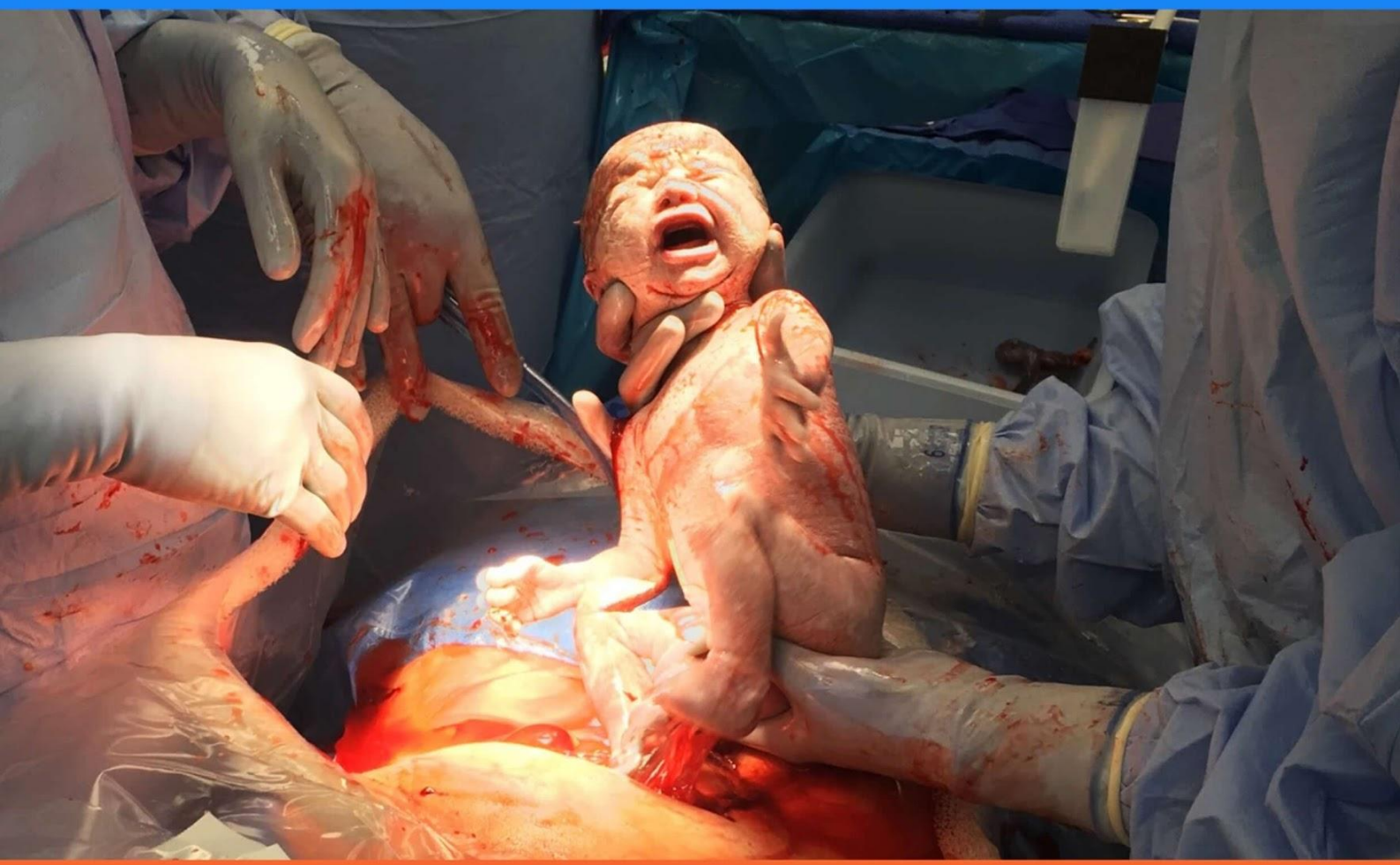
RESUS DRILLS



CAESAREAN SECTION #3

Caesarean Section #3

Drill pre-brief (instructor to read out)

"Welcome to this Resus Drill. Drills are for situations which happen quickly, are not common, and need a time-critical response.

They need practice, so when the time comes, you've already had the dress rehearsal. This is not a Simulation. Drills are for practising teamwork and speed.

We will run a scenario for 5 minutes, chat and reflect on it, then run the same scenario again for another 5 minutes."

Assurances

Learning, NOT assessment: The drill is for practice and for learning. We're concentrating on how fast you can think, and how well you work as a team.

Safe zone: Learning and mistakes are shared here, not any further.

5-min reflection rules: Please be constructive in the debrief. We're all here to learn. These are deliberately tough scenarios. That's the whole point of a drill.

Pretend it's real: we'll try to make the drill realistic, but this is not meant to be a high fidelity Simulation. Although it's not real, we need you to help us by acting as you'd do in real life, in your normal role, and we'll try to run it in real time.

Take-away pack: there is some information that you can take away for further learning. We recommend "spaced repetition" for the best learning:

- ➔ make some reflective notes while it's fresh in your mind
- ➔ make yourself read them again in a couple of weeks

How does it work?

These ER drill packs will be laminated and left in the Simulation Bay (Bay 5) for teaching purposes, as well as "take-home" cards for those who want to brush up on their learning. The team can then choose a scenario or roll the dice to decide!

Each Resus drill pack contains: location of equipment, "Red call" sheet (optional), decision algorithm, scenario script, debrief questions, procedure and additional learning resources.

Caesarean Section #3

S.E.T.U.P. (before patient arrives)

SELF… physical readiness *(stay calm)* & cognitive readiness *(accept the challenge)*

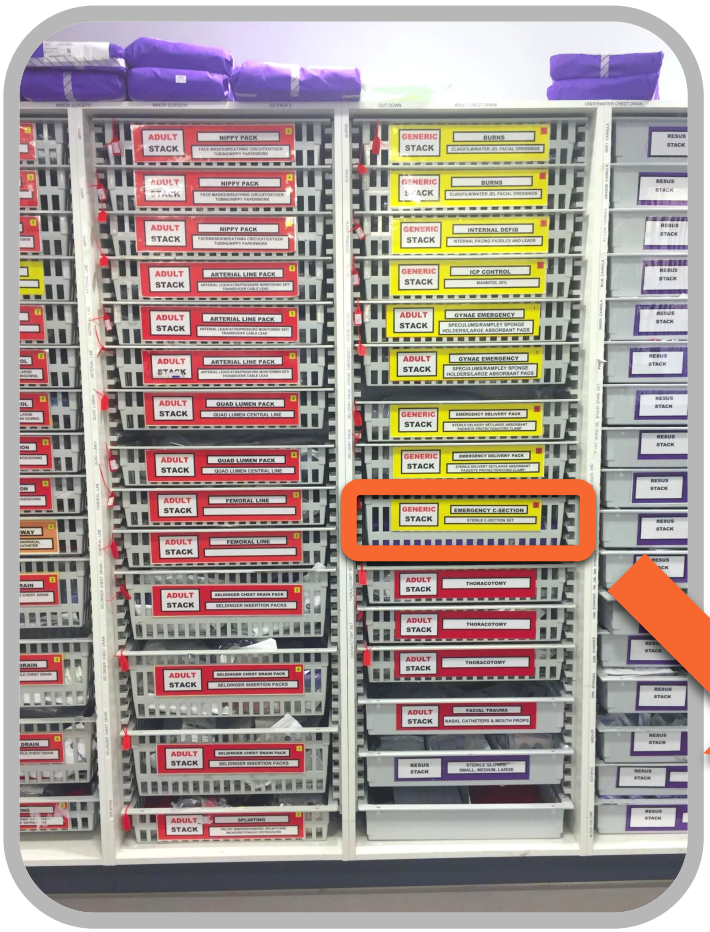
ENVIRONMENT… dangers, space, lighting, crowd control, appropriate equipment?

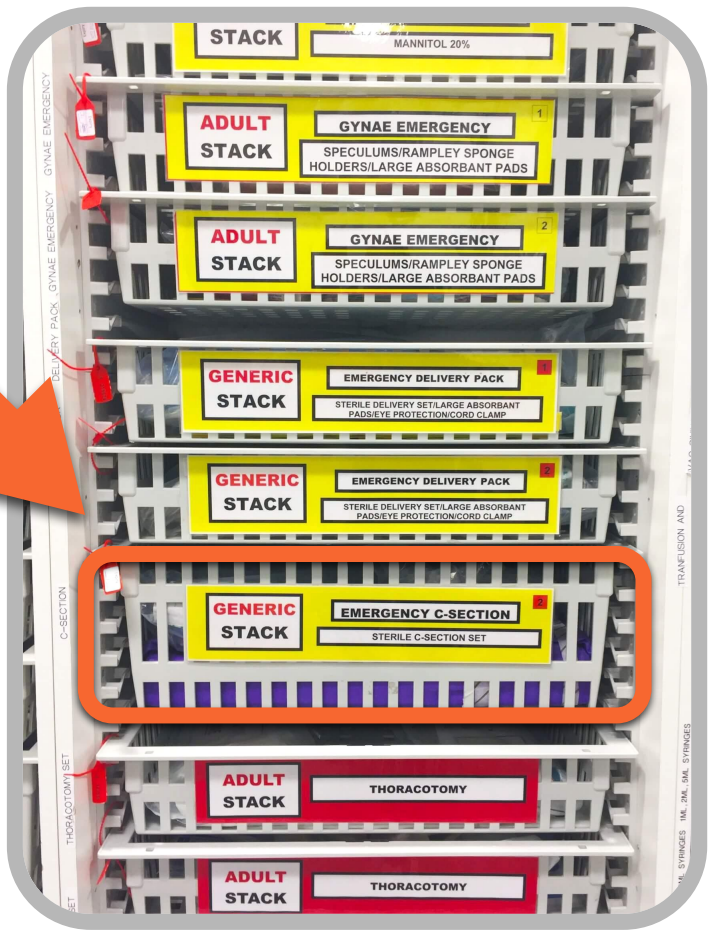
TEAM… initial briefing, identify Team Leader, allocate team roles

UPDATE… if possible, recap for the team *(and yourself)* before patient's arrival

PATIENT… the patient has now arrived

Location of Equipment





The **Emergency C-section kit** can be located inside of the Resus/ER equipment stacks next to Bay 9 and opposite Bay 10.

Caesarean Section #3

Location of Equipment (continued)

What's inside the Emergency C-section stack?

Syntometrine can also be found on the mid-shelf of the refrigerator inside the *Clean Utility.*

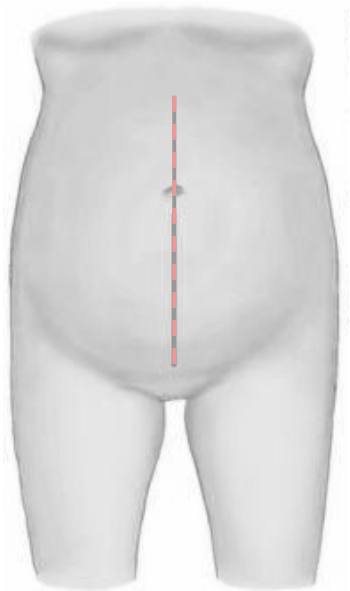
Caesarean Section #3

Indications

Confirmed MATERNAL CARDIAC ARREST with NO RESPONSE TO ALS IN 4 MINUTES and gestational age >20 weeks *(fundal height at or above umbilicus).*

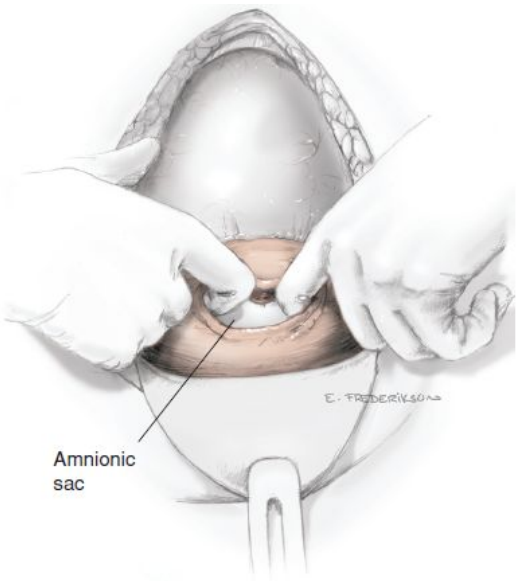
Equipment Required

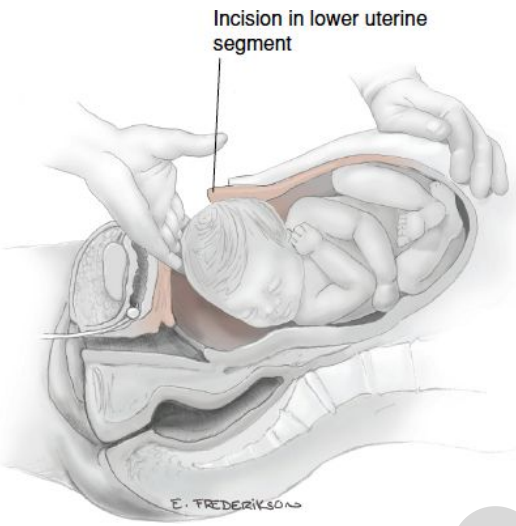
- ☑ Scalpel
- ☑ Clamp x 2
- ☑ Suction
- ☑ Celox gauze
- ☑ Large dressings
- ☑ Cling film



Landmarks and Techniques

1. Vertical incision: xiphisternum to pubis
2. Continue down through abdominal wall and peritoneum
3. Push bowel out of the way
4. 4cm vertical incision of uterus
5. Blunt extension of incision using fingers
6. Deliver foetus
7. Clamp and cut umbilical cord
8. Remove placenta and membranes
9. Pack abdomen with Celox gauze and dressing
10. Wrap with cling film





Caesarean Section #3

Cardiac Arrest Decision Algorithm

- [x] Woman of known gestation >20 weeks **OR** unknown + uterus above umbilicus
- [x] Loss of vital signs ≤15 minutes

In parallel:

- Intubate
- Start standard ALS with left lateral tilt of 20 degrees
- Call **2222** obstetric emergency + paediatric cardiac arrest teams

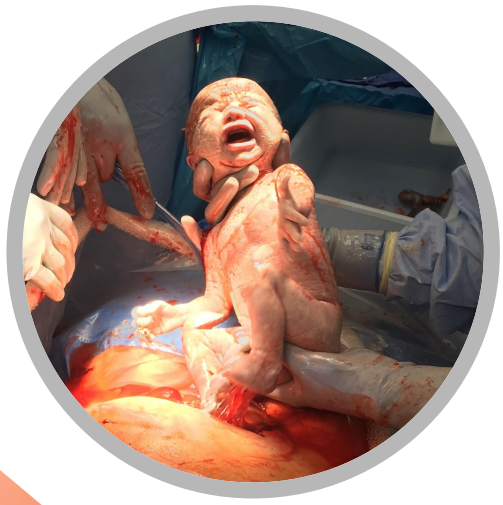
Perform emergency C section & deliver baby <5 mins

Emergency C section tray from stack

Suction

Inco pads on floor

Trolley to receive baby



ROSC within 5 mins of delivery?

Manually separate and deliver placenta

Stimulate uterine fundus

Clamp bleeding vessels and give syntometrine 500 mcg (1ml) IM

Pack with wet gauze, large dressing and cover with cling film

DEAD

University Hospitals of Leicester NHS
NHS Trust

Emergency Department: Pre-Hospital Pre-Alert Report Form

CALL SIGN OF THE VEHICLE / TEAM 1234

Age *(and sex)*	AGE 28		SEX F	(Marie)
Time *(of incident / onset of symptoms)*	30 mins			
Mechanism of Incident *(injury / illness)*	Severe SOB PMH PE			35/40
Injuries / Symptoms *(suspected or present)*				
Signs *(Observations, Clinical Stability)*	HR	140	GCS	14
	RR	20	BM	6
	BP	80/40	TEMP	36.6
	SPO_2	86%	PEAK FLOW	-
NEWS score total			EMAS TRAUMA TRIAGE TOOL POSITIVE?	(YES) / NO
Red Flag Sepsis			CLINICAL CONDITION	STABLE / (UNSTABLE)
Treatment *(Given so far – In brief!)*	IV access & 500ml saline			
ETA *(Time of arrival in ED)*	3 mins			
Requirements *(Circle – specify where required)*	TRAUMA MASSIVE BLOOD LOSS PROTOCOL TRAUMA TEAM ACTIVATION		(MEDICAL) STROKE THROMBOLYSIS CARDIAC SPECIALIST NURSE SEPSIS PATHWAY	

Call taken by;	V. Pregnant PRINT NAME	**Date;**		**Time;**	: HRS
Information passed to;	PRINT NAME	**Date;**		**Time;**	: HRS

Pátient Addressograph Label

(MUST BE ADDED ONCE PATIENT REGISTERED)

TURN FORM OVER AND COMPLETE CHECKLIST ON REAR

PLEASE ATTACH TO PATIENT NOTES – INSIDE FRONT SHEET

ADHESIVE STRIP - HERE

Caesarean Section #3

Scenario Script

"You have received a 3-minute warning of a 28-year-old female who has had 30 minutes of severe shortness of breath, and has a past medical history of PE. She is 35 weeks pregnant. Here is the Red Call form." *(give to* ***Team Leader****)*

Minute One

Team Leader designates team members and uses **S.E.T.U.P.** (Self, Environment, Team, Update, Patient arrives). Ensure if help is being called, that the team does this time-real (e.g. each phone call takes 20-30 secs). **Team Leader** should at least consider ITU support and the obstetric emergency team at this stage. Team needs to get the C-section pack *(not normal delivery pack)* from the ER stacks. *Do not prompt if incorrect.*

Minute Two

Your patient has arrived. She has a poor colour, is gasping, and not very responsive. So far the ambulance crew have established IV access and started a 500ml bag of saline). Keep time real for getting obs, obtaining 2nd access, putting on O2 etc. Obs unchanged, but patient unable to answer questions, gasping.

Minute Three

She has just gone floppy and rolled her eyes. Cardiac monitor should show SR (it is PEA). Someone needs to check pulse. Prompt if necessary. ***There is no pulse.*** **Team Leader** should initiate lateral tilt, CPR and airway control. Do not prompt tilt.

Minute Four

She remains in PEA arrest. **Team Leader** should make decision to do section (self), and call for either Paeds ED staff or paediatric arrest call for baby, plus senior support (ED consultant). If section started, ask **Team Leader** to talk through. If not, cover this briefly in the debrief.

Minute Five

The paeds ED team and ED consultant arrive. Do not prompt but **Team Leader** should allocate roles in the 2 teams.

Caesarean Section #3

Debrief and Feedback

You should aim to cover the following points within 5 minutes, then rerun the scenario:

1. Did the **Team Leader** allocate roles and tasks in a way that was clearly understood? Was **S.E.T.U.P** utilised?
1. Did the team make the right emergency calls (obstetric emergency team, ITU support and ED consultant?
2. Did the **Team Leader** rapidly reach a decision to proceed (self)?
3. Did the **Team Leader** explain the situation in a way that everyone understood it was a time-critical operative procedure?
4. Did the **Team Leader** ask for the right equipment (C-section stack rather than normal delivery stack – either before arrival or as soon as decision taken to do C-section)?
5. Was the right equipment provided quickly?
6. Was the right action taken, to deal with the baby? *(PED team or paed arrest call, either appropriate)*
7. Did the **Team Leader** display knowledge of the technical skills required?
8. How did team members help the team pull together?
9. Were there any instances of:
    a. Equipment issues?
    b. Human factors negatively impacting communication or patient care?

Additional Resources

- **Procedural Aide Memoires: PAMs** *(MAGPAS)* http://bit.ly/magpasreshys
- **Prehospital resuscitative hysterotomy: Perimortem Caesarean Section** *(R.Parry, et al.)* http://bit.ly/2AVGz5i
- **Post-Mortem C-Section: A How-to Guide to Section or Not to Section** *(BroomeDocs)* http://bit.ly/2PmWVwA
- **Prehospital resuscitative hysterotomy** *(R.Bloomer, et al.)* http://bit.ly/2qDhwxZ
- **Perimortem C-section** *(St.Emlyn's)* http://bit.ly/2AWYHvi
- **Out-of-hospital perimortem cesarean section** *(D.Kupas, et al.)* http://bit.ly/2zC0PXE
- **Realistic simulation by obstetricians** *(Operative Experience)* http://bit.ly/2Dvc5JF
- **Real patient, very speedy, smaller incision as they are experienced obstetricians** *(YouTube)* http://bit.ly/2QuNis3