

RESUS DRILLS



FACIAL TRAUMA

#6

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

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?

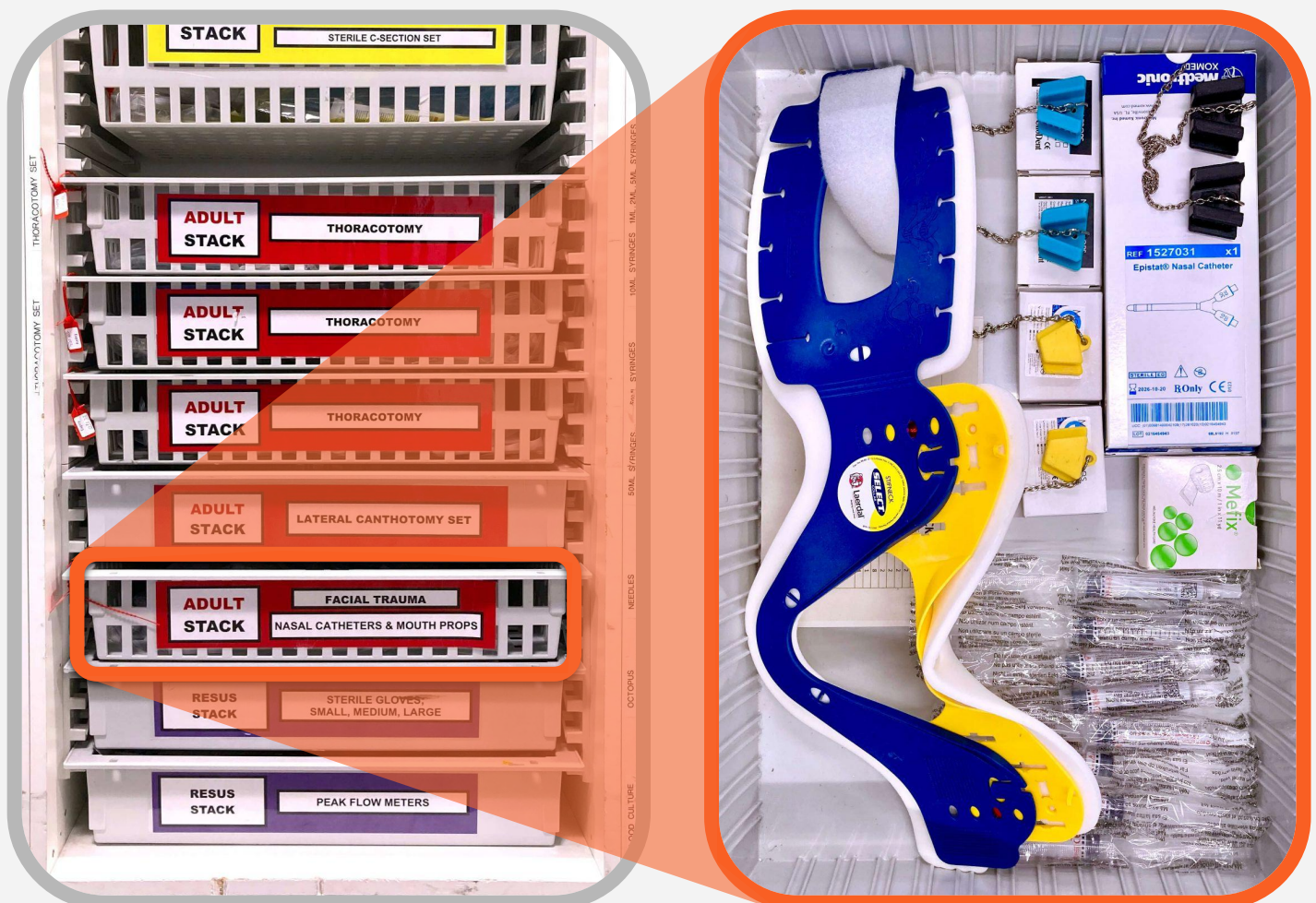
TEAM... initial briefing, identify Team Leader, allocate team roles

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

PATIENT... the patient arrives

Location of Equipment

The **Facial Trauma kit** can be located on the far right of the Resus/ER equipment stacks next to Bay 9 and opposite Bay 10.



Indications

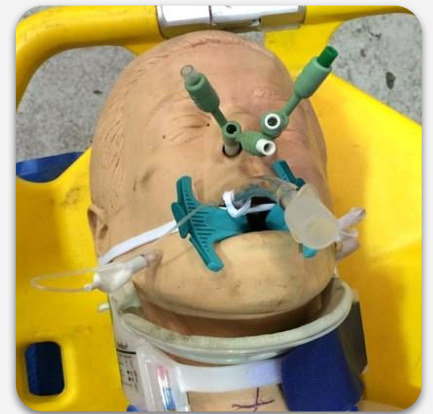
- Uncontrolled midface haemorrhage due to fracture
- **Intubation must be performed BEFORE this intervention**

Equipment Required

- | | | |
|--|---|-------------------------------|
| <input checked="" type="checkbox"/> Epistat nasal cannula x2 | <input checked="" type="checkbox"/> Syringe 20 ml | } (can also use Posiflush x8) |
| <input checked="" type="checkbox"/> Bite blocks (S/M/L) x2 | <input checked="" type="checkbox"/> Saline 100 ml | |
| <input checked="" type="checkbox"/> Cervical collar/Neck brace | <input checked="" type="checkbox"/> Mefix 2cm (cut into 10 cm strips) | |

Landmarks and Techniques

1. Insert **nasal epistats** into each nostril **! DO NOT INFLATE YET !**
2. Insert bite blocks either side of the ET tube, between upper and lower molars and with point of wedge towards the back of mouth
3. Apply cervical collar to stabilise the mandible
4. Inflate posterior balloons **WHITE VALVE** with 10 mls saline each side
5. Use epistats to pull the midface forward with traction
6. Inflate the anterior balloon on each side **GREEN VALVE** with 20-30 mls saline



Facial Trauma Decision Algorithm

- ✓ Heavy bleeding from the midface
- ✓ Airway threat

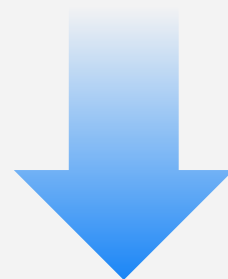
In parallel:

- Get difficult airway trolley
- Call Maxillofacial senior doctor

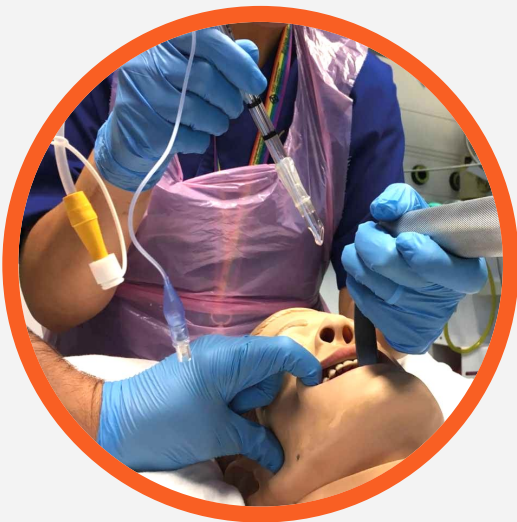
Assess and document
GCS score



Urgently get senior
anaesthetist help for **RSI**
intubation with manual
in-line immobilisation



Proceed as per
instructions on **Page 3**



Emergency Department: Pre-Hospital Pre-Alert Report Form

CALL SIGN OF THE VEHICLE / TEAM

1234

A ge (and sex)	AGE	49	SEX	M	Frank
T ime (of incident / onset of symptoms)		?			
M echanism of Incident (injury / illness)	Bus driver, unrestrained collision with bridge				
I njuries / Symptoms (suspected or present)	Nose bleeding heavily from hitting face on windscreen, no other apparent injuries				
S igns (Observations, Clinical Stability)	HR	80	GCS	13	
	RR	25	BM	3.7	
	BP	140/90	TEMP	36.9°C	
	SPO ₂	95% on 2L O ₂	PEAK FLOW	-	
NEWS score total	EMAS TRAUMA TRIAGE TOOL POSITIVE?			YES / NO	
R ed Flag Sepsis	CLINICAL CONDITION		STABLE / UNSTABLE		
T reatment (Given so far – In brief!)	1 x grey cannula 2L oxygen 1L saline				
E TA (Time of arrival in ED)	3 mins				
R equirements (Circle – specify where required)	TRAUMA			MEDICAL	
	MASSIVE BLOOD LOSS PROTOCOL TRAUMA TEAM ACTIVATION			STROKE THROMBOLYSIS CARDIAC SPECIALIST NURSE SEPSIS PATHWAY	
Call taken by;	M.F. Hertz	Date;		Time;	: HRS
Information passed to;	Dr Doctor	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

ADHESIVE STRIP - HERE

Scenario Script

Instructor to read out this section

“The red phone has just rung with a 3-minute warning of a 49-year old bus driver, not wearing seatbelt, who has collided with a bridge. He is GCS 13 and has heavy bleeding from hitting his face on the windscreen. Here is his red call information.” (give Page 5 to Team Leader)

Minute One

Team Leader (T.L.) designates team members and uses S.E.T.U.P. PPE and badges donned.

Should request Facial Trauma stack, Difficult Airway stack and consider activating trauma team. Do not prompt. Anaesthetist arrives if requested.



Minute Two

Paramedics arrive stating *“He’s become more drowsy, blood pouring from his nose, needing a lot of suctioning”* HR and BP stable.

Minute Three

T.L. should allocate roles for intubation, primary survey, IV access and bloods. Do not prompt. If asked, *“the GCS is 9.”*

When airway assessed *“There is crepitus of the face, heavy bleeding from nose, needing suctioning constantly.”*

T.L. should recognise need for urgent senior specialist intubation followed by mid-face stabilisation. Senior anaesthetist arrives to help.

Minute Four

Anaesthetist rapidly decides to intubate and achieves this quickly. Maxillofacial team delayed in arriving (if already called).

T.L. should decide to stabilise take action. If T.L. waits, do not prompt, but ETT needing constant suctioning and BP starts to drop.

Minute Five

If Epistats and bite blocks inserted, bleeding is controlled. Decision made re: CT or immediate transfer. If quick secondary survey performed, no more injuries found.

T.L. should organise senior Dr conversation to discuss imaging vs immediate transfer to Major Trauma Centre.

Debrief and Feedback

You should aim to cover the following points within 5 minutes, then re-run 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?
2. Did team members do as allocated?
3. *On arrival of patient* did **Team Leader** maintain team control?
 - a. Calm and clear speech?
 - b. Closed loop communication when tasking?
 - c. Body language that looks relaxed and inspires confidence?
4. Was the decision to control the airway with intubation and midface stabilisation taken quickly?
5. How did team members help the team pull together?
6. Were there any instances of:
 - a. Equipment issues?
 - b. Human factors negatively impacting communication or patient care?



Additional Resources



Floating in the Face of Danger: MaxFax injuries in ED (RCEM Learning)

<https://bit.ly/2vbVVPS>



Zygomatic Complex and Nasal Injury (RCEM Learning)

<https://bit.ly/3HxjSVO>



Prehospital Maxillofacial Haemorrhage Control (GSAHEMS)

<https://bit.ly/3QDWSIO>

