# Paediatric Cardiac Arrest

PRU Sim 17

## 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 to manage a paediatric patient in cardiac arrest – providing effective clinical leadership and appropriate ongoing care.

## 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.

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## Introduction

> *"You are responding to a Category 1 call of a 6-month-old child that is reported to be not breathing."*

## Expected Progression

- ☑ Assessment and management of a 1 year old in cardiac arrest.
- ☑ Optimise ventilations and ensure good quality chest compressions.
- ☑ Achieve vascular access and continue ALS.
- ☑ Will remain asystole.
- ☑ Recognise requirement for SUDIC process in hospital.

# Paediatric Cardiac Arrest

# PRU Sim 17

| | | | | | |
|---|---|---|---|---|---|
| **Case title** | Paediatric cardiac arrest | | | **Sim no.** | PRU 17 |
| **Setting** | Inside | **Patient age** | 6/12 | **Patient sex** | M |
| **Diagnosis** | SIDS | | | **Curriculum code** | |
| **Injuries** | • Non-visible<br>• Evidence of 'stiffness to limbs'<br>• Mum woke up and found infant not breathing next to her in bed | | | | |
| **Staff required** | 1 x PRU Paramedic, 1 x PRU Doctor, Ambulance staff, Parent | | | | |
| **Learning objectives** | 1. Expertly manage paediatric arrest<br>2. Ensure optimal ALS in progress<br>3. Advanced decision making with regards to hospital transfer | | | | |

## INITIAL SETUP

| | | | | | |
|---|---|---|---|---|---|
| **Observations** | | | | **Arrival route** | N/A |
| **HR** | Asystolic | **GCS** | E 1<br>V 1<br>M 1<br>= 3/15 | **Carers?** | Parent |
| **RR** | Apnoeic | | | **Visible external findings:**<br>Nil.<br>**Progression:**<br>On arrival in cardiac arrest. Stiffness to limbs if examined unlikely to be noted immediately.<br>No response to intervention. Key to focus on excellent ALS practice on scene and avoid 'scoop and run' approach (the ambulance staff on scene should push for this).<br>No response to ALS and can discuss the possibility of declaring on scene and the SUDIC process. | |
| **SpO2** | UTR | **Pupils** | (L) 5mm<br>(R) 5mm | | |
| **BP** | UTR | **Temp** | 34.9°C | | |
| **CRT** | >5 secs | **Weight** | Estimated at 7 kg | | |
| **Glucose** | 2.3 | | | | |
| **Equipment on arrival** | Standard response bags | **Additional info** | Infant mannequin. | | |

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| 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 confirmation of arrest | | |
| | Identification of futility | | |
| Interventions | Airway management | | |
| | Chest compressions | | |
| | IV access | | |
| | Adrenaline | | |
| | Compassionate interactions with parent | | |
| | Glucose bolus | | |
| Decision-Making | Rapid identification of management priorities | | |
| | Expert leadership | | |
| | Decision with respect to hospital transfer | | |