students in the event of an emergency. In an emergency situation, school staff are required under common law duty of care to act like any reasonably prudent parent and look to implement the relevant Emergency Plan.
- The staff who work with students who have a chronic condition at this school receive training and know what to do in an emergency by following the school's Emergency Plan for each condition.
- Action for staff to take in an emergency for the most common conditions at this school is displayed in prominent locations for all staff.
- This school regularly holds training on common chronic conditions. A log of the managing chronic conditions training is kept by the school and reviewed every 12 months to ensure all new staff receive training.
- All school staff who volunteer or who are contracted to administer medication are provided with training. The school keeps a register of staff that have completed the relevant training and records the date when retraining is necessary.

Legislation and Guidance

Pieces of legislation that directly affect managing chronic health conditions guidelines are 'The Disability Act 2005' and 'Education for Persons with Special Educational Needs Act 2004' (EPSEN).

These acts make it unlawful for service providers, including schools, to discriminate against people with disabilities. Other relevant legislation include the 'Education Act 1998', 'The Safety, Health and Welfare at Work Act 1989' and the 'Irish Medicines Board Act 2006'. This section outlines the main points from the relevant legislation.

Disability Act 2005 and the Education for Persons with Special Educational Needs Act 2004

Many students with chronic conditions are protected by the 'Disability Act 2005' and 'EPSEN', even if they don't think of themselves as 'disabled'. Schools responsibilities include:

- ▶ Not to treat any student less favourably in any school activities without sustainable justification.
- ▶ To make reasonable adjustments that cover all activities – this must take into consideration factors such as financial constraints, health and safety requirements and the interests of other students.
- ▶ To promote disability equality in line with the guidance provided by the 'EPSEN'.

The Education Act 1998

This act makes provision for the education of every person including any person with a disability or a person with any other educational needs. It provides for the role and responsibilities of the principal and teachers.

Safety, Health and Welfare at Work Act 1989

This act places duties on employers for the health and safety of their employees and anyone else on their premises. This covers principals and teachers, non-teaching staff, students and visitors.

Irish Medicines Board Act 2006

This act specifies the way that medicines are prescribed, supplied and administered.

Other Relevant Legislation

- Child Protection Guidelines and Procedures.
- Healthy Eating Programme
- The National Children's Strategy 2000
- Misuse of Drugs Act 2009
- Equal Status Acts 2000-2008
- Children Act 2001



Coláiste Nano Nagle

Dear Parent

RE: THE HEALTHCARE PLAN

Thank you for informing us of your child's chronic condition. As part of accepted good practice and with advice from the Department for Children and Family Affairs, relevant voluntary organisations and the School's Board of Management, our school has established 'Managing Chronic Health Conditions' guidelines for use by all staff.

As part of these guidelines, we are asking all parents of students with a chronic condition to help us by completing a school Healthcare Plan for their child. Please complete the plan, with the assistance of your child's healthcare professional and return it to the school. If you would prefer to meet someone from the school to complete the Healthcare Plan or if you have any questions then please contact us on 061 410390.

Your child's completed plan will store helpful details about your child's condition, current medication, triggers, individual symptoms and emergency contact numbers. The plan will help school staff to better understand your child's individual condition.

Please make sure the plan is regularly checked and updated and the school is kept informed about changes to your child's condition or medication. This includes any changes to how much medication they need to take and when they need to take it.

I look forward to receiving your child's Healthcare Plan. Thank you for your help.

Yours Sincerely

Principal



Coláiste Nano Nagle

Healthcare Plan

Date form completed: _____ Date for review: _____

1. Student's Information

Name of Student: _____ Class: _____

Date of birth: _____ Age: _____

Siblings in the school: _____

Name: _____ Class: _____

Name: _____ Class: _____

2. Contact Information

Student's address: _____

FAMILY CONTACT 1

Name: _____

Phone (day) Mobile: _____ Phone (evening): _____

Relationship to student:

FAMILY CONTACT 2

Name: _____

Phone (day) Mobile: _____ Phone (evening): _____

Relationship to student: _____

CONTACT 3

Name: _____

Phone (day) Mobile: _____ Phone (evening): _____

Relationship to student: _____

GP

Name: _____ Phone: _____

CONSULTANT

Name: _____ Phone: _____

Condition information for: _____

3. Details of the student's conditions

Signs and symptoms of this student's condition: _____

Triggers or things that make this student's condition/s worse: _____

4. Routine Healthcare Requirements

During school hours: _____

Outside school hours: _____

5. Regular Medication taken during school hours:

6. Emergency medication-Please fill out full details including dosage:

Please also refer to the Emergency Plan, stated later in this document, for relevant information:

7. Activities - Any special considerations to be aware of?

8. Any other information relating to the student's health care in school?

9. Name of Hospital Nurse for the student

Name: _____

Address: _____

Phone: _____

The school may contact the above named for further information or training.

Parental and student agreement (please tick the correct reply)

I agree _____ I do not agree _____ that the medical information contained in this plan may be shared with individuals involved with my child's care and education (this includes emergency services). I understand that I must notify the school of any changes in writing

Signed by parent: _____

Permission for emergency medication (please tick correct reply)

In the event of an emergency, I agree _____ I do not agree _____
with my child receiving medication administered by a staff member or providing
treatment as set out in the attached Emergency Plan.

Signed by parent: _____

Print name: _____



Coláiste Nano Nagle

Emergency Medication Provision School Record

PRINT NAME			
SIGNATURE OF STAFF MEMBER			
ANY REACTIONS			
DOSE GIVEN			
MEDICATION			
STUDENT'S NAME			
TIME			
DATE			



Coláiste Nano Nagle

Staff Training Record

Administration of Medication

Name of school: _____

Training provided by: _____

Type of training received: _____

Date training completed: _____

I confirm that the following people have received the training detailed above.

Signature of each person attending the training

1. _____

2. _____

3. _____

4. _____

5. _____

Trainer's signature: _____ Date: _____

I confirm that the people listed above have received this training.

Principal's signature: _____ Date: _____

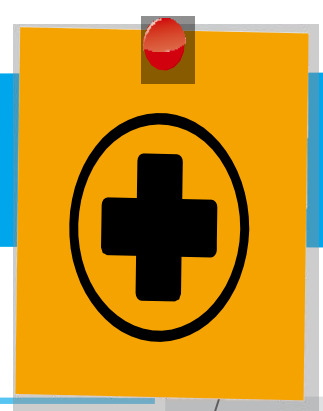
Date for update training/retraining: _____

Managing Asthma at School



Prepared by Asthma Society of Ireland

Asthma Emergency Plan



THE FIVE MINUTE RULE contains the recommended

Student's Name:

Class:

Family Contact:

Siblings in the School:

Common signs of an asthma attack

- ▶ Coughing ▶ Shortness of breath ▶ Wheezing
- ▶ Feeling tight in the chest ▶ Sometimes younger children express feeling tight in the chest as a tummy ache
- ▶ Being unusually quiet ▶ Difficulty speaking in full sentences
- ▶ Requesting use of the blue reliever inhaler ▶ Opting out of exercise

EMERGENCY PROCEDURE

THE FIVE MINUTE RULE

Do . . .

- ▶ Keep calm, attacks can be frightening and it is important to stay calm and reassure the student
- ▶ Encourage the student to sit up and slightly forward – do not hug them or lie them down
- ▶ Encourage the student to breath slowly and calmly and ensure tight clothing is loosened
- ▶ Make sure the student takes their reliever inhaler (usually blue) immediately – preferably through a spacer: TWO puffs if MDI (metered dose inhaler) / evohaler, ONE puff if turbohaler

If there is no immediate improvement

- ▶ Continue to make sure the student takes the reliever inhaler every minute for

Call an ambulance or a doctor urgently if the:

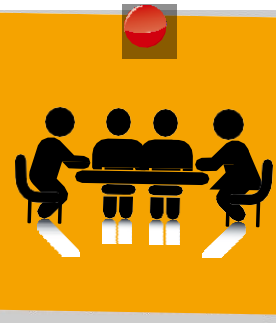
- ▶ Student's symptoms do not improve in 5-10 minutes
- ▶ Student is too breathless or exhausted to talk
- ▶ Student's lips are blue **or if you are in any doubt**

Ensure the student continues to takes one puff of their reliever inhaler every minute until the ambulance or doctor arrives.

Important things to remember in an asthma attack

- ▶ Never leave the student having an asthma attack
- ▶ If the student does not have their inhaler and/or spacer with them, send another teacher or student to their classroom or assigned room to get their spare inhaler and/or spacer
- ▶ In an emergency situation, school staff are required under common law duty of care to act like any reasonably prudent parent
- ▶ Reliever medicine is very safe. During an asthma attack do not worry about a student overdosing
- ▶ Send another student to get another teacher/adult if an ambulance needs to be called
- ▶ Contact the student's parents immediately after calling the ambulance/doctor
- ▶ A member of staff should always accompany a student taken to hospital by ambulance and stay with them until their parent arrives
- ▶ The parents must always be told if their child has had an asthma attack

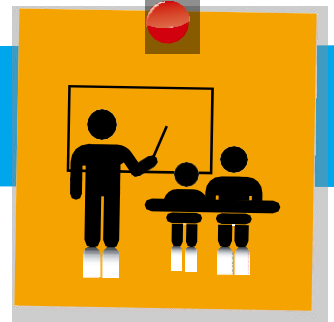
Actions for the Board of Management/Principal



The Board of Management/Principal has responsibility to:

- ▶ Promote a supportive learning environment for students with asthma
- ▶ Develop school guidelines for asthma management during school and school outings
- ▶ Meet annually with the school team to arrange and attend a meeting with the student, family, teacher(s) and other staff members who have primary responsibility for the student before the school year starts or when the student is newly diagnosed to discuss related services to meet student needs
- ▶ Identify all staff members who have responsibility for the student with asthma
- ▶ Delegate a staff member to maintain the school chronic conditions register
- ▶ Arrange for asthma management training for staff members with responsibility for students with asthma
- ▶ Alert all school-related staff members who teach or supervise a student with asthma. Ensure that they are familiar with emergency procedures. This includes substitute personnel
- ▶ Include asthma awareness as part of health education
- ▶ Learn about asthma and be able to recognise the symptoms of and how to respond to an asthma attack (5 Minute Rule)
- ▶ Support and implement the Emergency Asthma Plan (5 Minute Rule) agreed by the school and the student's parents
- ▶ Support and implement the plan agreed for storage of asthma medication

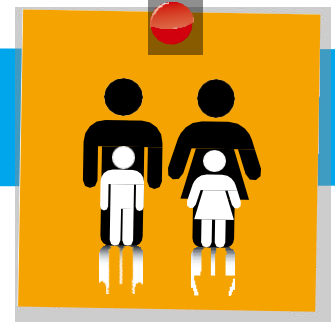
Actions for Teachers



The teachers have responsibility to:

- ▶ Participate in the school meeting with the parent(s) (Designated Teacher).
- ▶ Be prepared to recognise the triggers, respond to the signs and symptoms of an asthma attack and know what to do in an emergency (5 Minute Rule)
- ▶ 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 asthma effectively and safely at school. This may include avoiding triggers and taking their inhaler medication when required
- ▶ Learn about asthma by reviewing the material contained in this guide and attend asthma management training if necessary
- ▶ Treat the student with asthma the same as other students except when meeting medical needs
- ▶ Provide alternative options for unplanned vigorous physical activity and ensure that students with asthma warm up and pre-medicate as necessary
- ▶ Ensure that the inhaler and spacer device is stored in a safe place in the classroom and available to the student in the event of an asthma attack. This inhaler and spacer will be provided by the parent
- ▶ Ensure that the student with asthma has the appropriate medication with them during any exercise and are allowed to take it when needed.

Actions for Parents/Guardians



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

- ▶ Inform the school principal and their child's teacher that their child has asthma
- ▶ Attend and participate in the school meeting and provide specific information about their child's asthma including medication, spacer devices and the 5 Minute Rule – the Emergency Plan outlining what to do in an asthma attack
- ▶ Provide accurate emergency contact details and an up-to-date Healthcare Plan for their child
- ▶ Inform school staff of any changes in their child's health status
- ▶ Provide the school with the necessary equipment to treat an asthma attack: inhaler medications, spacer devices, 5 Minute Rule poster or asthma attack cards (available from the Asthma Society of Ireland)
- ▶ Ensure their child's inhalers and spacers are labelled with their child's full name.

Ensure all necessary asthma medication is within the expiry date

What is Asthma?

Asthma is a long-term condition that affects the airways – the small tubes that carry air in and out of the lungs.

The lungs consist of a series of tiny branching tubes called airways which carry air in and out of little air sacs (or alveoli) exchanging oxygen for carbon dioxide. The airways (or bronchial tubes) have muscles within their walls and a layer of lining. In asthma, the airways become more narrow than normal so it is more difficult for air to pass into the lungs and for air to be exhaled.

Children and young people with asthma may have airways that are sensitive and inflamed. Triggers can irritate these airways.

The muscles around the walls of the airways tighten so that the airways become narrower. The lining of the airways becomes inflamed and starts to swell. Often sticky mucus or phlegm is produced.

These reactions lead to the symptoms of asthma.

Signs and symptoms

Not every student with asthma has every symptom.

The usual symptoms of asthma are:

- ▶ Coughing (in some cases a cough may be the only symptom of asthma)
- ▶ Coughing after exercise and/or at night
- ▶ Shortness of breath
- ▶ Wheezing
- ▶ Tightness in the chest - sometimes younger children will express feeling tight in the chest as a tummy ache

Asthma varies in severity from person to person. While some children and young people will experience an occasional cough or wheeze, others will have severe symptoms.

In some cases a cough may be the only symptom of asthma. Some students may experience symptoms from time to time (maybe after exercise or during the hay fever season) but feel fine the rest of the time.

However, a student should visit their doctor or asthma nurse if experiencing any of the following:

- ▶ Regular or frequent daytime symptoms
- ▶ Night-time symptoms resulting in poor sleep and daytime tiredness
- ▶ Frequent time off school due to their asthma
- ▶ Exercise tolerance is reduced

Any of the above can be a sign that a student has poor asthma control. This can be for a variety of reasons including:

- ▶ They have not been prescribed the right medication for their needs
- ▶ They are not using the correct inhaler technique
- ▶ They are not taking their medication as prescribed
- ▶ They are not avoiding or are unable to avoid their asthma triggers
- ▶ They have a cold or an infection

Medication and treatments

The vast majority of students with asthma should only need to bring reliever medication (these are usually blue in colour) to school.

Reliever inhalers

Every child and young person with asthma should have a reliever inhaler. Relievers are taken immediately when asthma symptoms start. They work quickly to relax the muscles surrounding the narrowed airways enabling the airways to open wider, making it easier to breathe again. However, relievers do not reduce the swelling in the airways.

Relievers are essential in treating asthma attacks

- ▶ Reliever inhalers are usually blue
- ▶ They come in different shapes and sizes (see poster for examples)
- ▶ It is very important that a student with asthma has a reliever inhaler that they can use reliably and effectively. The student should know how to use their reliever inhaler and spacer properly and have their technique regularly checked by their healthcare professional
- ▶ Reliever medication is very safe and effective and has very few side effects. Some children and young people do get an increased heart rate and may feel shaky if they take increased puffs
- ▶ If the inhaler has been unused for some time (at school or in a school bag) then it may need to be 'primed' – spray two puffs into the air before administering to the student, to ensure adequate delivery of the medication
- ▶ In an asthma attack it is better for the student to continue taking their reliever inhaler until emergency help arrives

Children and young people with infrequent asthma symptoms will probably only have a reliever inhaler prescribed. However, if they need to use their reliever inhaler more than twice a week, they should see their healthcare professional for an asthma review as they may also need to take controller medication.

At School

- ▶ Students with asthma need to keep their reliever inhalers with them, or close at hand, at all times. You never know when they might need it. They should also have a spare inhaler available
- ▶ As soon as a student is capable they will be allowed to keep their reliever inhaler with them at all times
- ▶ It is essential that all students with asthma are allowed to access their reliever inhaler freely at all times. **Reliever inhalers should never be kept in a locked room or drawer**
- ▶ Students should be reminded to take their reliever inhaler to PE lessons, school trips and other activities outside the classroom

- ▶ If students are playing sport on the sports field then reliever inhalers should be easily accessible (e.g. left with the teacher/coach)
- ▶ It is important to know which reliever belongs to which student. Each asthma medication should be clearly labelled with the student's name
- ▶ The expiry date of all asthma medication should be checked every six months
- ▶ Parents should always be told if their child is using their reliever inhaler more than usual

Spare reliever inhalers

All parents of students with asthma should be asked to provide a spare reliever inhaler, separate from the one the student carries with them all the time. This ensures that if a student forgets or loses their everyday inhaler, a spare is available.

- ▶ Students with asthma should always be aware of where to go to get their reliever inhaler (including their spare) when they need it

Misuse of reliever inhalers

- ▶ Reliever medication is a prescription-only medicine. While not appropriate, it is not harmful if a student without asthma misuses another student's reliever inhaler. If they take numerous puffs of reliever inhaler, they may experience an increased heart rate or tremor, but this should pass shortly and should not cause any long-term effects

Controller inhalers

Controller medication acts to make the lining of the airways less sensitive and less reactive to asthma triggers. It helps to calm the swelling in the airways. Taking controller medication means that a child or young person with asthma is less likely to react badly when they come into contact with an asthma trigger. However, not all students with asthma will need a controller. Controllers are usually prescribed for people who have been using their reliever inhaler more than twice a week.

- ▶ Controllers reduce the risk of asthma attacks
- ▶ Controller inhalers are usually brown, beige, orange, red and white or purple
- ▶ The protective effect of controller medication builds up over time so controllers need to be taken every day (usually morning and evening) even if the child or young person is feeling well

- ▶ Controller inhalers are usually corticosteroids
- ▶ Corticosteroids are a copy of steroids produced naturally in our bodies. They are completely different from the anabolic steroids associated with bodybuilders
- ▶ Doctors prescribe the lowest possible dose of inhaled corticosteroid to achieve asthma control
- ▶ There is a small risk of a mouth infection called thrush and hoarseness of the voice

At school

- ▶ Residential schools should be aware of which students in their care are taking controller medication and set up appropriate management
- ▶ Many students with asthma will need to take their controller inhaler morning and evening when they are on overnight school trips

Do inhaler medicines have an expiry date?

- ▶ All reliever and preventer inhalers have an expiry date. Parents should be responsible for ensuring that all their child's asthma medication is within the expiry date.

Asthma inhalers usually last about two years

- ▶ Healthcare Plans can be used to help both parents and the designated staff member record and check medication expiry dates

Empty inhalers

- ▶ Parents are responsible for ensuring that their child's inhaler is not empty and has plenty of doses left
- ▶ In a school setting, it is sensible to have a spare inhaler available

Spacers

Spacers are used with aerosol inhalers. A spacer is a plastic container with a mouthpiece at one end and an opening for an aerosol inhaler at the other. Spacers are used to help deliver medicine to the lungs. They make aerosol inhalers easier to use and more effective.

At school

- ▶ Spacers may often be needed and used at school, especially by students under the age of 12 years
- ▶ Each student with asthma who has been prescribed a spacer by their doctor or asthma nurse should have his or her own individually labelled spacer. This should be kept with their inhaler

Steroid tablets

A short course of steroid tablets is sometimes needed to treat asthma exacerbations in students and these are generally taken outside school hours. Usually if a student is sick enough to be taking oral steroid tablets, then the student should be at home

Nebulisers / Compressors

A compressor is a machine that turns liquid medication into a mist that is then breathed in through a mask or mouthpiece. Normally students do not need to use a nebuliser/compressor at school because asthma control is maintained using inhalers and spacer devices.



Managing Asthma

Asthma control

Children and young people can usually control their asthma effectively by avoiding their known triggers where possible and by taking the appropriate medication using the correct technique.

Asthma reviews

It is important that children and young people with asthma have regular review appointments with their healthcare professional to monitor their asthma symptoms, the medication they are taking (including their inhaler technique) and any side effects.

Personal asthma action plans

Every parent of a child or young person with asthma should be offered a written personal asthma action plan for their child by their child's doctor or asthma nurse. The healthcare professional should complete this personalised care/self-management plan in discussion with the child and their parent at the child's regular asthma review.

The plan includes information parents need to help their child keep their asthma under control, including:

- ▶ Details about their child's asthma medication
- ▶ How to tell when their child's asthma symptoms are getting worse and what they should do about it
- ▶ What to do if their child has an asthma attack

If a child's asthma is getting worse or better, a written personal asthma action plan shows the parent how to monitor their child's condition, change their child's medication accordingly and when to seek medical advice. These changes to a child or young person's medication are usually to the medication they take outside of school hours.

It is not usually necessary to keep a copy of students' personal asthma action plans in school. Instead schools should use a Healthcare Plan to help keep written information about individual students with asthma.

Triggers

A trigger is anything that irritates the airways and causes asthma symptoms. There are a wide variety of asthma triggers which can affect people's asthma in different ways, some common triggers are outlined below. Many people with asthma have several triggers. It is important that children and young people with asthma get to know their own triggers and try to stay away from them or take precautions where possible.

Implementing a number of changes at school to minimise asthma triggers may help prevent asthma attacks.

Colds and Flu

- ▶ Remind parents of students with asthma to ask their healthcare professional about the flu vaccination at the start of the school year

Chalk dust

- ▶ Damp dust chalk boards or use white boards

House-dust mites

- ▶ Ensure rooms are regularly damp dusted and cleaned to reduce dust and house dust mites
- ▶ Vacuum all areas frequently. Vacuum cleaners should have good suction and a filtered exhaust that does not scatter dust
- ▶ Limit the number of soft furnishings and soft toys in the classroom

Mould

- ▶ Ensure classrooms are well aired, well ventilated and avoid condensation. Remove any damp and mould in the school quickly
- ▶ Ensure piles of autumn leaves are kept in areas away from students and regularly removed from the school grounds

Pollen and grass cuttings

- ▶ Avoid keeping pollinating plants in the classroom or playground areas
- ▶ Avoid mowing playing fields and grass areas during school hours

- ▶ Students with pollen allergies should have the option of remaining indoors on high pollen days (this includes during PE and games/activities). This will require making arrangements for appropriate supervision to be provided

Stress and emotion

- ▶ Assist students with time management and in learning relaxation techniques to help avoid and manage stress especially at exam time
- ▶ Be aware of students whose asthma is triggered by extreme emotion or fits of laughter

Furry and feathery animals

- ▶ Do not keep furry or feathery pets in classrooms or anywhere in the school
- ▶ Be aware that symptoms could be triggered from the clothing of other students with pets at home

Scented deodorants and perfumes

- ▶ Be aware of students whose asthma is triggered by scented deodorants and perfumes
- ▶ Encourage staff and students not to wear strong perfumes and encourage the use of unscented and non-aerosol products across the school
- ▶ Do not use room deodorisers or air fresheners

Latex Gloves

- ▶ Use non-latex gloves in all areas at school.

Dust from flour and grain

- ▶ Be aware of students whose asthma is triggered by dust from flour and flour grain and avoid spreading dust from flour and grain in cooking activities

Chemicals and fumes

- ▶ As far as possible avoid chemicals and fumes that trigger students asthma in science and craft lessons
- ▶ Be aware of students with asthma and their triggers. If certain chemicals or fumes are known to trigger student's asthma, ensure that the room is well ventilated, discreetly offer them the option of using their reliever inhaler

Cleaning and gardening products

A review of the cleaning routine may need to be considered as some chemicals and cleaning products may be a trigger for some students with asthma. Here are some guidelines to help:

- ▶ Rather than sprays, use solid or liquid alternative cleaning products where possible
- ▶ Avoid using furniture polish, floor cleaners, carpet cleaners and oven cleaners in school hours. Ensure there is good ventilation
- ▶ Minimise use of cleaning products by damp dusting where possible
- ▶ Only use lawn weed and insect sprays outside of school hours

Weather and air quality

- ▶ Avoid leaving windows open during thunderstorms– thunderstorms can release large quantities of pollen into the air which can trigger attacks

Exercise and physical activity

Exercise and physical activity is good for everyone including children and young people with asthma. The majority of students with asthma should be able to take part in any sport, exercise or activity they enjoy, as long as their asthma is under control. For some children and young people, exercise is their only trigger (often known as exercise- induced asthma) while for others it is one of many triggers. However, as exercise is part of healthy living, it is one asthma trigger that should be managed, not avoided.

PE, school sport, games and activities

- ▶ Students with asthma should be encouraged to participate in all PE and activity- based lessons and to become involved in after-school clubs and sport activities

Tips for supervising students exercising with asthma

- ▶ If exercise and physical activity makes a child or young person's asthma worse, always ensure that they use their reliever inhaler (usually blue) immediately before they warm up

- ▶ Always start a session with warm up exercises
- ▶ Swimming is generally thought to be an ideal activity for students with asthma, however the chlorine or temperature changes may initiate asthma symptoms. If chlorine or temperature changes are a trigger for a student's asthma it may be necessary for the student to take their reliever inhaler 5-10 minutes before swimming
- ▶ If a student has asthma symptoms while exercising, they should stop, take their reliever inhaler and wait at least five minutes or until they feel better before starting again
- ▶ Always end a session with warm down exercises

PE teachers and sport coaches should also:

- ▶ Make sure they know which students they teach/coach have asthma and what triggers their asthma
- ▶ Understand how to minimise potential asthma triggers during exercise
- ▶ Encourage the use of unscented and non-aerosol products in changing rooms at swimming pools
- ▶ Ensure that each student's inhaler is labelled and kept in a box at the site of the lesson. If a student needs to use their inhaler during a lesson they should be encouraged to do so
- ▶ Speak to the parents if they are concerned that a student has uncontrolled asthma. These students may need to have their asthma reviewed by their doctor or asthma nurse
- ▶ Make time to speak to parents, if parents request, to relieve concern or fears about their children with asthma participating in PE
- ▶ Ensure if a student needs to sit out for five minutes, try to keep them involved as much as possible, for example by asking them to take notes on the match or getting them to do some ball work (if they are feeling well enough to do so)

Classroom teachers should follow the same principles as described above for games and activities involving physical activity. A very small minority of children and young people with difficult-to-control asthma may find it difficult to participate fully in exercise because of the nature of their asthma. However, there have been changes to PE and exercise in schools and there are now opportunities to try alternative ways of exercising, enabling more children and young people to get involved.

Resources

www.asthmasociety.ie

Asthma Adviceline: Call Save 1850 44 54 64, 10am – 1pm, Monday – Friday.

How to Use your Inhaler, Spacer Device & Peak Flow

Videos demonstrating the correct techniques for using these devices available to view at:

www.asthmasociety.ie/inhaler/index.html

Asthma Attack Card

A pocket-sized card to inform people with asthma and those around them about what to do in an asthma attack.

Poster: What to do if a student has an asthma attack

A poster detailing the Five Minute Rule – what to do in an asthma attack, should be displayed in classrooms to help teachers/staff in an emergency situation.

Reach Your Peak Pack

A poster, DVD, and top tips leaflet packed with information on exercising safely with asthma- a useful tool to encourage students with asthma to take part in exercise and to help coaches, teachers and other students to understand the condition.

All of these resources are available to download from our website or in paper format by contacting our office.

Asthma Society of Ireland

42-43 Amiens Street,

Dublin 1.

Phone: 01-817 8886

Call Save: 1850 44 54 64

Fax: 01- 817 8878

Email: office@asthmasociety.ie

Website: www.asthmasociety.ie

Managing Diabetes at School



Prepared by

Diabetes Federation of Ireland

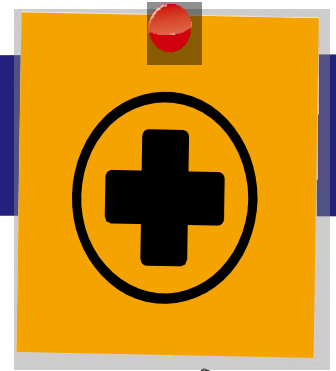
Part A - Emergency & Actions

Sample Diabetes Emergency Plan 51

Actions for the Board of Management 53

Actions for Teachers

Diabetes Emergency Plan



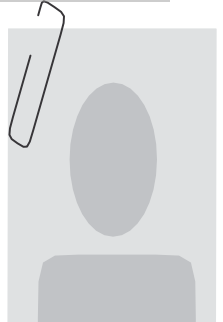
The following pages contain information relating to emergency plans for Hypoglycaemia and Hyperglycaemia.

Student's Name:

Class:

Family Contact:

Siblings in the School:



HYPOGLYCAEMIA: When the blood sugar is below 4 mmol and the student feels unwell.

SYMPTOMS OF A MILD HYPO

(Put the student's specific symptoms here)

- ▶ Sweating
- ▶ Paleness
- ▶ Weakness or dizziness
- ▶ Headache and/or tummy pain
- ▶ Hunger
- ▶ Mood change, especially angry or aggressive behaviour
- ▶ Anxiety or irritability
- ▶ Inability to concentrate

SOME YOUNG CHILDREN MAY NOT FEEL WARNING SYMPTOMS OF A HYPO.

NEVER LEAVE THE STUDENT WITHOUT ADULT SUPERVISION DURING A 'HYPO' EVENT.

Treatment of a MILD HYPO

STEP 1

Do the following

- ▶ **IMMEDIATELY GIVE 15g FAST ACTING CARBOHYDRATE.**
- ▶ 15g fast acting carbohydrate is provided by any one of the following:
 - ▶ 100mls of Lucozade
 - ▶ 150mls of coke or other non-diet drink
 - ▶ 150mls of pure fruit juice
 - ▶ 3- 5 glucose tablets
 - ▶ 3- 4 sweets, e.g. jelly babies
- ▶ Wait 10-15 minutes for the sugar to be absorbed into the bloodstream
- ▶ If after 10 minutes, the blood sugar is still below 4 mmol, a sugary option from the above list should be given again
- ▶ If the blood sugar is above 4 mmol, proceed with STEP 2

STEP 2

This must be followed by a slow acting carbohydrate snack which is one of the following

- ▶ Roll/sandwich
- ▶ Portion of fruit
- ▶ Cereal bar
- ▶ Two plain biscuits
- ▶ or a meal if it is due

Diabetes Emergency Plan(Cont...)



TREATMENT OF A MODERATE HYPO

The student is unable to cooperate but is able to swallow and is conscious

- ▶ Use one tube of Glucogel
- ▶ Twist top of tube and remove. Insert tip of the dispenser into the student's mouth between the gum and cheek
- ▶ Slowly squeeze in one whole gel (for children under 5 years of age, use half a tube initially)
- ▶ Massage the outer cheek gently
- ▶ Wait 5-10 minutes and then check the blood sugar
- ▶ Repeat the gel if the blood sugar is less than 4 mmol after 5-10 minutes
- ▶ If the student has improved and the blood sugar level is above 4 mmols, give a carbohydrate snack listed on previous page in STEP 2 - Treatment of a mild Hypo

TREATMENT OF A SEVERE HYPO

If **Name** is unconscious, do not give them anything to eat or drink.

- ▶ Put them in the recovery position and ensure they are breathing
- ▶ Call an ambulance 999, state they have diabetes and contact the next of kin
- ▶ Have Glucagon available for administration

HYPERGLYCAEMIA: High Blood Glucose

COMMON

SYMPTOMS:

- ▶ Excessive thirst
- ▶ Frequent urination
- ▶ Tiredness
- ▶ Nausea
- ▶ Blurred vision
- ▶ Weight loss

HYPERGLYCAEMIA

A CAN BE

CAUSED BY:

- ▶ Too little or no insulin
- ▶ Too much food
- ▶ Stress
- ▶ Less exercise than normal
- ▶ Infection or fever
- ▶ Excitement

ACTION:

- ▶ The student may feel confident to give extra insulin.
- ▶ If not, call the student's next of kin who will give instructions. If the student feels well, they should drink some water or sugar free drinks.

Emergency Plan For Diabetic Ketoacidosis

Diabetes Ketoacidosis - if the blood glucose levels remain high and untreated, the student can become very unwell and develop Diabetic Ketoacidosis.

- ▶ Deep and rapid breathing (over-breathing)

CALL EMERGENCY

SERVICES -

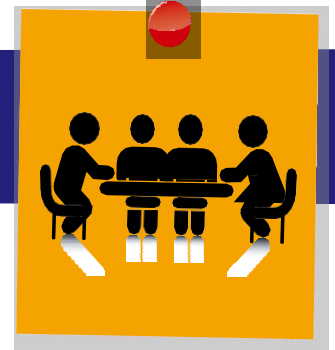
999 AND THE STUDENT'S

PARENTS IF THE

FOLLOWING SYMPTOMS

ARE PRESENT:

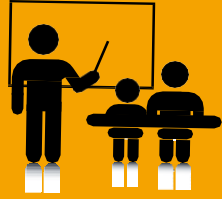
- ▶ Nausea and Vomiting
- ▶ Drowsiness
- ▶ Breath smelling of acetone
e.g. nail polish remover
- ▶ Abdominal pain



The Board of Management/Principal have responsibility to:

- Promote a supportive learning environment for students with diabetes
- Develop school guidelines for diabetes management during school and school outings
- Allocate sufficient resources to supervise students with diabetes
- Designate a member of staff to maintain the school chronic conditions register
- Arrange and attend meetings with the student (if appropriate), parents/guardians, designated teacher 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
- Identify all staff members who have responsibility for the student with diabetes
- Ensure substitute personnel are aware of the needs of a student with diabetes and the Diabetes Emergency Plan
- Arrange for diabetes management training for staff members with responsibility for students with diabetes
- Alert all school related staff members who teach or supervise a student with diabetes. Ensure that they are familiar with emergency procedures
- Support and implement the plan agreed for storage of diabetes medication and provide a place with privacy if necessary for the student to administer insulin
- Delegate a staff member to regularly check the expiry date of diabetes medicines kept at school
- Include diabetes awareness as part of health education
- Support and facilitate ongoing communication between parents/guardians of students with diabetes and school staff
- Have sufficient knowledge of diabetes to make informed decisions regarding the safety of students
- Support and implement the Healthcare Plan and Emergency Diabetes Plan agreed by the school and the student's parents

Actions for Teachers

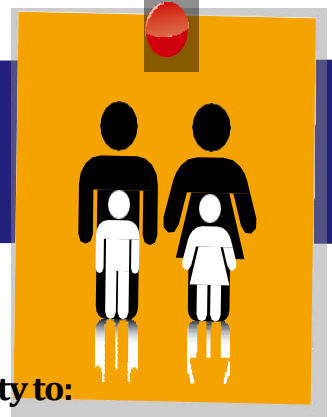


The designated teacher has responsibility to:

- ▶ Participate in the school meeting with the parent(s) and all relevant staff
- ▶ Work with the school team and the parents to develop a written Healthcare Plan including a specific Diabetes Emergency Plan for the student
- ▶ Be prepared to recognise the triggers, respond to the signs and symptoms of hypoglycaemia and hyperglycaemia and know what to do in an emergency
- ▶ Maintain effective communication with parents including informing them if their child has been unwell at school
- ▶ Provide a supportive environment for the student to manage their diabetes effectively and safely at school. This may include unrestricted access to the bathroom, drinking water, snacks, blood glucose monitoring and taking insulin
- ▶ All teachers should treat the student with diabetes the same as other students except when meeting medical needs
- ▶ Ensure the hypo kit* is stored in a safe place in the classroom and available to the student in the event of hypoglycaemia. This hypo kit will be provided by the parent
- ▶ Ensure that the student with diabetes has the appropriate medication or food with them during any exercise and are allowed to take it when needed. This also includes blood glucose monitoring when needed during the school day
- ▶ Provide alternative options for unplanned vigorous physical activity
- ▶ Ensure that the student has the right to privacy when injecting insulin, adequate time for blood glucose testing and eating snacks/meals if needed
- ▶ Check expiry date on medication regularly
- ▶ Provide information for substitute teachers that communicate the day-to-day needs of the student with diabetes and the Diabetes Emergency Plan
- ▶ Learn about managing diabetes at school by reviewing the diabetes section part B of this resource pack
- ▶ Attend diabetes management training if deemed necessary

* *Hypo kit example- contains blood glucose meter, testing strips, finger pricking device with lancets, Lucozade, glucose sweets, cereal bar, biscuits, Glucogel and Glucagon injection.*

Actions for Parents/Guardians



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

- ▶ Inform the Board of Management, school principal and the teacher that their child has diabetes
- ▶ Attend and participate in the school meeting to develop a written Healthcare Plan to meet their child's needs
- ▶ Provide accurate emergency contact details and develop a Diabetes Emergency plan for their child
- ▶ Inform school staff of any changes in their child's health status
- ▶ Provide the school with the necessary equipment such as a hypo kit* and replenish supplies as needed
- ▶ Ensure their child's insulin and glucose meter are labelled with the child's full name.
- ▶ Ensure insulin and all necessary equipment is within the expiry date
- ▶ Provide the school with appropriate spare medication labelled with their child's name
- ▶ Bring 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
- ▶ Provide Information about their child's meal/ snack schedule which should be tailored if possible to fit into the daily school timetable
- ▶ Provide the school with appropriate treats for their child for special events such as parties if required.

** Hypo kit example - contains blood glucose meter, testing strips, finger pricking device with lancets, Lucozade, glucose sweets, cereal bar, biscuits, Glucogel and Glucagon injection.*

What is diabetes?

Diabetes is a long-term condition where the amount of glucose (sugar) in the blood is too high because the body cannot use it properly. This happens because:

- ▶ The pancreas does not make any or enough insulin
- ▶ The insulin does not work properly
- ▶ Sometimes it can be a combination of both

Glucose comes from the digestion of carbohydrates and from the liver, which makes glucose. Carbohydrates include:

- ▶ Bread, rice, potatoes, chapattis, cereal, pasta
- ▶ Sugar and other sweet foods

Insulin is the hormone produced by the pancreas that helps glucose move into the body's cells. The body's cells need glucose for heat and energy. Insulin acts as the 'key' to 'unlock' the cells to allow the glucose in. Once the door is 'unlocked' the glucose can enter the cells where it is used as fuel for energy. When insulin is not present or does not work properly, glucose cannot get into the cells and builds up in the blood stream.

Type 1 diabetes

Type 1 diabetes develops if the body stops producing insulin. Type 1 diabetes usually appears before the age of 40 years and most students with diabetes will have Type 1 diabetes.

Nobody knows why this type of diabetes develops. It is not caused by eating too much sweets and sugar and there is nothing a student with Type 1 diabetes or their parents could have done to prevent it. More than 2,500 school-age children in Ireland have Type 1 diabetes. It is important to note the incidence of Type 1 diabetes in childhood in Ireland is increasing.

Type 2 diabetes

Type 2 diabetes develops when the body can still make some insulin but not enough, or when the insulin that is produced does not work properly (known as insulin resistance). In most cases this is linked with being overweight. Type 2 diabetes is more common in adults and there is a higher incidence in people from Africa and South Asia. However, recently, more children and young people are being diagnosed with the condition, some as young as seven years.

Signs and symptoms of Type 1 diabetes

If diabetes goes untreated, the body starts breaking down its stores of fat and protein to try to release more glucose but this glucose still cannot get into the cells because of the absence of insulin.

As this glucose accumulates in the blood stream, the body tries to excrete it in urine. This is why people with untreated or poorly managed diabetes often pass large amounts of urine, are extremely thirsty, may feel tired and lose weight.

The classic symptoms of diabetes are:

- ▶ Thirst
- ▶ Lethargy
- ▶ Frequent urination
- ▶ Weight loss

Medication and treatment

Medication for Type 1 diabetes

Type 1 diabetes is treated with insulin. Insulin cannot be taken by mouth because the digestive juices in the stomach destroy it. Insulin treatment for Type 1 diabetes is subcutaneous (under the skin) insulin of varying frequency but may be up to four injections a day or via a pump device.

To achieve optimum control

Students with Type 1 diabetes will need to test their blood glucose levels at school to help their diabetes management and prevent acute problems. The dose of insulin each student needs is dependent on these results. If a student has Type 1 diabetes, regular insulin is essential to maintain life and they must have their insulin as recommended by their healthcare team.

Most students with diabetes will use a pen-like device to administer their insulin but it is getting more common for insulin pumps to be used. The decision about which system to use will be decided by the student, their family and the student's diabetes team.

Insulin pens

Students are more likely to have a pen like device (known as an insulin pen) but a syringe and needle can also be used by some to administer insulin.

Using cold insulin can make the injection more painful so the insulin the student is currently using should be kept at room temperature. Spare medication not currently in use, should be stored in a fridge. After removing from the fridge, insulin can be used for up to a month after which it should be discarded even if the cartridge is not empty and a new supply started. The amount of insulin the student needs to keep at school will depend on how much insulin they are prescribed.

Extreme temperatures will destroy insulin. Therefore, insulin pens should not be kept in direct sunlight, near a radiator or other heat sources. The student's parents should talk to the school and come to an agreement about where the insulin should be kept. This could be in a named container in a central but accessible place or when the student is mature enough, kept on their person or in their schoolbag.

Needle disposal

The needles for insulin pens need to be changed after each injection. Students with diabetes who use insulin pens should have access to a special sharps disposal container to drop needles in after injecting insulin or after doing a blood test. A sharps box can be provided to the school by the parents and replaced when full. It must be stored in a safe place and this can be a locked cupboard when not in use for safe keeping and should be accessible to the student when they need to take their insulin.

Some students carry a needle clipper, a small device that snips and collects the sharp ends of needles after use and this can be carried by the student (if mature enough to do so).

Insulin pumps

Insulin pump therapy is another method to administer insulin. An insulin pump continuously infuses insulin into the subcutaneous tissue (the layer of tissue just beneath the skin).

An advantage of insulin pump therapy is that for some students it can help improve their diabetes control and minimise the frequency of low blood sugars. It can also give

students with diabetes more freedom with insulin, food and activity levels as the pump mimics the action of the pancreas.

How an insulin pump works

Insulin pumps are usually worn 24 hours a day but can be disconnected for a short time if necessary, for example, during some contact sports and swimming.

An insulin pump does not test blood glucose levels and each student who uses a pump:

- ▶ Must learn to set the insulin dose themselves according to their diet, activity and blood glucose levels or have help from a designated person if adjustment is needed during school hours
- ▶ Needs to test their blood glucose levels at least four times a day or as instructed by their diabetes team, in order to give them the information they need to set the right dose on the pump for them

Medication for Type 2 diabetes

Type 2 diabetes is mainly treated with lifestyle changes such as a healthier eating, weight loss and increased physical activity. However, tablets and/or insulin may sometimes be required to achieve normal blood glucose levels in students with Type 2 diabetes.

Managing the condition

Although diabetes cannot be cured, it can be managed very successfully. An essential part of managing diabetes is having a healthy lifestyle: eating a healthy diet that contains the right balance of foods and taking regular physical activity – the recommendation for all children and young people is 60 minutes of physical activity per day.

- ▶ **Students with Type 1 diabetes** need insulin for the rest of their lives. They also need to eat a healthy diet that contains the right balance of foods: a diet that is low in fat (once over five years old), low in sugar and salt and contains plenty of fruit and vegetables.

- ▶ **Students with Type 2 diabetes** need to eat a healthy diet that is low in fat (once over five years old), low in sugar and salt and contains plenty of fruit and vegetables.

If it is found that this alone is not enough to keep their blood glucose levels within the target range, they may also need to take medication.

Elements of Effective Diabetes Management

- ▶ Monitoring blood glucose/sugar levels
- ▶ Understanding hypoglycaemia and its treatment
- ▶ Understanding hyperglycaemia and its treatment
- ▶ Regular healthy meals and snacks
- ▶ Regular physical activity
- ▶ Administration of insulin
- ▶ Planning for special events
- ▶ Planning for emergency events
- ▶ Dealing with emotional and social issues

Lunch or snack breaks

Students with Type 1 diabetes need to eat at regular intervals. A missed meal or snack can lead to hypoglycaemia. It is important to know the times a student with diabetes needs to eat and make sure they keep to these times. Children and young people must be allowed to finish their lunch and snacks completely before going out to the yard. They may need to have their lunch at the same time each day. If it is necessary for a student with diabetes to eat or drink in class, it is important to discuss with the

student how they feel about having their diabetes explained to the class to enable other students to understand more about their condition and avoid any misunderstandings.

Students with Type 2 diabetes will not have the same need as those students with Type 1 diabetes for snacks as they may need to lose weight and they are also not so susceptible to hypos (blood sugar less than 4 mmol).

Please note: the term mmol used throughout this document, refers to the unit of measurement on blood glucose meters that a person with diabetes uses to check their blood glucose levels.

The normal blood glucose levels are 4 to 7 mmol.

Each student will have an agreed target range with their diabetes team for their blood glucose levels which may differ from the 4 to 7 mmol range.

Blood testing

Most students who are treating their diabetes with insulin will need to test their blood glucose levels on a regular basis. At school this may be:

- ▶ Before or after physical activity
- ▶ Before a meal
- ▶ Anytime they feel that their blood glucose level is falling too low or climbing too high

Specific blood glucose targets will be set by the diabetes team for each student and a decision will be made for each student in their Healthcare Plan what to do if the blood glucose levels are out of target.

A blood glucose meter is used to test blood glucose levels. A test strip is inserted into a small meter. The student then pricks their finger using a lancet and a small drop of blood is applied to the test strip. Older students with diabetes will usually want to keep their testing equipment with them so they can test their blood glucose if and when needed. The lancet (finger pricker) and test strip are disposed of in a sharps box (the same container students use for disposing their insulin pen needles).

A blood glucose meter is not a device to be 'shared' as it is a single, named-person device.

If recommended by the student's doctor, it is medically preferable to permit students to check their blood glucose levels and respond to the result in the classroom, at any other school location or school activity. Taking immediate action is important so that symptoms do not get worse and the student doesn't miss time away from the classroom.

Advantages of checking blood glucose levels in the classroom

- ▶ The student experiences fewer stigmas as blood glucose monitoring loses its mystery when handled as a regular occurrence in front of classmates
- ▶ It is safer for students because less time is lost between recognizing symptoms, confirming low blood glucose and obtaining treatment with a fast acting sugar followed by a snack or meal
- ▶ The student isn't at risk of having a hypo while alone in the bathroom
- ▶ The student achieves better glucose control which will improve their ability to concentrate and learn. It will also help to prevent long term complications of high blood glucose and acute complications of high and low blood glucose
- ▶ The student gains independence in diabetes management
- ▶ The student spends less time out of the class

Insulin during school hours

Although many students at school may start on a twice daily injection regime of insulin at breakfast and early evening, regimes alter depending on the student's needs. Some students may need to have an injection during the school day, for example before lunch or they may use an insulin pump. It is preferable that the insulin injection is taken/administered in the student's immediate environment. It is unusual and may be inappropriate for a student to have to use a first aid room to take their insulin if they are happy to inject discreetly at the table or if the first aid room is a long way from where the student eats.

Insulin injections – some types of insulin are given immediately before eating so the student may need to inject discreetly at the meal table.

Insulin pumps – are attached 24 hours a day and they deliver a set dose of rapid-acting insulin continuously. The student with diabetes will also need to 'boost' the dose of insulin from the pump at mealtimes having worked out the amount of carbohydrate they have eaten. The bolus dose of insulin can be given before, during or

after the meal, depending on the student's requirements. Older students will usually do this themselves, for younger children discussion with parents and their healthcare professional is needed about how this is managed at school.

Diabetes management outside school

Children and young people with diabetes should have an annual review with their diabetes team to discuss their diabetes management. They should also have reviews every three to four months. A student's diabetes nurse specialist may visit the school on the teacher and parents request to discuss the management of diabetes in school. The availability of the diabetes nurse specialist will depend on local services.

School excursions

Going on school excursions should not cause any real problems for students with diabetes. They need to remember to take their blood glucose meter, insulin and injection kit with them, even those who would not usually take insulin during school hours in case of any delays over their usual injection time. They will have to eat some starchy food following the injection so should also have some extra starchy food with them. They should also take their usual hypo treatment with them. For young children, it may be more suitable for the teacher to carry this equipment. Students with diabetes must not be excluded from school excursions on the grounds of their condition.

Exercise and physical activity

Exercise and physical activity is good for everyone, including students with diabetes. The majority of students with diabetes should be able to enjoy all kinds of physical activity.

It should not stop them from being active or being selected to represent their school or other sporting teams. However, all students with diabetes need to prepare more carefully for all forms of physical activity than those without the condition, as all types of activity use up glucose.

Tips for supervising students with Type 1 diabetes during physical activity

Before an activity

- ▶ Ensure the student has time to check their blood glucose levels
- ▶ Inform the student how energetic the activity will be
- ▶ Check that the student with diabetes has eaten enough before starting an activity, to prevent their blood glucose dropping too low and causing a hypo
- ▶ Some students with diabetes may also need to eat or drink something during and/or after strenuous and prolonged exercise to prevent their blood glucose level dropping too low and causing a hypo
- ▶ Ensure the student has access to quick acting carbohydrate such as Lucozade
- ▶ If the test shows a blood glucose level of 15 mmol or above for a sustained period, a urine or blood test for ketones (the by-product of the body burning fat for energy) may need to be performed before commencing any physical activity. If students have had their correct insulin injection and are feeling well, it may be safe to exercise but the blood glucose will need to be monitored carefully

While it is important that teachers keep an eye on students with diabetes, they should not be singled out for special attention. This could make them feel different and may lead to embarrassment.

If a student with diabetes does not feel confident participating in physical activity, teachers should speak to the student's parents to find out more about the student's situation. The majority of students should be able to take part in any sport, exercise or physical activity they enjoy, as long as they are enabled to manage their diabetes.

During an activity

It is important that the person conducting the activity is aware that there should be glucose tablets or a sugary drink nearby in case the student's blood glucose level drops too low. If the activity will last for an hour or more, the student may need to test their blood glucose levels during the activity and act accordingly.

If a hypo occurs while a student is taking part in an activity, they should take immediate treatment. Depending on the type of activity, the student should be able to continue

once they have recovered. A student's recovery time is influenced by a number of factors, including how strenuous the activity is and how much the student has eaten recently.

The student should check their blood glucose 10 – 15 minutes after the hypo. If the blood glucose is still below 4 mmol, repeat the steps of treating hypoglycaemia. If the blood glucose level has risen above 4 mmol, the student should eat a long-acting starchy food. (See Diabetes Emergency Plan).

After an activity

Students with diabetes may need to eat some starchy food such as a sandwich or a bread roll but this will depend on the timing of the activity, the level of exercise taken, when their insulin injection is due and whether a meal is due.

Students who use insulin pumps

Pumps may need to be disconnected if taking part in contact sports. Although some may be waterproof, students may prefer to disconnect while swimming.

Pumps cannot be disconnected for long periods of time because the pump uses rapid-acting insulin. Generally, the rule is that they should not be disconnected for more than an hour. While the pump is disconnected, no more insulin will enter the body and the blood glucose level will gradually begin to rise.

To ensure insulin levels are correct after physical activity, check that the student remembers to reconnect their pump as soon as the activity is over and tests their blood glucose levels. In the case of extended activity, it is important to check how the student manages their glucose levels.

Students with Type 2 diabetes

If a student has Type 2 diabetes but they are not on insulin, it is unlikely that they will have a hypo during exercise. As these students are generally overweight, physical activity should be actively encouraged.

Complications

Hypoglycaemia (or hypo / low)

Hypoglycaemia occurs when the level of glucose in the blood falls too low (usually under 4 mmol). When this happens, a student with diabetes will often experience warning signs which occur as the body reacts to the low glucose levels.

Hypoglycaemia can be caused by:

- ▶ A missed or delayed meal or snack
- ▶ Not enough food especially carbohydrate
- ▶ Strenuous or unplanned exercise
- ▶ Too much insulin
- ▶ Sometimes there is no obvious cause

Symptoms of hypoglycaemia:

- ▶ Sweating
- ▶ Paleness
- ▶ Weakness or dizziness
- ▶ Headache and/or tummy pain
- ▶ Hunger
- ▶ Mood change, especially angry or aggressive behaviour
- ▶ Anxiety or irritability
- ▶ Inability to concentrate

Young children may not be able to recognise these signs and it is easy to think a student is being undisciplined when in actual fact they are having a hypo.

- ▶ **Please review the Diabetes Emergency Plan**

Severe Hypoglycaemia

Severe hypoglycaemia is rare at schools and generally can be prevented by prompt treatment when the early signs of hypoglycaemia are recognised. When hypoglycaemia is severe, school personnel must respond immediately.

Glucagon is a hormone that raises blood glucose levels by causing the release of glycogen (a form of stored carbohydrate) from the liver. It is administered when the student's blood glucose levels go so low that the student loses consciousness or experiences seizures. Although Glucagon may cause nausea and vomiting when the student regains consciousness, it does not harm the student. How much is given to the student is decided by the student's diabetes team. Training in the administration of glucagon for school staff can be given by the student's diabetes nurse specialist. The student's parents supply the school with the glucagon kit. Glucagon is usually stored in a fridge. It should be stored in a safe place in the school with easy access to it in an emergency.

Glucagon should not be left in the school over the school holidays and a new Glucagon can be brought into the school at the start of the new term.

Hyperglycaemia is the term used when the level of glucose in the blood rises above 15mmol and stays high for hours.

If the blood glucose levels remain high and untreated, the student may become very unwell and develop Diabetic Ketoacidosis.

Diabetic Ketoacidosis is recognised by symptoms such as:

- ▶ Deep and rapid breathing (over-breathing)
- ▶ Nausea and Vomiting
- ▶ Drowsiness
- ▶ Breath smelling of acetone, e.g. nail polish remover
- ▶ Abdominal pain

These symptoms are an emergency. The parents must be contacted and 999 called for the emergency services.

The sick student at school

Students with diabetes are no more susceptible to infection or illness than their classmates without diabetes.

When a student with diabetes become ill with the usual fevers and other childhood sicknesses, the blood sugar balance is likely to be upset. Careful monitoring with blood glucose testing and extra insulin may be required. Such illness management is the responsibility of the parents/ guardians not school personnel.

For this reason, when a student with diabetes becomes ill at school, the parents/ guardians should be notified immediately so that they can take appropriate action.

Vomiting and inability to retain food and fluids are serious conditions since food is required to balance the insulin. If the student is vomiting, contact the parents/guardians immediately.

Resources

Diabetes Federation of Ireland is the national charity dedicated to providing support, education and motivation to all people with diabetes. It also raises public awareness of diabetes and its symptoms and funds Irish based research into finding a cure for diabetes.

Services provided by the Diabetes Federation of Ireland include:

- ▶ Patient support via our national telephone helpline
- ▶ Information via leaflets, information packs, website and quarterly Diabetes Ireland magazine
- ▶ Support for children, young people and parents with diabetes via our SweetPea Club, children and adolescent summer adventure outings, family weekends and parent support groups
- ▶ Direct health education for people with diabetes through public meetings and structured education programmes
- ▶ Financial services: negotiated motor and health insurance schemes
- ▶ Advocate to improve diabetes services and fight against discrimination of people with diabetes
- ▶ Professional support via professional meetings and quarterly Diabetes Professional magazine
- ▶ Public awareness: Health Awareness Exhibition and other initiatives
- ▶ Health Promotion initiatives including school awareness, diabetes workplace awareness, early detection and prevention initiatives and diabetes screening
- ▶ Funding medical research in Ireland

Contact Details

Diabetes Federation of Ireland, Tel: 1850 909 909 or
01-836 3022 76

Lower Gardiner Street,

Dublin 1.

Email: info@diabetes.ie

Website: www.diabetes.ie

Western Regional Office, Tel: 071 9146001
Diabetes Federation of Ireland,

Email: wro@diabetes.ie 1 Wine Street, Sligo.

Southern Regional Office, Tel: 021-4274229

Diabetes Federation of Ireland, Email:
sro@diabetes.ie 32 Grande Parade, Cork.

Managing Epilepsy at School

*Prepared by Brainwave-
The Irish Epilepsy Association*



Epilepsy Emergency Plan

First aid for seizures is quite simple and can help prevent a student from being harmed by a seizure.

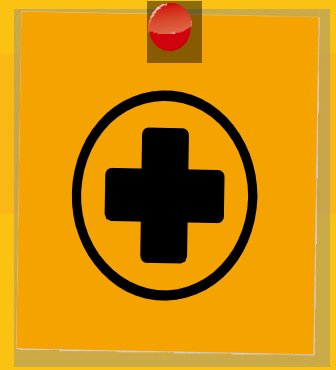
Student's Name:

Type of Seizure:

Class:

Family Contact:

Siblings in the School:



+ First Aid for Seizures

FIRST AID WILL DEPEND ON THE INDIVIDUAL STUDENT'S EPILEPSY AND THE TYPE OF SEIZURE THEY ARE HAVING.

Some general guidance is given on this page. This is a sample plan and please fill out appropriately for each student but most of all, it is important to keep calm and know where to find help.

When to call an ambulance - dial 112 or 999

- ▶ If you know it's the student's first seizure
- ▶ The seizure continues for more than 5 minutes
- ▶ Or longer than is normal for that individual
- ▶ One seizure follows another without the student regaining awareness between seizures
- ▶ The student is injured during the seizure
- ▶ You believe the student needs urgent medical attention

PLEASE NOTE THAT SOME STUDENTS MAY BE PRESCRIBED EMERGENCY MEDICATION AND PLEASE REFER TO THEIR HEALTHCARE PLAN FOR DETAILS

TONIC-CLONIC SEIZURES

DO

- ▶ Note the time
- ▶ Protect the student from injury (remove any harmful objects nearby)
- ▶ Cushion the head
- ▶ Wipe away excess saliva
- ▶ Gently put the student in the recovery position when the seizure has ended
- ▶ Stay with them until recovery is complete
- ▶ Calmly reassure the student

DON'T

- ▶ Restrain the student
- ▶ Put anything in their mouth
- ▶ Try to move them unless they are in danger
- ▶ Give the student anything to eat or drink until they are fully recovered

SEIZURES INVOLVING ALTERED CONSCIOUSNESS OR BEHAVIOUR

DO

- ▶ Guide the student from danger
- ▶ Stay with the student until recovery is complete
- ▶ Calmly reassure
- ▶ Explain anything that they may have missed

DON'T

- ▶ Restrain the student
- ▶ Panic
- ▶ Assume the student is aware of what is happening or what has happened
- ▶ Give the student anything to eat or drink until they are fully recovered

First Aid For Seizures



TONIC-CLONIC SEIZURES

DO

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- ▶ Protect the student from injury (remove any harmful objects nearby)
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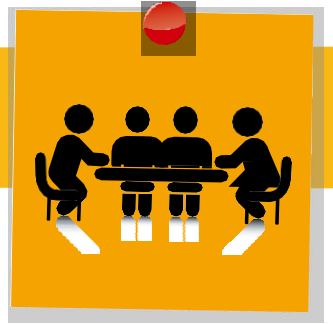
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- ▶ You believe the student needs



For further information

www.epilepsy.ie

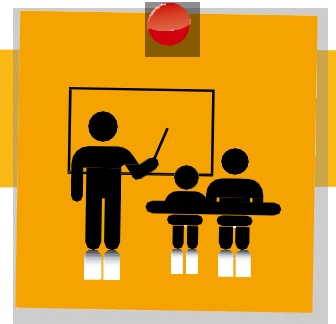
Actions for the Board of Management



The Board of Management/Principal have responsibility to:

- ▶ Promote a supportive learning environment for students with epilepsy. This includes understanding of the potential cognitive impacts of epilepsy and its treatment on learning. Also, it includes extending support to the student to minimise disruption to learning from the seizures and from missed schooling
- ▶ Develop school guidelines for epilepsy management during school and school outings
- ▶ Allocate sufficient resources to manage students with epilepsy
- ▶ Identify all staff members who have responsibility for the student with epilepsy
- ▶ Delegate a staff member to ensure medication is stored safely, check the expiry date of epilepsy medicines kept at school and maintain the school chronic conditions register
- ▶ Allow adequate time for epilepsy management training for staff with responsibility for students with epilepsy
- ▶ Alert all school-related staff members who teach or supervise a student with epilepsy. Ensure that they, including the bus driver and substitute personnel are familiar with emergency procedures
- ▶ Include epilepsy awareness as part of health education
- ▶ Support and implement the Emergency Epilepsy Plan agreed by the school and the student's parents
- ▶ Advise the student and their parents of the Reasonable Accommodations provision in State examinations and of the arrangements in the event of seizures during in-house examinations

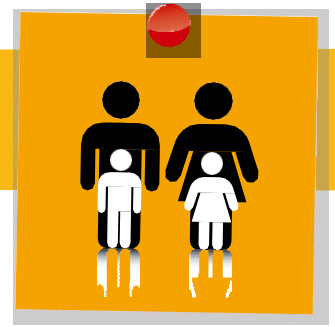
Actions for Teachers



The designated teacher has responsibility to:

- ▶ Participate in the school meeting with the parent(s)/guardian(s) and the principal.
- ▶ Work with the school team and the parents to develop a written Healthcare plan including the Epilepsy Emergency Plan specific for the student
- ▶ Be prepared to recognise the triggers, signs and symptoms of seizures 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 epilepsy effectively and safely at school
- ▶ Provide alternative options for vigorous physical activity
- ▶ Promote inclusion of the student with epilepsy in all school activities that are appropriate and safe to participate in, including sports, extracurricular activities and school trips in accordance with the guidance of the student's medical team
- ▶ Ensure that emergency medication such as buccal midazolam is stored in a safe place in the school and readily available in the event of a seizure
- ▶ Ensure that the student has the right to privacy when recovering from a seizure if this is needed. However the student should be checked on at regular intervals
- ▶ Provide information for substitute teachers that communicates the day-to-day needs of the student with epilepsy and the Epilepsy Emergency Plan
- ▶ Attend Epilepsy management training if deemed necessary
- ▶ Be aware of the potential impact of seizures and medication on a student's memory and overall school performance

Actions for Parents/Guardians



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

- ▶ Inform the school principal and their child's teacher that their child has epilepsy
- ▶ Attend and participate in the school meetings and provide specific information about their child's epilepsy including seizure type, pattern, triggers, management and drug regime
- ▶ Provide accurate emergency contact details and an up-to-date Healthcare Plan and Emergency Plan for their child including details of the GP, and local A&E service and conditions under which an ambulance is to be called
- ▶ Inform school staff of any changes in their child's health status
- ▶ Provide the school with the necessary information and emergency medication to meet the student's needs within school. Replenish supplies of emergency medication as needed. A ventilated pillow may be supplied in the case of a student who may need to sleep after a seizure
- ▶ Ensure their child's medication and any spare medication provided is labelled with their full name and is within the expiry date
- ▶ Provide information about their child's triggers which are relevant to the daily schedule e.g. impact of skipped meals. These can be tailored to fit into the daily school timetable
- ▶ Agree that the student with epilepsy will take part in all school activities, e.g. swimming, outings and extracurricular activities that are safe and appropriate for them to do. If there are concerns as to safety of a specific activity it is best to be guided by the student's neurology team
- ▶ Where the student is on a special diet for epilepsy such as the Ketogenic or Modified Atkins/Low GI Diet, provide the school with appropriate treats for their child for special events such as parties

What is epilepsy?

Epilepsy is a tendency to have seizures (sometimes called fits). A seizure is caused by a sudden burst of intense electrical activity in the brain. This causes a temporary disruption to the way that messages are passed between brain cells so the brain's messages briefly pause or become mixed up. There are many different kinds of epilepsy and about 40 different seizure types. Some of the common types of seizure are described in signs and symptoms.

Epilepsy can affect anyone at any age. It can have an identifiable cause such as a blow to the head, meningitis or a brain tumour but for the majority of people there is no known cause. In some cases, the tendency to have seizures runs in families but having a parent with epilepsy does not necessarily mean a child will have the condition. There are approximately 1 in 200 children with epilepsy in Ireland.

Signs and symptoms

The brain is responsible for controlling the functions of our bodies. What a child or young person experiences during a seizure will depend on where in the brain the epileptic activity begins and how widely and rapidly it spreads. For this reason, there are many different types of seizure and each student with epilepsy will experience the condition in a way that is unique to them. Seizures can happen at any time and they generally only last a matter of seconds or minutes after which the brain usually returns to normal.

Seizures can be divided into two groups:

- ▶ Generalised
- ▶ Partial (sometimes called 'focal')

Frontal lobe (motor)

Possible symptoms:

- ▶ uncontrolled jerking of one arm or leg
- ▶ head and eyes turning to one side

Parietal lobe (sensory)

Possible symptoms:

- ▶ tingling or warmth down one side of the body

Temporal lobe (memory, emotions etc)

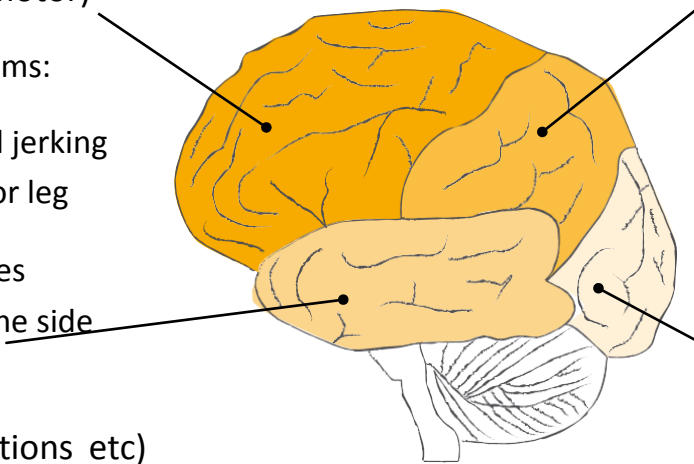
Possible symptoms:

- ▶ feeling of intense fear or happiness
- ▶ vivid memory flashbacks
- ▶ intense deja vu
- ▶ intense smells or taste
- ▶ unpleasant sensation in the stomach

Occipital lobe (visual)

Possible symptoms:

- ▶ flashing lights, balls of light or colours in one half of vision



Generalised seizures

Some seizures affect the whole or most of the brain and are called generalised seizures. These will always involve a loss of consciousness although the child or young person will not necessarily fall to the floor.

Absence seizures

In an absence seizure the person stops what they are doing and may stare, blink or look vague for just a few seconds. Absence seizures can sometimes be mistaken for daydreaming or inattention but in fact the person has lost consciousness. Absence seizures are one of the most common seizure types in children and young people and can occur several times a day. You may be able to help your students who have absence seizures by providing written information at the end of a lesson and helping them catch up on things they have missed.

Myoclonic seizure

These seizures involve sudden contractions of the muscles. The seizure can be a single movement or a series of jerks. Myoclonic seizures most commonly affect the arms and sometimes the head but can affect the whole body. Usually no first aid is needed unless the student has been injured.

Tonic-clonic seizures

Tonic-clonic seizures are the most widely recognised epileptic seizure. In a tonic-clonic seizure, the student loses consciousness, the body stiffens and then they fall to the ground. This is followed by jerking movements sometimes called convulsions.

Sometimes the student will be incontinent (lose control of their bladder or bowel). After a few minutes, the jerking movements usually stop. The student may be confused and need to sleep after the convulsive movements are over for minutes or even hours, until recovery is complete. However, some students will recover quickly.

Atonic seizures

In atonic seizures all muscle tone is lost and the person simply drops to the ground, hence the other name for this type of seizure: 'drop attack'. When a student experiences an atonic seizure, the body goes limp and they usually fall forward – this can lead to them banging their head. Although they fall heavily, the student can usually get up again straight away.

Partial seizures

In some types of seizure, only part of the brain is affected: these are called partial seizures. Sometimes a partial seizure can turn into a generalised seizure and some types of partial seizure can act as a warning or 'aura' for a generalised seizure.

Partial seizures can be either simple where consciousness is not impaired or complex where consciousness is impaired to some extent.

Simple partial seizures

The symptoms depend on the area of the brain affected. For example, a student experiencing a simple partial seizure may go pale and/or sweaty, may report tingling or a strange smell or taste or experience déjà vu. During a simple partial seizure, the student remains fully conscious and the seizure is brief. Some students experience a simple partial seizure on its own or it may be a warning that the seizure may spread to other parts of the brain.

Complex partial seizures

The specific symptoms of a complex partial seizure depend on which area of the brain the seizure is happening in. In a complex partial seizure, it can appear that the person is fully aware of what they are doing but they may act strangely, for example: chewing,

smacking their lips, plucking at their clothing or just wandering aimlessly. It is important to remember that a person experiencing a complex partial seizure cannot control their behaviour and that their consciousness is altered so they cannot follow instructions and may not respond at all.

Status epilepticus

Sometimes a student with epilepsy can experience a longer seizure or a series of seizures without regaining consciousness. The "five minute rule" is the cut off point at which either emergency medication should be administered or medical attention sought.

If a seizure (or series of seizures) lasts 5 minutes without recovery it has the potential to become status epilepticus which is a medical emergency. Prompt intervention at 5 minutes is required to prevent this. Status epilepticus occurs when a seizure continues for more than 30 minutes and it is a medical emergency as the stress on the student's body may lead to brain damage. Some people are prescribed emergency medication

such as rectal diazepam or buccal midazolam which aim to bring them out of the seizure before they enter 'status epilepticus'. These need to be administered by a properly trained member of staff. Training can usually be provided by the public health nurse in your area or contact your local Brainwave office for further information.

The effect of epilepsy on the student at school

There are various considerations for students with epilepsy especially if their seizures are not controlled. These might include safety in sports, activities and practical subjects. Storage and administration of medicines may also need to be planned for.

Seizures are just one aspect of epilepsy that can affect education. A student with epilepsy may experience many seizures during a school day and this disruption can make learning a difficult process. Epilepsy can have other effects that are not easily observed during the school day such as night-time seizures that can leave a student exhausted and unable to concentrate and social or psychological effects.

Intellectual disabilities and other conditions

Most students with epilepsy are just as capable of learning as other students and some are high achievers. However, students with epilepsy can struggle academically in comparison to their intellectual level and some have problems with learning and attendance. Some students with epilepsy have intellectual disabilities and need a high level of support. Rates of epilepsy are higher among students with other conditions such as autism, cerebral palsy, hydrocephalus, acquired brain injury, ADHD and intellectual disability.

Students with epilepsy can experience a range of difficulties at school. Some reasons why students with epilepsy can have difficulties at school are:

- ▶ Difficulty concentrating
- ▶ Working more slowly than others
- ▶ Being too tired

Epilepsy can lead to variation in a student's performance and may also be associated with developmental delay and learning difficulties. Students and their families may find these effects have an impact socially and sensitive input from school staff is needed to prevent damage to the student's self-esteem.

Behavioural and learning difficulties in and outside school can be due to:

- ▶ Frequent and/or prolonged seizures
- ▶ Damage to the brain
- ▶ Side effects of epilepsy medication

They can also result from a low level of epileptic activity in the brain which can disturb brain function without causing a seizure.

People with epilepsy often complain of a poor memory and the reasons for this may vary. Epileptic activity or underlying damage to the brain may cause memory problems. Some anti-epileptic drugs may cause side effects including memory problems, drowsiness, dizziness, headache or disturbances to vision.

Having many seizures or severe seizures can cause damage to the brain and this can lead to learning disabilities. Epilepsy can occur in combination with other factors and sometimes epilepsy and learning disabilities can both be a part of a syndrome. (A syndrome is a group of signs and symptoms that, added together, indicate a particular medical condition)

Medicines and treatments

Regular medication

The majority of people with epilepsy take regular medication with the aim of controlling their seizures. Some students with difficult to control epilepsy may take several different types of medication. Generally, these can be taken outside school hours. Side effects can include drowsiness, poor memory and concentration, confusion, irritability, over-activity and weight gain.

At school

There may be some students who will require the administration of medication as part of their Healthcare Plan or Emergency Epilepsy Plan. Rescue medication such as buccal midazolam may be prescribed to some students to stop seizures that last over 5 minutes, the details of which should be included in the student's Emergency Plan. For further information on buccal midazolam please contact your local Brainwave office.

It is important to remember that students with epilepsy may appear to display inappropriate behaviour or lack of concentration but these may be due to their medication and/or condition.

Epilepsy surgery

One alternative to long-term medication for a small number of children and young people is epilepsy surgery. This usually involves an operation to remove a small amount of brain tissue in the area involved in abnormal activity, with the aim of stopping or reducing seizures.

At school

When a child or young person is being considered for epilepsy surgery, they will have a series of tests to find out if they are suitable. This may be a long process and can be worrying and distressing. After the tests, the doctor will decide whether surgery is the best

option and if so, the child or young person will have the surgery and may then gradually reduce their medication. The school may need to be aware that a student is likely to have several periods out of school before and after the surgery. School staff should also be aware of the psychological impact of the tests, surgery and coming to terms with the outcome of the surgery, whether or not this means being free from seizures.

Vagus nerve stimulation (VNS)

VNS is another treatment for epilepsy where a small electric impulse generator is implanted under the skin below the left collar bone in an operation. The generator sends electrical signals along electrodes that are attached to the vagus nerve in the neck to the brain. The signals aim to stop or prevent seizures.

At school

The surgery to implant the VNS generator is minor but the student will need some time away from school to recover. Using a VNS device can have side effects such as hoarseness, sore throat, coughing or shortness of breath.

Ketogenic diet

The ketogenic diet is a treatment for students with difficult to control epilepsy. The diet uses high fat and low carbohydrate levels to mimic the effect of starvation on the body. The diet must be carried out under close medical supervision.

The Ketogenic Diet is a **special diet, high in fat**, which can have an antiepileptic effect. The reason for this is not clearly understood. This diet is not suitable for every student.

Students who are on this diet must be carefully monitored by hospital doctors and a specially trained dietician. Parents need to be aware that it can be particularly unpleasant and difficult. There are several issues to be considered before commencing the diet to ensure safety, optimal growth and development.

At school

A student who is on the ketogenic diet will usually bring their own food to school and may need supervision at school breaks and meal times. It is very important that

students on the ketogenic diet do not eat or drink anything that is not part of their diet as this could lead to seizures. It would be helpful for other students to be aware of the reason for the student's diet.

Managing the condition

Individualised Healthcare Plans

As epilepsy affects individuals differently, any policies or health care plans need to reflect the student's individual needs. Schools need to agree an individualised

Healthcare Plan for each student. This should be done in consultation with the student, their parents/guardians and where appropriate should incorporate guidelines from the hospital team.

The Healthcare Plan should address issues such as:

- ▶ The types of seizures the student is likely to experience
- ▶ How to recognise the specific seizures that apply to the student
- ▶ What to do- a detailed explanation of appropriate first aid for each type of seizure that the student may have
- ▶ Define what is an emergency in the case of the individual student and what action is to be taken and when. This section should be clear about issues such as: the typical duration of seizures, the typical recovery period, the point at which seizures are considered prolonged, any potential complicating factors (e.g. other health issues), other indicators of emergencies (e.g. injury) administration of emergency medication and contacting emergency services
- ▶ Additional relevant educational information, learning difficulties or disability, comprehension and memory issues
- ▶ Interruptions to school attendance and learning and any measures that may be availed of to support the student in the respect of same e.g. learning support, resource, home tuition
- ▶ Reasonable accommodations to permit the student to participate in activities such as swimming or practical classes requiring supervision
- ▶ Any relevant information that is pertinent to best practice in providing care to the student

Disability and Education Legislation

In terms of the legislation, epilepsy is considered to be a disability under the term physical disability. Current legislation requires that reasonable accommodations are made to prevent issues of discrimination regarding access issues. Examples of reasonable accommodations may include the provision of an LCD or TFT monitor for a student with photosensitive epilepsy. Other accommodations may extend to providing a quiet place for the student to recover from their seizure rather than sending them home.

Psychological and social factors

As with any student, those with epilepsy may experience psychological and social factors which can affect their behaviour and learning. These may range from issues of stigma and exclusion to issues of confidence, fear and anxiety, self esteem, memory and concentration. Social Personal and Health Education (SPHE) classes, science projects and a school talk from Brainwave, The Irish Epilepsy Association are all among the potential opportunities for raising awareness of epilepsy among other students. Such learning opportunities do not need to identify any individual student as having epilepsy unless they are happy to disclose it but can serve to create a climate of understanding among the school body generally.

Triggers

In many students with epilepsy, seizures happen without warning but in some people certain triggers can be identified. Some examples are given below.

Stress, anxiety or excitement can cause some students with epilepsy to experience more seizures and the seizures can occur before or after the feelings.

In school, factors might include:

- ▶ Worrying about their epilepsy and how it might affect their school life
- ▶ Worrying about exams
- ▶ Excitement/worry about being able to take part in school activities or events
- ▶ Stress caused by being bullied or teased

There may also be factors outside school that cause stress (for example, a difficult home life or bereavement).

Hormonal changes can affect a student's epilepsy. This could include the onset of puberty (in either sex) or seizures associated with menstruation (sometimes referred to as catamenial epilepsy).

Not taking medication as prescribed can lead to changes in a student's epilepsy such as the pattern or severity of their seizures.

Unbalanced diets and skipping meals can lead to low blood sugar levels that in some students with epilepsy, may be a seizure trigger. There is no evidence to suggest that specific foods can trigger seizures. A regular intake of balanced meals is advised. Energy drinks containing caffeine and other stimulating substances can lower seizure threshold and are best avoided.

Late nights, broken sleep or irregular sleep patterns can trigger seizures. Establishing a regular sleep pattern may help.

Alcohol and recreational drugs are increasingly part of many young people's lives. Alcohol can make seizures more likely and worsen the side effects of anti-epileptic medication. Recreational drugs can trigger seizures in students whether or not they have epilepsy. In students with epilepsy they can affect seizure patterns and are often associated with other possible trigger factors.

Some over-the-counter and prescription medicines may make a student more likely to have seizures – always check with the pharmacist.

Illness can make seizures more likely especially when associated with a high temperature. Using measures to lower a high temperature is important for this reason. For some people pain, when severe, can be a trigger also.

Photosensitive epilepsy is the name given to a form of epilepsy in which seizures are triggered by flickering or flashing light, glare and certain patterns. It is often assumed that everybody with epilepsy is photosensitive but only around five per cent of people with epilepsy are. People are typically screened for this when they are being diagnosed and would be advised that they have this form of the condition. Photosensitive epilepsy is most common between the age of 9 and 15 years. High contrast, for example,

black and white stripes, grids, swirls, patterned clothing, blocks of intense red colour, wallpaper patterns, fireworks and sunlight through blinds may also trigger seizures for some students with photosensitive epilepsy.

Flickering from television screens can sometimes trigger seizures for some children and young people with photosensitive epilepsy. Some TV and computer screens such as plasma and LCD are flicker free (but not glare free). The larger the screen the greater portion of the visual field it fills so distance from the screen required is relative to its size. A smaller screen viewed at the recommended distance (8-10 feet) will pose less risk overall.

Unless they are displaying high contrast patterns or material that is flickering or flashing, computers and interactive whiteboards themselves should not trigger seizures for most students with photosensitive epilepsy. This is because they usually either flicker at a rate that is too fast to trigger seizures or do not flicker at all.

In the case of TV, the risk can also be minimised by viewing the screen from at least 2.5 metres (8 feet) away so distancing the student from the whiteboard may also help reduce the risk from any problem image. With computers where close work is necessary and distancing is not feasible, the student should where possible, use a monitor that is flicker free, has an anti-glare screen and is in a well lit area. Web content can now be screened similar to TV but again it has not been universally adopted so caution is advised and it may be wise to stick to trusted sites that have not caused previous problems. Wearing polarised sunglasses outdoors on sunny days can help to remove flickering reflection (e.g. from water). This will help to minimise the risk of seizures occurring although it will not remove it entirely.

Experts in the field of photosensitivity have responded to concerns raised about the use of CFL bulbs and have stated they should not pose a risk. Individual sensitivities however can vary and should be assessed on this basis.

Guidelines for reducing risk to students with photosensitive epilepsy include distance from screen, having good background lighting to offset contrast and using glare reduction screens (although most newer equipment has this feature built in). As other factors are naturally occurring and are hard to control, good guidance is for the student to place one hand over one eye in the event of exposure to an image that can provoke this kind of seizure.

Most people with epilepsy should be aware of possible triggers and know which activities or equipment to avoid. Drawing up a Healthcare Plan in consultation with the student and their parents, can help the school and relevant staff to clarify possible triggers and how to avoid them.

Exercise and physical activity

Exercise and physical activity is good for every student including those with epilepsy.

Some students with epilepsy are advised against taking part in some activities when this is not necessary. With the relevant safety precautions (including qualified supervision where appropriate) students with epilepsy can take part in most, if not all, school activities including sport. Many students with epilepsy have their seizures completely controlled by medicines and do not need to take any greater safety precautions than anyone else.

Indeed, when a child or young person with epilepsy is active they are less likely to have seizures. So, for most people with epilepsy, exercise can be of real benefit. However, a very small number of people with epilepsy find that exercise increases their likelihood of having a seizure. This is usually due to over- exertion. Also, taking up exercise or a sporting activity for the first time or after a long period of inactivity, could affect a student's body weight and metabolism, which in turn could have an effect on their seizure control.

Students with epilepsy may need to speak to their doctor before taking up a new sport or leisure activity, particularly if their seizures are not fully controlled. Things to take into account are the type, severity and frequency of the seizures and known triggers such as stress and excitement. Good communication between schools and young people and their families is important for ensuring that students with epilepsy are fully included in school activities.

Resources

www.epilepsy.ie

Download information and read the latest news and advice about epilepsy.

http://www.epilepsy.ie/index.cfm/spKey/training_for_success.html

Training for Success is Brainwave's Pre-employment Training Programme for people with epilepsy

www.epilepsy.org.uk

Download information and read the latest news from Epilepsy Action in the UK.

Brainwave The Irish Epilepsy Association

Brainwave was established in 1966 by a group of individuals concerned to improve the quality of life of people with epilepsy in Ireland. Over the 45 years since our inception, the Association has grown and expanded and now provides a range of services from headquarters in Dublin and from its network of regional offices.

Mission Statement

Brainwave is committed to working to meet the needs of all its members living with epilepsy.

Objectives

- ▶ To provide support, information and advice to people with epilepsy
- ▶ To provide information and advice to health professionals in dealing with epilepsy
- ▶ To improve public understanding of epilepsy (in order to eliminate fear and prejudice) through awareness campaigns and education programmes
- ▶ To undertake, encourage and assist research into the causes of, cure for and management of epilepsy and into the social and psychological effects of the condition
- ▶ To promote legislative and civil rights for people with epilepsy and to campaign to eliminate all discriminatory practices and policies affecting them
- ▶ To assist in the development of support groups for people with epilepsy in the area of training and employment

- ▶ To provide information on issues related to driving: insurance and changing legislation
- ▶ To provide practical aids to people with epilepsy (pillows, bracelets)
- ▶ To operate as a public forum and an advocate for the condition of epilepsy
- ▶ To raise funds to support its work in an awareness creating manner

Mid West Region

(Counties Limerick, Clare & North Tipperary)

Social Services Centre, Henry Street, Limerick.

061-313 773

brainwavek@epilepsy.ie

Managing Anaphylaxis at School

*Prepared by
Anaphylaxis Ireland*



Anaphylaxis Emergency Plan

• WHEN USING ANAPEN •

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

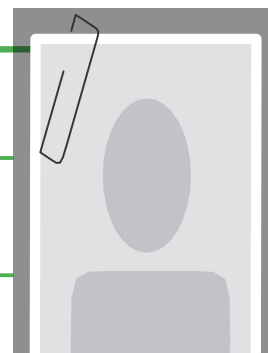


Student's Name:

Class:

Family Contact:

Siblings in the School:



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

Allergic to:

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



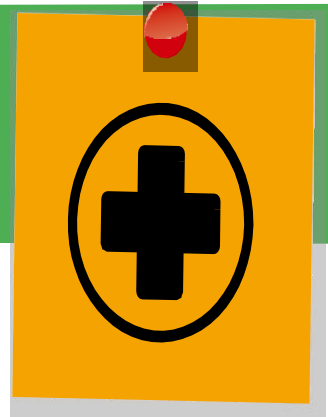
4 Hold Anapen in position for

✚ IF IN DOUBT USE THE ANAPEN ✚

Anaphylaxis Emergency Plan

• WHEN USING JEXT •

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

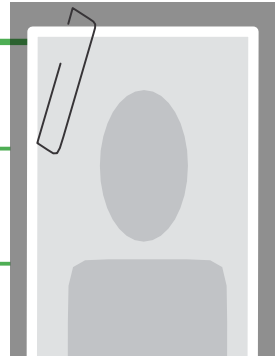


Student's Name:

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 Jext
- ▶ 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

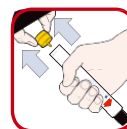
Action for severe reaction

- ▶ Give Jext 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 Jext may be given if no response after 5-15 minutes

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.



3 Place the black injector tip against your outer thigh, holding the injector at a right



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

✚ IF IN DOUBT USE JEXT ✚

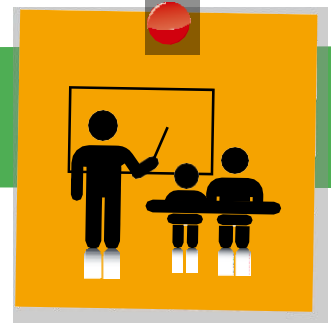
Actions for Board of Management/Principal



The Board of Management/Principal 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 allergens which may cause anaphylaxis in the student

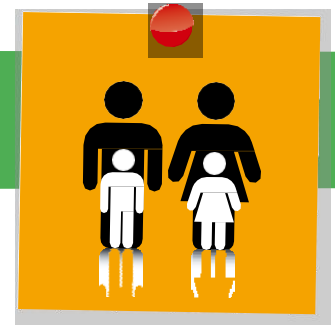
Actions for Teachers/Designated Teacher



The teachers/designated teacher 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 when necessary. 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 deputy-principal including informing them if a 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

Actions for Parents/Guardians



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

- ▶ Inform 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

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



▶ Swollen lips



▶ Nettle rash

These photographs are included only as a guide to show how **some** students may react. The symptoms in these pictures may not be present even though anaphylaxis is occurring.

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 or the 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)

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

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 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 volunteer 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 product

- ▶ 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. craft or technology)

4. Snacks in tuck shops and vending machines

Avoid selling packets of nuts and seeds as a snack. This is because the allergen can be easily carried on the hands of the person eating them and contaminates work surfaces, computers, books etc. While this type of cross-contamination reaction is not likely to be life threatening it can be serious enough to cause disruption to the school and increase anxiety in the student, their parents and school staff

5. Musical Instruments

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

6. 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.

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

This policy was formally adopted by the Board of Management on the 27th February 2018

The policy will be reviewed again in 2021.

Signed: _____ Chairperson

_____ Principal

Date: _____