

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 aims for this session is for learners to gain familiarity with the management of trapped patients in the context of railways. Also, the considerations of amputation in the prehospital setting.

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 person hit by a train just outside of Leicester railway station. He is bleeding heavily from a leg injury.

You are likely to be the 2nd medical resource on scene. Fire and Rescue are on scene and the RIO is in attendance alongside British Transport Police.”

Expected Progression

- Patient is trapped under the train. Unconscious with a respiratory rate of 6.
- Partially obstructed airway requiring rapid intervention.
- Obvious injury to the lower leg which is trapped within the train mechanism.
- FRS will announce extrication is difficult and likely to take >1 hour as requires major removal of engines etc.
- Will deteriorate and become increasingly hypotensive/tachycardic despite interventions.
- Should prompt decision/conversation around amputation of the limb.

Case title	Person trapped under a train			Sim no.	PRU 5
Setting	Railway	Patient age	24	Patient sex	M
Diagnosis	Severe (fatal) head injury			Curriculum code	
Injuries	<ul style="list-style-type: none"> • Large right sided haemothorax with multiple rib fractures and flail chest • Splenic laceration and intraperitoneal blood • Lower leg mangled around the mid tib/fib and tissue trapped within the mechanism of the train. Catastrophic bleeding. 				
Staff required	1 x PRU Paramedic, 1 x PRU Doctor, 2 x Ambulance staff, FRS Officer, RIO				
Learning objectives	<ol style="list-style-type: none"> 1. To gain familiarity with railway environment 2. Understand rescue from under trains 3. Consider decision making principles in prehospital amputation 				

INITIAL SETUP

Observations				Arrival route	N/A
HR	140	GCS	E 1 V 1 M 1 = 3/15	Carers?	None
RR	6			Visible external findings: Bruising to chest and abdomen. Obviously mangled and trapped lower leg. Progression: Found unresponsive with partially obstructed airway. Will continue to deteriorate despite interventions. Consideration for amputation.	
SpO2	UTR	Pupils	4mm		
BP	78/45	Temp	35.7°C		
CRT	-	Weight	60 kg		
Glucose	7.2				
Equipment on arrival	Standard response bags	Additional info	Adult 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		
Assessment	Identification of catastrophic bleeding		
	A-E assessment		
	Identification of urgent requirement for airway management		
	Immobilisation considered		
	Monitoring applied		
Interventions	Tourniquet and dressings		
	Minimum iGel for airway management		
	Thoracostomies/Thoracocentesis		
	IV access		
	Pelvic binder		
	IV fluid		
	Tranexamic Acid (TXA)		
Decision-Making	Consider HEMS resource (not available)		
	Senior call		
	Amputation discussion		