

Training non-nursing staff in administration of emergency medication for prolonged seizures in epilepsy

**October 2009
CYP36/09/2**

Policy Reference Information

Policy Reference Number	CYP36/09
Version Number	2
Status	Live
Author/Lead	Kate Rudd Epilepsy Nurse Specialist
Implementation Date	July 2004
Date of Last Review Date	October 2009
Date of Next Formal Review	October 2012

Document Revision Record

Version	Description of Change(s)	Reason for Change	Author	Date
2	Inclusion of buccal midazolam as an emergency medication for use in prolonged seizures	Formal review date over due	Lynn Willbourne	Nov 2008
2	Changes made in line with Trust Policy Framework	To ensure policy conforms to Trust Policy Framework 2008	Lynn Willbourne	Nov 2008
2	Amendments following feedback from consultation process		Lynn Willbourne	March 2009

INDEX PAGE

	<i>Page number</i>
Policy Reference Information	2
Document Revision Record	2
1. Introduction	3
2. References	3-4
3. Policy Statement	5-6
4. Definitions	6
5. Policy Headings	
5.1. Model for provision of Training	6
5.2 Trainer competency and skill development	7
5.3. Resources to provide training	7-8
5.4. Assessment of competency of trainees	9
5.5. Preparing trainees to work with individual children and young people	10
5.6. Evaluating and maintaining quality of training	10
5.7. Role of Epilepsy Nursing Service	11
APPENDICES	
1 - Knowledge assessment form	12
2 – Skills assessment form – Rectal diazepam	13
3 – Skills assessment form – Buccal midazolam	14
4 – Problem solving	15
5 – Consultation tool	16

1. INTRODUCTION

- 1.1 Epilepsy (see section 4.1) is the tendency to have seizures. Seizures (see section 4.2) are unpredictable and therefore are likely to occur in community settings when the child is at school or away from home. There is a need therefore for all carers; professional and voluntary, to be able to manage seizures safely.
- 1.2 For those children with epilepsy who are prone to prolonged seizures and status epilepticus (see section 4.3), the prompt use of emergency medication in the community can reduce the need for hospital treatment and reduce the incidence and risks associated with status epilepticus. The administration of emergency medication for a prolonged seizure in the community is therefore often appropriately delegated to parents, carers, education, social and voluntary services personnel.
- 1.3 Clinical guidelines recommend that a convulsive seizure lasting longer than 5 minutes **or** three or more seizures in a hour receive urgent care and treatment (NICE, 2004). Rectal diazepam or Buccal midazolam (which is unlicensed for the treatment of prolonged or repeated seizures) is recommended as community treatment (NICE, 2004).
- 1.4 In Newham there are many schools, play schemes, residential and voluntary services projects that encourage their personnel to learn how to administer these medications and this enables children and young people to be included in activities yet have access to potentially life saving treatment where ever their seizure occurs. This role is voluntary but in some organisations, certain groups of employees have a contractual obligation to undertake this role. Each organisation should have its own organisational policy regarding the administration of medication.
- 1.5 Newham PCT employees provide training on the administration of emergency medication for prolonged seizures to personnel from other organisations. Training is provided to education by registered nurses from the School Nursing and Health Visitor Team. The Practice Development facilitator within the Community Children's Nursing team will liaise and work with the Epilepsy Nurse Specialists to provide training to social care and the voluntary sector.

2 REFERENCES

- Appleton R., & Gibbs J. (1995). *Epilepsy in Childhood and Adolescence*. Martin Dunitz, London.
- Beran, R. G. (2008) An alternative perspective on the management of status epilepticus. *Epilepsy & Behavior*, 12 (3) : 349. 353.
- Joint Epilepsy Council JEC. (2004). *A guideline on training standards for the administration of rectal diazepam*. JEC.
- Joint Epilepsy Council JEC, (2008). *A guideline on training standards for the administration of buccal midazolam*, JEC
- Nursing & Midwifery Council NMC. (2008). Standards for medicines management. NMC, London.*
- Scott, R.C., Surtees, R.A.H., & Neville, B.G.R. (1998) Status epilepticus: pathophysiology, epidemiology, and outcomes. *Archives Diseases Childhood*, 79 : 73–7.
- Shorvon S., (2000), Handbook of epilepsy treatment, 179-194, Blackwell Science
- National Institute for Clinical Excellence (NICE) (2004) *The epilepsies: diagnosis and management of the epilepsies in children & young people in primary and secondary care – A quick reference guide*. NICE, London.

3. POLICY STATEMENT

- 3.1 This policy is aimed at registered nurses employed in Services for Children & Young People within Newham PCT, who provide training on the administration of emergency medications for prolonged seizures.
- 3.2 This policy aims to set out the standard to which training on the administration of emergency medications should be provided and how the trainers can access ongoing support and education to ensure they are providing training of a high quality.
- 3.3 This policy also provides guidance to managers of the nursing teams in Services for Children & Young People within Newham PCT to ensure responsibilities for providing this training are allocated to appropriately trained and experienced nurses within their teams.
- 3.4 This policy sets out the role of the Epilepsy Nursing Service for Children & Young People in the delivery of the training.

- 3.5 This policy adopts the Joint Epilepsy Council's documents "A guideline on training standards for the administration of rectal diazepam" (JEC, 2004) and "A guideline on training standards for the administration of buccal midazolam" (JEC, 2008), which set out practice guidelines for those purchasing and delivering training of this nature.
- 3.6 Newham PCT provides indemnity for its employees when they provide training to the employees of other organisations (e.g. education, social services or voluntary organisations), provided the PCT employee follows this policy on how training should be provided.
- 3.7 This training involves the delegation of a medicine and therefore the Standards for medicines management (NMC, 2008) apply and have been specifically mentioned in section 5.4 of this policy.
- 3.8 As a registered nurse providing training to other organisations, the nurse is accountable for the training they have provided and their assessment of the trainee's competence in the training situation, but not for the ongoing actions of the trainees once they are using the skills in their working environments.
- 3.9 The ongoing responsibility for the actions of the trainees once working in their environments (e.g. schools, nurseries, play schemes) lies with their employing organisations.

4. DEFINITIONS

- 4.1 Epilepsy is defined as the tendency to have recurrent seizures (Appleton & Gibbs, 1995).
- 4.2 A seizure is "an intermittent, paroxysmal, stereotyped disturbance of consciousness, behaviour, emotion, motor function, perception or sensation that results from a cortical neuronal discharge" (Appleton & Gibbs, 1995).
- 4.3 Historically, status epilepticus has been defined as "any seizure lasting for at least 30 minutes or repeated seizures lasting for a total of 30 minutes or longer, from which the person does not regain consciousness between each seizure" (Shorvon, 2000). More recently, definitions and the NICE guideline recommendations for initiation of community treatment after **5 minutes** (Section 1.3) reflect the change towards a more prompt recognition of status epilepticus in contemporary clinical practice (Scott *et al*, 1998; Beran, 2008).

5. POLICY HEADINGS

5.1 MODEL FOR PROVISION OF TRAINING

5.1.1 The Epilepsy Nurse Specialist provides initial training on how to provide emergency medication training and provides ongoing support and further training updates to the emergency medication trainers.

5.1.2 The emergency medication trainers are a selected group of members of the school nursing and health visitor team who, using the training materials outlined in section 5.3, provide training to those employees within education who are required to administer emergency medication. The Practice Development facilitator within the Community Children's Nursing Team and the Epilepsy Nursing Service will provide the training for those within the voluntary sector required to carry out this procedure.

5.1.3 The training for the trainees regarding the individualised health care plan and needs of the individual child is provided by the named school nurse, health visitor or community nurse for the child in the community setting.

5.2 TRAINER COMPETENCY and SKILL DEVELOPMENT

5.2.1 It is expected that the role of emergency medication trainer will be formally identified in the emergency medication trainer's personal IPR/PDP objectives and remit by their team manager/supervisor.

5.2.2 Emergency medication trainers should meet the following requirements which have been adapted from the JEC guidelines (JEC 2004, 2008);

5.2.2.1 Have a nursing qualification and experience working with children and young people with epilepsy which, where possible, will have included the practical administration of emergency medication in epilepsy.

5.2.2.2. Have undergone basic Epilepsy Workshops for Community Practitioners (2 days) provided by the Epilepsy Nursing Service.

5.2.2.3 Have undergone training on how to use the Newham PCT training pack from the Epilepsy Nursing Service

5.2.2.4. Have experience of delivering training/facilitation courses to adult learners or evidence of teaching skills

5.2.2.5 Demonstrate that they can keep their knowledge up to date by attending a half day supervision of practice/training session provided by the Epilepsy Nurse Specialist three times a year.

5.3 RESOURCES TO PROVIDE THE TRAINING

- 5.3.1 Emergency medication trainers should provide training using only the materials contained within the Emergency medication training pack. A paper template of this pack is available together with electronic resources (Power Point presentations, student work book and other materials). This can be accessed and downloaded onto a laptop or run from CD Rom.
- 5.3.2 Other resources and equipment can be loaned from the epilepsy nursing service.

The DVDs/videos that should be used are:

- “Epileptic Seizures” National Society for Epilepsy
- “Rectal Diazepam: Rapid Delivery, Gentle Alternative” CP Pharmaceuticals Ltd
- “Buccal Midazolam, Treatment for Prolonged Seizures” Special Products

An additional anatomical rectal model can be loaned from the Epilepsy Nursing Service.

- 5.3.3 The booklet for trainees should be the only materials handed out during the course.
- 5.3.4 The contents of the training pack have been developed to meet the JEC (2004, 2008) recommendations regarding the core components of an emergency medication training course. The core components are:

Epilepsy Awareness

- What epilepsy is
- Causes of epilepsy
- How a diagnosis is made
- Types of seizures (with reference to current classification of the International League Against Epilepsy)
- Treatment for epilepsy
- First aid
- Status Epilepticus
- Psychosocial issues for people with epilepsy
- Sources of information and support for people with epilepsy, their families and carers

The administration of rectal diazepam/buccal midazolam

- What diazepam/buccal midazolam are
- Their use for epilepsy and other conditions
- Indications for use of diazepam/buccal midazolam
- Different routes of delivery and appropriate doses when given in either form

- The benefits of rectal diazepam/buccal midazolam
- Practical demonstration using DVD and/or an anatomical model
- Possible difficulties in administration (e.g. constipation, vomiting)
- Consequences of too much medication being given and appropriate action

Health & Safety Issues

- Risk assessment
- The individual's care plan
- Storage & disposal
- Duty of care issues
- Awareness of local policies on administration of emergency medication
- Importance of privacy

5.3.5 There was extensive consultation regarding the content of the training pack therefore any amendments or additions to the training pack should not be made by trainers independently but proposed to the epilepsy nurse specialist during the course of supervision of practice/training sessions where they can be discussed and agreed.

5.3.6 The training package is designed to be delivered in one-day, meeting the JEC recommendations for a minimum of six hours continuous education to cover all components. It is acceptable to deliver the training pack over shorter sessions e.g. two half day sessions; however the training should not be shortened or delivered in less time.

5.4 ASSESSMENT OF COMPETENCY OF TRAINEES

5.4.1 The NMC guidelines for medicines management state that when delegating the administration of medication to a patient, carer or care assistant, it is important that the registered nurse “ensures that the patient, carer/care assistant is competent to carry out the task. This will require education, training and assessment of the patient carer/ care assistant and further support if necessary. The competence of the person to whom the task has been delegated should be assessed and reviewed periodically “. (NMC, 2008).

5.4.2 There are recognised difficulties associated with assessing knowledge and skills of the trainees to administer emergency medication. Observing and assessing their competency during the actual procedure is not possible as this is an emergency procedure and cannot be predicted.

5.4.3 Newham PCT adopts the recommendation from the JEC that “during the course a training provider checks that learning is taking place, supervising the participant in a simulated procedure using an anatomical model” (pg 8, JEC, 2004) for rectal diazepam and “ using a volunteer with water as the medication” (pg 9, JEC, 2008) for buccal midazolam.

- 5.4.4 An individualised assessment of the preparedness of each trainee therefore takes place within the course by the emergency trainer. See Appendix 1 for example of assessment checklist. This knowledge and skills assessment includes:
- i) Verbal/written questioning with expected answers on key knowledge points
 - ii) Demonstration of ability to administer emergency medication in a simulated practice situation
 - iii) Responses of trainee to problem scenarios that may arise during administration of medication.
 - iv) Agreement from the trainee that they feel ready to take on the task of administering emergency medication.
- 5.4.5 A certificate stating the knowledge and skills that the trainee has demonstrated during the assessment will be awarded. This certification is a statement of competency in the simulated training situation and reflects the preparedness of the trainee for the “real-life” situation.
- 5.4.6 Re-training of the trainees should take place within 18 months. It is the responsibility of the management in the community setting and the trainee to ensure that their training is in date and that update training is requested.

5.5. PREPARING TRAINEES TO WORK WITH INDIVIDUAL CHILDREN

- 5.5.1 The one day emergency medication training course prepares the trainees to safely administer emergency medication for a prolonged seizure due to epilepsy. As such the knowledge and skills gained from the course are general and do not pertain to the individual needs of a particular child.
- 5.5.2 After completing the course and before they begin to work with an individual child, the trainee must be involved in the development of the individualised health care plan and receive additional individualised information relevant to the particular child.
- 5.5.3 This is provided by the named community health professional attached to the community setting, in a school this will be the school nurse, in a nursery the health visitor and in the voluntary sector the Practice Development facilitator from the Community Children’s Nursing Team
- 5.5.4 In preparing the trainees to work with individual children the named community health professional should refer to the advice and use the health care plan template and resources prepared by the Epilepsy Nurse Specialist which is available in locality areas.

5.6. EVALUATING and MAINTAINING THE QUALITY OF THE TRAINING COURSE

- 5.6.1 Every training course that is delivered should be evaluated using the standard evaluation sheet in the training pack.
- 5.6.2 Evaluation forms should be collected and sent to the epilepsy nurse specialist with the completed monitoring form at the end of a training session. The epilepsy nurse specialist will meet with the course leader to discuss the evaluation if there are immediate issues to discuss. Otherwise evaluations will be reviewed at sessions with epilepsy nurse specialist described in section 5.7.2 of this policy.
- 5.6.3 A list of the attendees should be kept together with their knowledge and skills assessment training record and sent to the epilepsy nurse specialist.

5.7 ROLE OF THE EPILEPSY NURSING SERVICE

- 5.7.1 The Epilepsy Nurse Specialist will provide the initial training on how to use the training pack to the emergency medication trainers.
- 5.7.2 The Epilepsy Nurse Specialist will provide a ½ day session three times a year for emergency medication trainers to enable reflection on practice, identify learning needs and discuss clinical updates in the epilepsy field.
- 5.7.3 The Epilepsy Nurse Specialist will remain responsible for the content of the training pack and ensuring that its contents continue to meet national standards and current good practice in the management of epilepsy.
- 5.7.4 The Epilepsy Nurse Specialist will lead on reviewing and evaluating the quality of the training and work with the emergency medication trainers to ensure that this training continues to meet the required standard.
- 5.7.5 The Epilepsy Nursing Service will provide individualised training for parents/carers in the home setting.

Appendix 1

Date: / / 200

Name of trainee: _____

Place of work: _____

KNOWLEDGE ASSESSMENT

The trainee is able to demonstrate their knowledge in the following areas:

	Question	Required answer	Tick
1	What is epilepsy?	Epilepsy is a tendency to have seizures	
2	What is a seizure?	A seizure is a disturbance of electrical signals in brain which causes a change in the body's functioning.	
3	Can you describe what a tonic-clonic seizure looks like?	The person goes stiff and usually falls over. They lose awareness . The body shakes and jerks . They may become blue around the mouth, may wet themselves or bite their tongue . They sleep deeply afterwards & are difficult to move.	
4	When do we usually give emergency medication for seizures?	When a seizure is going on for longer than 5 minutes	
5	Where can you find the exact information about when emergency medication is needed for a particular child?	In their health care plan	
6	What are the risks of prolonged seizures?	Damage to the brain Death	
7	Where does diazepam/midazolam work to stop seizures?	Diazepam/midazolam work in the brain to calm the electrical signals and stop the seizure .	
8	What are two unwanted effects of diazepam/midazolam?	Reduction in breathing rate. Excessive sedation	
9	What are the advantages of giving diazepam/midazolam in an emergency?	Can't swallow to take a tablet Injection into blood stream only done in hospital Both routes are safe and easy to use Medication taken quickly by blood stream to brain where it works within 10 minutes	
10	Where should diazepam/midazolam be stored?	In a locked cabinet .	
11	Who can give rectal diazepam/buccal midazolam in the community?	Only people that have been specially trained.	

Appendix 2

SKILLS ASSESSMENT – RECTAL DIAZEPAM

In a simulated situation, using an anatomical model, the trainee has demonstrated the following skills:

	Skill required	Tick
1	Trainee keeps calm/takes control of situation	
2	Makes a note of the time the seizure starts	
3	Rolls child (model) onto left side	
4	Checks expiry date on diazepam tube/packet	
5	Checks dose and child with health care plan	
6	Correctly identifies that seizure is now an emergency	
7	Check first aider present – summons if not	
8	Puts on gloves	
9	Clothing to lower body are removed	
10	Opens rectal tube/packet properly removing cap	
11	Keeps rectal tube upright	
12	Locates rectum and inserts tube into rectal passage on model in direction of umbilicus	
13	Squeezes tube firmly between thumb and forefinger	
14	Keeps squeezing tube whilst removing tube from rectum	
15	Holds buttocks together	
16	Notes time the rectal diazepam was given	
17	Keeps the child on their side	
18	Watches the child's body for signs of seizure activity	
19	Watches the child's breathing and colour	
20	Writes down the description of the seizure, dose, time and outcome in child's health care plan	

Appendix 3

SKILLS ASSESSMENT- BUCCAL MIDAZOLAM

In a simulated situation, the trainee has demonstrated the following skills:

	Skill required	Tick
1	Trainee keeps calm/takes control of situation	
2	Makes a note of the time the seizure starts	
3	Checks expiry date on bottle of midazolam and checks solution is clear.	
4	Checks dose and child with health care plan	
5	Correctly identifies that seizure is now an emergency	
6	Check first aider present – summons if not	
7	Puts on gloves	
8	Correctly draws up dose of oral midazolam	
9	Parts lips and drips ½ solution onto buccal mucosa between lower gums/cheek	
10	Drips remaining solution onto buccal mucosa at other side of mouth	
11	Notes time the buccal midazolam was given	
12	Disposes of oral dispenser and returns cap to bottle of midazolam	
13	Watches the child's body for signs of seizure activity	
14	Watches the child's breathing and colour	
15	Writes down the description of the seizure, dose, time and outcome in child's health care plan	

Appendix 4

PROBLEM SOLVING

The trainee has responded with required response and rationale to the following possible scenarios:

	Problem	Required response	Required rationale	Tick
1	You have given the diazepam/ midazolam and although the seizure has stopped within 5 minutes, the child is still blue around their mouth and is not breathing very well. What do you do and why?	Maintain recovery position Call 999 Call first aider Save tube of diazepam Inform manager after event	It could be problem with breathing caused by diazepam. Situation is an emergency First aider needs to assess Child's medication may need review.	
2	You have given the diazepam/ midazolam and 10 minutes later the child is still stiff and jerking with froth coming from their mouth. What do you do and why?	Maintain recovery position Call 999 Save <u>medication</u> Inform manager after event	Emergency situation Medication has not worked to stop the seizure Child needs hospital attention. Child's medication may need review.	
3	You are trying to insert the diazepam tube into the rectum but can't. What do you do and why?	Check technique Abandon procedure Call 999 Talk to school nurse after event	Because diazepam can't be given and seizure is continuing - becomes emergency situation May need further training	
4	You go to the cupboard and the emergency medication for that child is not there. Another child's medication is there. What do you do and why?	Do not use the other child's medication Abandon procedure Call 999 Inform manager	Other child's medication might be needed soon after Can't give diazepam so situation emergency. Medication is "missing" needs to be investigated by manager	

Appendix 5

COMMENTS & NOTES BY TRAINER

AGREEMENT TO USE THE DEMONSTRATED KNOWLEDGE & SKILLS

I have taken part in the training and feel competent to use rectal diazepam/ buccal midazolam for a child that I am working with. I understand the need to undergo individual training, including a discussion with the child's parent/carer, about the health care plan for a particular child once I am back in my workplace.

Name of trainee: _____

Signed: _____ Date: / / 200

Place of work: _____

I have assessed this trainee's knowledge and skills as documented in their training record which I have retained. In the simulated situation of this training course, this trainee has demonstrated the required level of knowledge and skills to be able to give rectal diazepam / buccal midazolam. I recommend re-training by / /200 .

Name of trainer: _____

Signed: _____ Date: / / 200

Designation: _____