

SIMULATION CASE PC-7

Learning outcomes:

By the end of this simulation the candidates will:

- Understand management of asystole
- Understand the importance of a team approach to cardiac arrest management
- Understand the importance of effective communication during cardiac arrest management

Simulation focus: Primary respiratory arrest secondary to asthma, leading to cardiorespiratory arrest.
 Rhythm asystole

Timing: 0-3 minutes: introduction; remaining time: split equally between simulation and debrief

Introduction [Environment and Set]

Prior to the start of the simulation: one instructor to:

1. [Environment] Brief candidate group to *check the Environment*:

Room	Candidates to set up the room appropriately	
Equipment	Candidates to check required equipment present and accessible	

Equipment list:

In addition to generic equipment list:

- Appropriate size manikin to be ready for simulation in room and covered until simulation commences

2. [Set] Give *History*

You have received a pre-alert from the non-paramedic crew bringing in a 6-year-old, known asthmatic who has stopped breathing on the way to hospital.

Then leave the room for candidate group to prepare and after 2 minutes, return with instructor team and commence simulation

[Dialogue] Simulation

Initial handover *{to tell candidate on your arrival with the child as a Non-Paramedic SBAR to Team Leader}*

Situation	A 6-year-old, known asthmatic who has stopped breathing on the way to hospital.	
Background	A 6-year-old girl, a known asthmatic, stopped breathing on the way to hospital. Her father said that she had been wheezy during the night, and they have been giving salbutamol through a spacer hourly. He had gone in to check on her at 6.30am and found her blue and gasping for breath.	
Assessment	A	Apnoeic
	B	Not breathing
	C	Pulseless
	D	
	E	
Recommendation	Needs resuscitation	

Clinical course *{to be given as the simulation progresses}*

The child cannot be ventilated satisfactorily by bag and mask. Once intubated inflation pressure initially remains high. She remains in asystole until effective ventilation and chest compressions have been continued through two cycles of the asystole protocol.

Key treatment points



Airway	Establish airway patency		
	Oral tracheal intubation		
Breathing	Bag with TT with added oxygen		
	IV/IO access		
Circulation	Asystole protocol		
Specific therapy	Uninterrupted BLS		
Handover to PICU Consultant	S		
	B		
	A		
	R		

[Closure] Debrief

Using the learning conversation, carry out the debrief of both the technical and non-technical elements of the simulation.

The debrief will be for the team as a whole and should focus on some or all of the following:

- Technical skills in an A, B, C, D, E format and guided by the KTPs; in particular the safe and effective demonstration of all continuously assessed skills:
 - BLS
 - Defibrillation
 - Airway management
- Non-technical skills, including qualities of team membership and leadership:

Team members	<ul style="list-style-type: none">• Clear communication• Respect• Flexibility• Assertiveness• Ability to listen
Team leaders	<p>All of the above, plus</p> <ul style="list-style-type: none">• Full overview of all aspects associated with child, parents and team• Prioritises according to KTPs• Summarises and re-evaluates

- Feedback on Environment, where required

At the end of the debrief, give the opportunity for candidates to ask questions, answer these and then summarise the key points

Assessment

Refer to the *Instructor guidance on simulations* document for a guide to the assessment of the simulation station. These assessments should be documented on the paper-based or electronic system for the final faculty meeting. Any scores of *serious concern* should be reported immediately to the course director.