### **Paediatric Seizures**

#### Information for facilitators

This teaching session is designed to be delivered by the roadside to a small group. It generally runs for 20 minutes followed by a debrief of approximately 20-25 minutes (40-45 mins total).

#### **Aim**

The aim for this session is to manage a paediatric patient that has had a seizure and is unresponsive to initial therapy.

#### What you will need

There are **THREE** components to this session:

Page 2 contains background information that can be read to the group and an expected sim progression.

Page 3 contains details of the scenario with expected progression for the sim technician.

Page 4 contains the checklist for facilitators to fill out during the scenario and a list of equipment required.

#### Introduction

"You are responding to a Category 1 call of a 5-year-old child who has been having a seizure."

#### **Expected Progression**

- Assessment and management of a paediatric patient having an active seizure.
- Failure to respond to initial benzodiazepine.
- Significant respiratory depression from 2nd dose.
- Consideration of 3rd line agents (Levetiracetam).
- Packaging and transfer to ED.

# Paediatric Seizures

## PRU Sim 20

Case title	Paediatric seizures		Sim no.	PRU 20	
Setting	Inside Patient age	5	Patient sex	М	
Diagnosis	Seizure		Curriculum code		
Injuries	<ul><li>Previous history of seizures (No AEDs)</li><li>Status epilepticus</li></ul>				
Staff required	1 x PRU Paramedic, 1 x PRU Doctor, Parent				
Learning objectives	<ol> <li>Management of paediatric seizure</li> <li>Management of BZD complications</li> <li>Prehospital management of treatment resistant status</li> </ol>				

#### **INITIAL SETUP**

Observations			Arrival route	N/A		
HR	140	GCS	E 1 V 1 M 1 = 3/15	Carers?	Parent	
RR	18			Visible external findings:		
SpO2	90% on air	Pupils	(L) 6mm (R) 6mm	Progression: Initial choice of BZD is not effective. 2nd choice (aim for IV) is not effective but slows breathing rate and causes		
ВР	103/65	Temp	36.6°C			
CRT	<2 secs					
Glucose	6.3	Weight	Estimated at 18 kg	a desaturation. Responds to simple BVM ventilation.  Consider Levetiracetam whilst transferring to hospital.		
Equipment on arrival	Standard response bags	Additional info	Child mannequin.			

DOMAIN	TASK	TIME	DONE
Preparation	Role allocations		
	Disposition discussions		
Initial Actions	Scene safety		
	Information gathering		
	Introductions to individuals on scene		
	Early update to control and further resources		
Assessment	A-E assessment		
	Rapid recognition of seizure state		
	Recognise deterioration post-BZD		
Interventions	Airway management		
	O2		
	IV access		
	Ventilation support		
	Benzodiazepine (BZD) choices and dose		
	Levetiracetam		
Decision-Making	Engagement with parent		
	Destination decision		