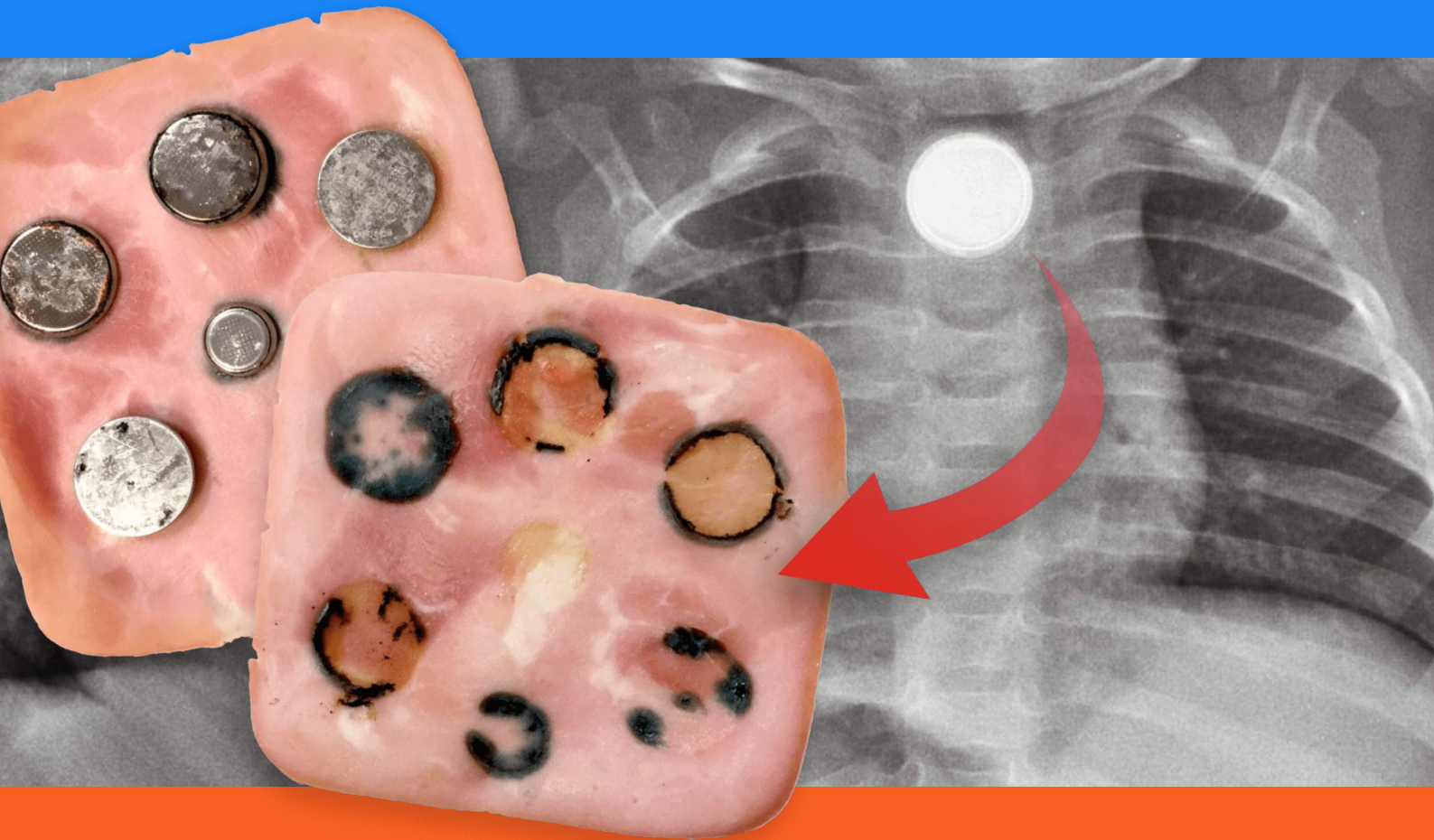


# RESUS DRILLS



UPPER GI BLEED  
PAEDS

#7

## Pre-brief

Instructor to read out this section

*“Welcome to this Resus Drill. Drills are for situations which are not common, and need a time-critical response. This is not a Simulation. Drills are a rehearsal 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:** drills are for practice and for learning. We're concentrating on how fast you can think, and how well you work as a team.

**Safe zone:** lessons are shared here, not judged, not told as tales.

**5-min reflection rules:** please use the debrief to be positive about what you can all do better on the re-run. These are deliberately tough scenarios. That's the point of a drill.

**Pretend it's real:** 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?

**Each Resus Drill pack follows a standard format.**

The drill packs are laminated and available for teaching purposes, and can be downloaded from [www.em3.org.uk](http://www.em3.org.uk)

Our downloaded drills can be edited to suit local hospitals.

## S.E.T.U.P.

Instructor to read out before patient arrives

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

**ENVIRONMENT...** 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 arrives

## Location of Equipment

### BloodTrack® devices

Located opposite the *Clean Utility* and next to the *Linen Store*.



### Rapid fluid infuser

Located opposite the *Dirty Utility* and *Pathology Hot Lab*.



## Major Upper GI Bleed Decision Algorithm

- ✓ Red haematemesis of significant volume?
- ✓ With or without ongoing bleeding?
- ✓ With or without melaena?



Manage the child in a resuscitation area of the ED

Alert Senior Emergency & Paediatric Doctors

### Signs of shock?

HR, BP, cool peripheries, pallor, abnormal lactate/Hb on VBG

Keep child calm

Cross-match 10-20 ml/kg blood

Call senior anaesthetist

Activate Major Haemorrhage Protocol & consider TXA

2x IV/IO lines



Transfuse if signs of shock

O negative blood via rapid warmer device (avoid crystalloid)

### CONSIDER CAUSE

Known liver / GI disease?

Coagulopathy?

Self-harm?

### CAUSE NOT CLEAR

Get immediate CXR/AXR to look for **BUTTON BATTERY**

If seen, crash call ENT/surgery

## Emergency Department: Pre-Hospital Pre-Alert Report Form

CALL SIGN OF THE VEHICLE / TEAM

1234

<b>A</b> ge (and sex)	AGE	2	SEX	M
<b>T</b> ime (of incident / onset of symptoms)	10 mins			
<b>M</b> echanism of Incident (injury / illness)	Suddenly vomiting up blood			
<b>I</b> njuries / Symptoms (suspected or present)				
<b>S</b> igns (Observations, Clinical Stability)	HR	170	GCS	15
	RR	40	BM	3.8
	BP	70/35	TEMP	36.1°C
	SPO <sub>2</sub>	95% air	PEAK FLOW	-
	NEWS score total	<b>EMAS TRAUMA TRIAGE TOOL POSITIVE?</b>		
<b>R</b> ed Flag Sepsis	CLINICAL CONDITION		STABLE / UNSTABLE	
<b>T</b> reatment (Given so far – In brief!)	O <sub>2</sub> via face mask			
<b>E</b> TA (Time of arrival in ED)	3 mins			
<b>R</b> equirements (Circle – specify where required)	<b>TRAUMA</b>		<b>MEDICAL</b>	
	MASSIVE BLOOD LOSS PROTOCOL TRAUMA TEAM ACTIVATION		STROKE THROMBOLYSIS CARDIAC SPECIALIST NURSE SEPSIS PATHWAY	
Call taken by;	L. Blood	Date;	Time;	: HRS
Information passed to;	Dr Reg	Date;	Time;	: HRS

Patient Addressograph Label  
(MUST BE ADDED ONCE PATIENT REGISTERED)

**TURN FORM OVER AND COMPLETE CHECKLIST ON REAR**

PLEASE ATTACH TO PATIENT NOTES – INSIDE FRONT SHEET

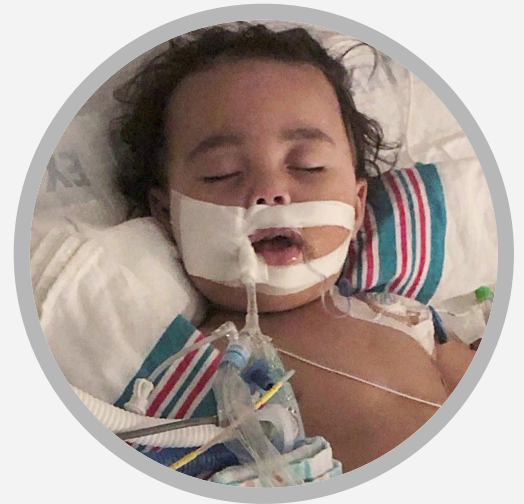
## Scenario Script

Instructor to read out this section

*“A 2-year-old boy suddenly vomited a large volume of fresh red blood. His mum called an ambulance. Here is the pre-alert sheet from the ambulance service...” (give Team Leader page 4)*

## Minute One

Gloves, aprons, suction. **Team Leader (T.L.)** designates team members and uses **S.E.T.U.P.** (Self, Environment, Team, Update, Patient arrives).



## Minute Two & Three

Instructor: *“The child is sitting up, looks anxious and quiet, and vomits blood again, filling 1/3rd of a bowl”*

**Team Leader** to ask for primary survey, 2x IVs, seek information of parameters of shock. **Information:** HR 140, BP 60/40, cold peripheries, VBG results on p6. Instructor not to mention button battery possibility at this stage. If TL asks: there is no past medical history. **TL** should be requesting MHP activation, ED consultant and paediatric help, senior anaesthetist.

## Minute Four

IV access obtained (ideally two). Should start 10 ml/kg O-negative blood via warming device. Provide VBG, if requested. *(show Page 6)*

**T.L.** should be requesting more nurses, doctors, specialist help and using closed loop communication to check the multiple tasks are being done.

## Minute Five

Haematemesis is ongoing. **T.L.** should reassess all interventions, blood pressure, check help is arriving and consider diagnosis. If **T.L.** suggests button battery and portable chest x-ray – diagnosis confirmed. *(show Page 7)*



### Measurement report

07.11.2014 12:52

Serial number : 19241

Instrument ID : LRI A&E 1

Operator ID : blood

Leicester Royal Infirmary A&E

Pat. ID

Last name

First name

Blood type Venous

FIO<sub>2</sub> 0.21

pH 7.283 (-) [ 7.350 - 7.450 ]

PCO<sub>2</sub> 4.62 kPa [ 4.27 - 6.40 ]

PO<sub>2</sub> 3.93 kPa (--) [ 11.07 - 14.40 ]

BE -9.8 mmol/L

cHCO<sub>3</sub><sup>-</sup> 16.0 mmol/L

Na<sup>+</sup> 137.1 mmol/L [ 136.0 - 145.0 ]

K<sup>+</sup> 5.09 mmol/L [ 3.50 - 5.10 ]

Ca<sup>2+</sup> 1.021 mmol/L (--) [ 1.150 - 1.330 ]

Cl<sup>-</sup> 106.4 mmol/L [ 98.0 - 107.0 ]

Glu 11.6 mmol/L (++) [ 3.5 - 5.3 ]

Lac 8.1 mmol/L (++) [ 0.4 - 0.8 ]

Urea 12.9 mmol/L (+) [ 2.5 - 6.4 ]

AG 19.8 mmol/L

Osm 288 mOsm/kg

Hct 21.2 % (--) [ 36.0 - 53.0 ]

Hct(c) 21.0 %

tHb 70.0 g/L (--) [ 115.0 - 178.0 ]

SO<sub>2</sub> 38.7 % (--) [ 94.0 - 98.0 ]

COHb 1.0 % [ 0.0 - 3.0 ]

MetHb 0.7 % [ 0.0 - 1.5 ]

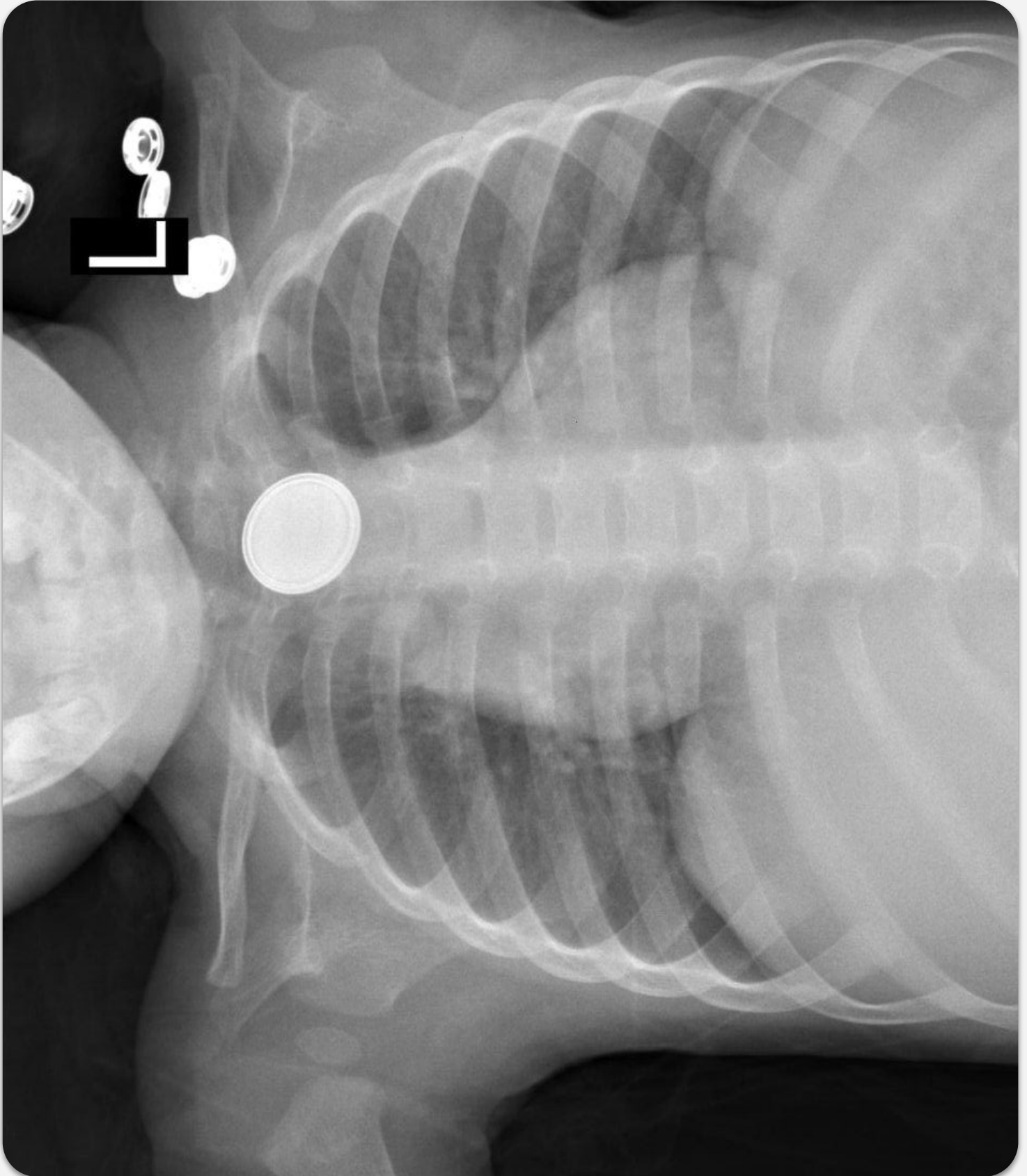
HHb 60.2 % (++) [ 0.0 - 2.9 ]

O<sub>2</sub>Hb 38.1 % (--) [ 94.0 - 98.0 ]

Bili Out of range (-) [ 51 - 850 ]

## Chest X-ray

Provide if requested. Otherwise, wait until debrief.












## Debrief and Feedback

You should aim to cover the following points within 5 minutes, then re-run the scenario:



1. Did the **Team Leader (T.L.)** allocate roles and tasks in a way that was clearly understood? Was **S.E.T.U.P** utilised?
2. Did team members communicate as follows...
  - a. On patient arrival, did **T.L.** ensure a good pre-hospital handover?
  - b. Did **T.L.** show calm and clear speech? Body language?
  - c. Did **T.L.** maintain good team control and communication throughout?
  - d. Was closed-loop communication used when assigning tasks?
3. Was IV access and the rapid infuser prioritised?
4. Did **T.L.** accurately interpret gravity of situation and convey that?
5. Were the following all called correctly: ED consultant / ITU / Gastro? Was the massive haemorrhage protocol activated?
6. How did team members help the team pull together?
7. Were there any instances of...
  - a. Equipment issues?
  - b. Human factors negatively impacting communication or patient care?

## Additional Resources

- |  |  |
|--|--|
|  Potential Button-Battery or Magnet Ingestion or Insertion (UHL local guideline) <a href="https://bit.ly/40LG73e">https://bit.ly/40LG73e</a> |  Button Batteries Burn (EM3) <a href="https://bit.ly/3SftcTt">https://bit.ly/3SftcTt</a>                                  |
|  Management of Upper Gastrointestinal Bleeding in Children (UHL local guideline) <a href="https://bit.ly/3YG6uGe">https://bit.ly/3YG6uGe</a> |  Re-ACT Talks: Batteries, Burns and other Bombs (NHS England) <a href="https://bit.ly/3IOF9U1">https://bit.ly/3IOF9U1</a> |
|  Massive Haemorrhage guideline (UHL local guideline) <a href="https://bit.ly/2GNSzZY">https://bit.ly/2GNSzZY</a>                             |  Button Battery Update (LITFL) <a href="https://bit.ly/3XJkJZQ">https://bit.ly/3XJkJZQ</a>                                |
|  |  Lightning Learning: GI Bleeds (EM3) <a href="https://bit.ly/3ElfBnM">https://bit.ly/3ElfBnM</a>                          |

