The following protocols and procedures are as per training completed and certified by HealthCare Ireland as of November 2021.

Protocols ratified by the Board of Management on 10/11/2021

Epilepsy Awareness & Administration of Buccal Midazolam

Epilepsy Awareness 1 – Introduction:

1 What is Epilepsy? – "A tendency to recurrent seizures originating in the brain"

Statistics

- 1:20 people have a single seizure at some time in their life
- around 1:115 people have epilepsy
- anyone can develop epilepsy regardless of age, culture or social class
- epilepsy is more common in people who have an intellectual / learning disability
- approximately 70% become seizure free on preventative treatment

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Causes of Epilepsy: Not always determinable, but possible causes are:

- Structural damage: birth trauma, infections of the brain, injury, substance abuse, tumour, stroke

- Inherited causes: low seizure threshold, rare genetic disorders of which epilepsy is a symptom e.g. tuberous sclerosis

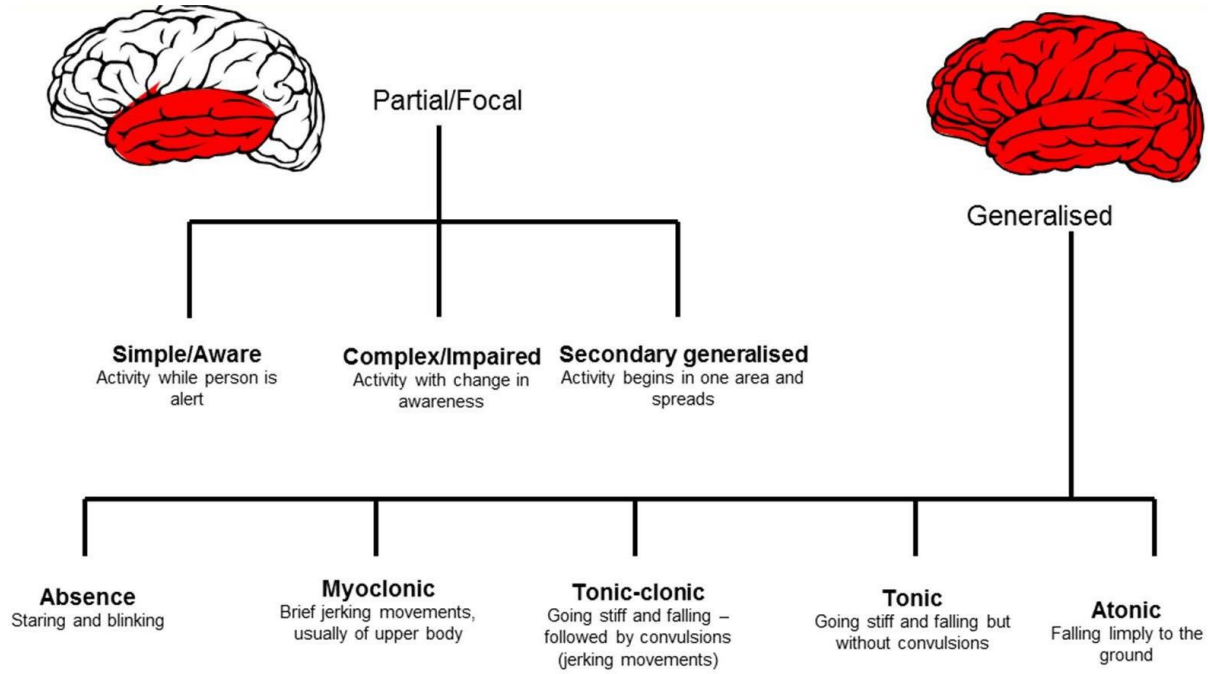
What is a seizure?

An epileptic seizure is an intermittent stereotyped disturbance of:

- consciousness
- behaviour
- emotion
- motor function
- perception or sensation

The level of disturbance is dependent on the type of seizure

Types of Seizures:



Epilepsy Awareness 2 – Seizure Management:

- Guideline:

1. Protect the person from danger – keep the environment safe
2. If the person is injured in any way – call for help

- Protect from danger
- Observe what happens
- Record what happens
- Tell the person – they might be unconscious during the seizure

- Focal Aware:

- Small part of the brain is affected
- The person retains awareness
- Witnesses may not notice, often little to see
- Person can speak and act normally
- Usually brief
- During the seizure the person may say that they feel funny or strange and have difficultly explaining the sensations.

Some people describe this as their warning sign or aura as it can occur before a generalised seizure

- Generalised Non-Motor (Absence):

- The person becomes blank and unresponsive for a few seconds
- They will not respond to what is happening around them. If they are walking they may carry on walking but will not be aware of what they are doing
- Because the seizures are brief, they may not be noticed
- Often confused with brief focal seizures

- Atonic Seizure:

- In an atonic seizure (or 'drop attack') the person's muscles suddenly lose tone and they become floppy
- If they are standing they often fall, usually forwards, and may injure the front of their head or face
- Atonic seizures tend to be brief and happen without warning

- Myoclonic Seizure:

- Myoclonic means 'muscle jerk'
- Myoclonic seizures are brief but can happen in clusters (many happening close together in time) and often happen shortly after waking
- If the person is standing the jerk can be forceful enough to cause the person to fall
- In myoclonic seizures the person is conscious

- Tonic Seizure:

- In a tonic seizure the person's muscles suddenly become stiff
- If they are standing they often fall, usually backwards, and may injure the back of their head
- Tonic seizures tend to be very brief and happen without warning

- Support for Non Tonic – Clonic Seizures:

- Remember the person's awareness may be altered but not lost
- Be calm and reassuring - use normal tone of voice
- Ensure safety - gently guide away from danger, do not restrict or restrain movement
- Remain with the person, time the length of seizure
- If secondary generalisation occurs (the person has a tonic clonic seizure) follow support as directed

The stages of a Tonic Clonic Seizure:

Aura	a warning sign (not always present)
Tonic	muscles stiffen and the person may fall to the ground, breathing stops temporarily
Clonic	a period of jerking movements, breathing returns (abnormal and noisy)
Recovery	the person may be drowsy and may sleep, or could be confused post-ictally (after seizure)

– The Management of a Tonic-Clonic Seizure:

DO

1. Note the time
2. Clear a space around the person
3. Cushion the head to prevent head and facial injury
4. Remove spectacles, if worn
5. Loosen tight neckwear
6. Loosen chest and leg safety straps on wheelchairs
7. Turn on side if possible, to aid drainage
8. Reassure others and explain what you are doing

DON'T

1. Put anything in the mouth
2. Give anything to eat or drink
3. Restrain or restrict movement during the seizure
4. Move the person unless they are in danger

Epilepsy Awareness 3 – Conclusion:

- Support given following a Tonic Clonic Seizure:

- note the time the seizure stops and time the recovery
- turn the person on their side if not already
- check that vomit or dentures are not blocking the throat
- wipe away any excess saliva from the mouth
- reassure the person and tell them what has happened
- check for signs of injury, apply first aid if necessary and seek medical assistance if required
- if the person has fallen carry out a check from head to toe, check for swelling, pain or abnormality. Check understanding and comprehension - use communication methods appropriate to that person. Recheck at regular intervals.
- observe the person and stay with them until recovery is complete (they may need assistance to return to their routine)
- if the person has fallen, encourage the person to stand in stages (sit on floor, sit on chair etc.), furniture can be used for the person to lean on, mechanical aids should also be considered. All this should be done in line with your manual/safer handling policy.
- provide privacy and offer assistance if there has been incontinence
- record appropriately

- Under what circumstances would you call an ambulance:

- it is the person's first seizure

- a seizure lasts more than 5 minutes and you do not know the usual length of the person's seizure

- a seizure lasts 2 minutes more than is usual, and rescue medication isn't prescribed

- a tonic clonic seizure follows another without full recovery in between, and rescue medication has been given but it hasn't been effective or it has not been prescribed

- concussion/head injury is suspected

- you are concerned about the person's colour/breathing

- if water is inhaled

- when directed by organisational policy

– Some factors which can trigger seizures:

- missed medication – sudden withdrawal of medication
- changes in pattern of/ lack of sleep
- illness/infections - such as urinary tract/respiratory tract infections
- stress – including stress caused by constipation/pain
- heat
- boredom/ changes in routine
- menstrual cycle (Catamenial Epilepsy)
- alcohol
- photosensitivity (3 – 5% of people)

- How to record a seizure:

- note the time it started and finished
- note triggers, auras, warnings e.g. changes in mood
- record accurately exactly what you saw ‑ e.g. head, eye and limb movement, noises, facial colouring, incontinence
- record any injuries sustained in line with organisational requirements

- Epilepsy Care Plan:

An epilepsy care plan should contain the following:

- records of triggers and seizure warnings
- descriptions of seizures including length and recovery
- frequency of seizures
- seizure pattern ‑ night/day, menstruation etc.
- prescribed medication
- seizure recording sheets (including annual charts)
- protocols for rescue medication
- all relevant correspondence from GP, hospital etc.
- epilepsy risk indicators/assessment

Buccal Midazolam - An alternative rescue medication

- Midazolam – What is it?

A treatment when conscious sedation is needed. Used in anaesthesia, to reduce anxiety in medical procedures, used in dental practice and in palliative care.

Midazolam is used for the following types of seizures:

Serial/cluster Seizures	Seizures occurring one after another with or without normal breathing and recovery in between
Prolonged Seizures	Seizures lasting 5mins or 2mins longer than usual

4 - Midazolam used to prevent:

Status Epilepticus

Definition: Any one seizure or repeated seizures lasting for 30 minutes from which the person does not fully regain consciousness

- Convulsive status epilepticus is a medical emergency and hospital care is required

- Buccolam ‑ Midazolam Oromucosal Solution:

- Available in prefilled syringes only in doses of 10mg/2ml, 7.5mg/1.5ml, 5mg/1ml, 2.5mg/0.5ml

- How does it work?

- **Slowly** dripped into the buccal cavity
- Absorbed from lining of cheek
- Good blood supply
- Travels via the heart to the brain

- Dampens down seizure activity – works within a few minutes

- Administering Buccal Midazolam

ONLY IF PRESCRIBED BY A DOCTOR

- Pre admin check – Protocol
- Preparing the syringe – Safety Checks
- The Actual Administration

- Pre admin check – Protocol:

- WHO?
- WHEN?
- HOW MUCH?
- FURTHER ACTION?

- Safety Checks

- Do I have the right dosage – PROTOCOL
- Is it in date?
- Is the seal intact?

What documentation needs to be in place before administering Midazolam?

- Dosage, Strength, Route of administration
- Exact instructions about when to administer
- If second dose, how much & when
- What to do if seizures don't stop
- When to seek medical help

How to administer Midazolam buccally?

Buccal route (side of mouth)

- Insert syringe into the mouth, between the lower gums and cheek
- **Slowly** push syringe down until empty
- ***Not in oral cavity***
- Note the time of administration, monitor recovery and record in care plan