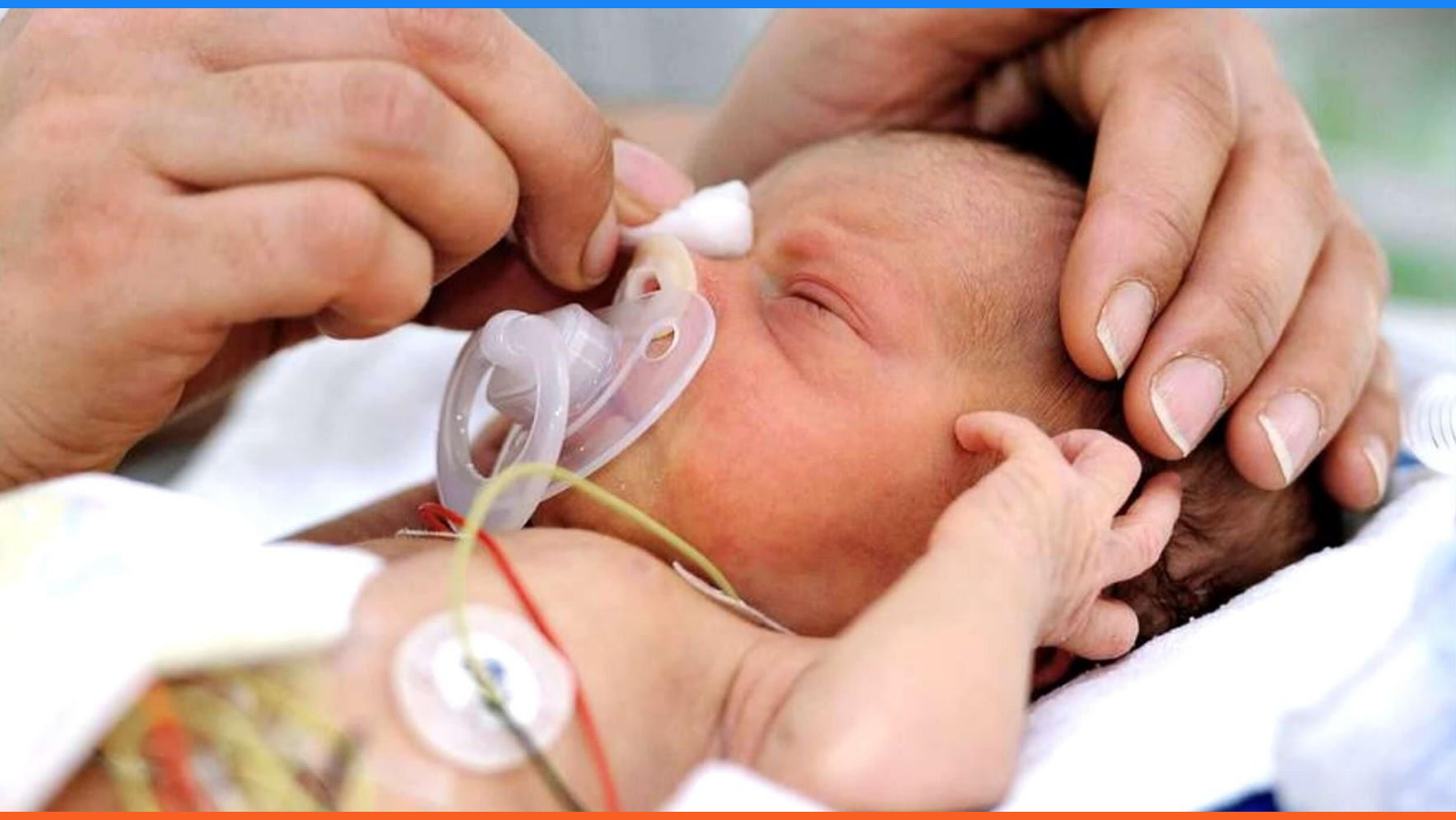
RESUS DRILLS



UNEXPECTED DELIVERY #4

Unexpected Delivery

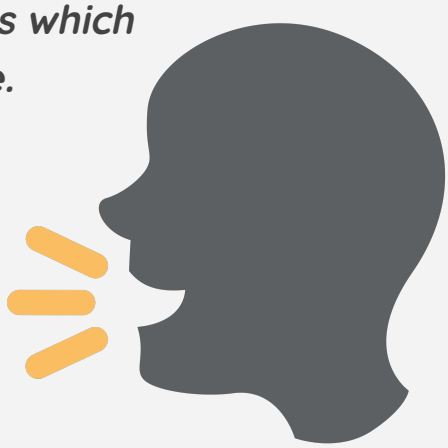
Drill #4

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.

Unexpected Delivery

Drill #4

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?

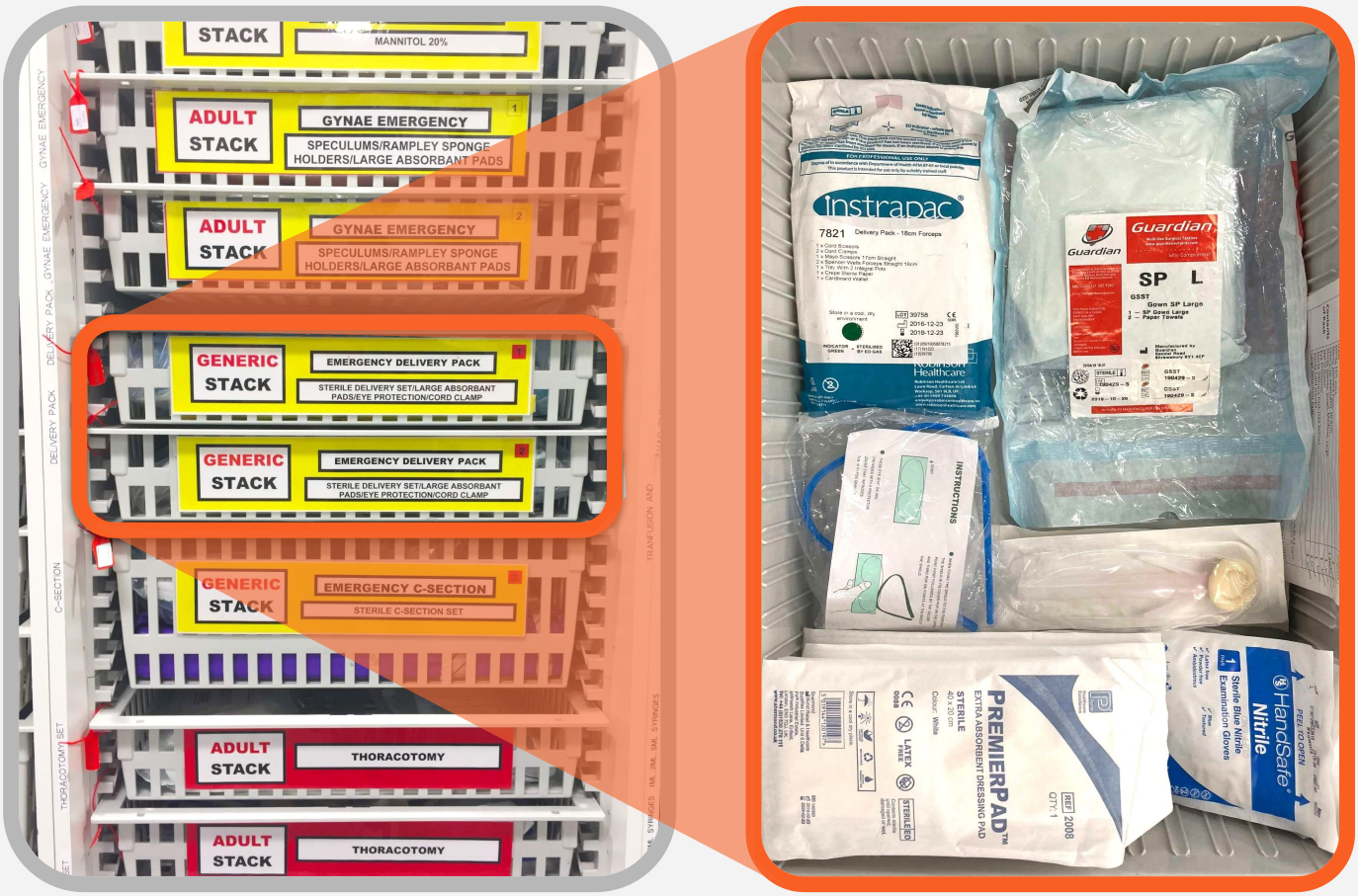
TEAM... initial briefing, identify Team Leader, allocate team roles

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

PATIENT... the patient arrives

Location of Equipment

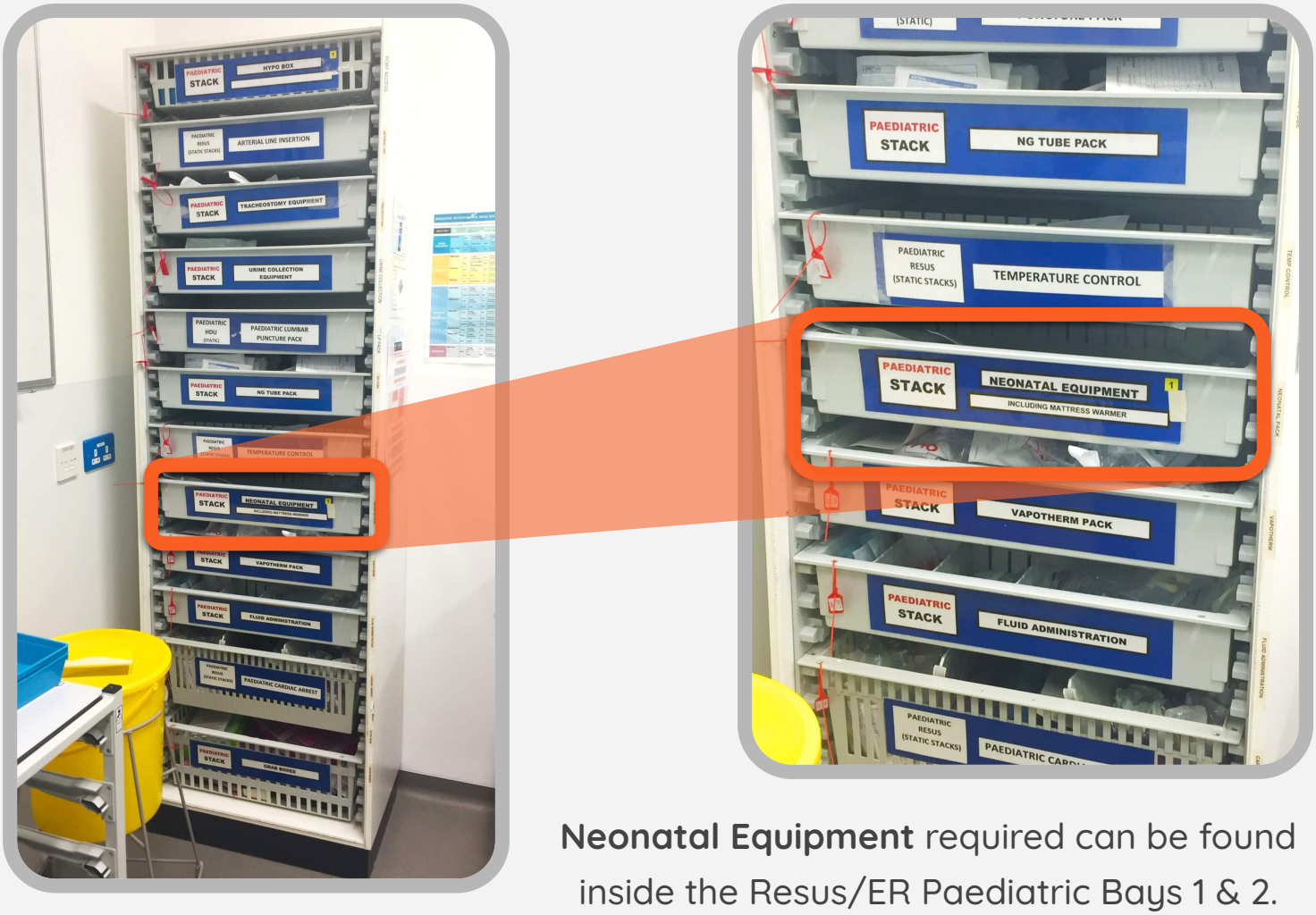
The **Emergency Delivery Pack** can be located inside of the Resus/ER equipment stacks next to Bay 9, opposite Bay 10.



Unexpected Delivery

Drill #4

Location of Equipment ...continued



Neonatal Equipment required can be found inside the Resus/ER Paediatric Bays 1 & 2.

Unexpected Delivery

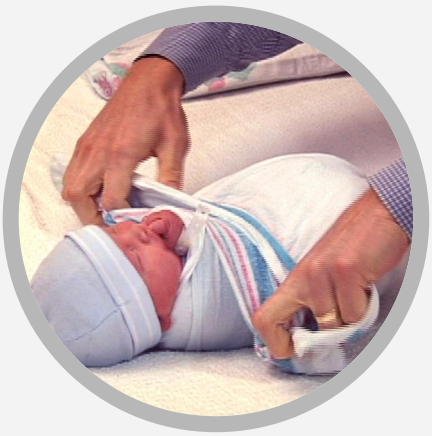
Drill #4

Equipment Required

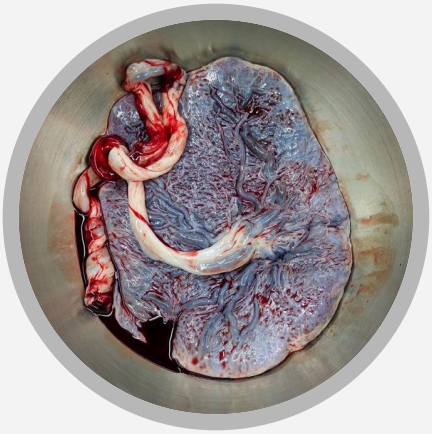
- [x] Towels
- [x] Emergency Delivery stack (incl. cord clamps x2, kit for mum)
- [x] Neonatal stack (incl. cord clamps x2, hat, TransWarmer)

Landmarks and Techniques

1. **Cord clamping:**
    a. Place one clamp approximately 15 cm from the baby's abdomen
    b. A second clamp 2–3 cm distally to the first
    c. Ensure that they are firmly closed and cut between



2. **Basic neonatal resuscitation:**
    a. Dry and rub (stimulate) with warm towels and check response and heart rate (should be >60/min)
    b. BLS highly unlikely to be needed, wrap baby in dry, warm towels and keep separate from mum for now (until mum assessed and facts established)
    c. Apply TransWarmer under wrapped baby and a hat
3. **3rd stage of labour:**
    a. Support the mother in a comfortable position...
        i. Upright at 45° if no bleeding, never flat
    b. Passively assist the mother, do not pull the cord...
        i. Expulsion of placenta + membranes can take >15-20 mins
        ii. Deliver straight into a bowl or plastic bag and keep



    c. Once placenta is delivered (end of 3rd stage)...
        i. Massage lower abdomen with a cupped hand using a circular motion to stimulate uterine contraction
        ii. Administer Syntometrine I.M. (kept in ER fridge)

Unexpected Delivery

Drill #4

Unexpected Premature Delivery Decision Algorithm

Baby delivered unexpectedly

- Medical history unknown
- Social circumstances unknown

In parallel CALL FOR HELP and GET EQUIPMENT:

- Call 2222 obstetric emergency team and paediatric ED team
- Get delivery stack and neonatal stack

Initial immediate visual assessment <1 min

1. *Mother* – any signs of haemorrhage or collapse?
2. *Baby* – Breathing? Crying?

Cord is clamped and cut safely

Immediately move *Mother* and *Baby* to clinical area in adjoining cubicles

120s

CUBICLE 1

Allocate a team to *Mother* (Team 1)

Check for signs of haemorrhage and shock:

- ABC assessment
- Estimate blood loss so far (>300 ml?)

Focus on 3rd stage:

- Site intravenous cannula (wide bore)
- Send group & save
- Stimulate uterine fundus
- Syntometrine 500 mcg (1ml) IM

MAINTAIN TEMPERATURE

CUBICLE 2

Allocate a team to *Baby* (Team 2)

Check condition:

- Tone
- Colour
- Breathing
- Heart rate

Focus on basics:

- Stimulate baby whilst drying
- Apply hat, wrap in towels
- Put baby on TransWarmer

Unexpected Delivery

Drill #4

Scenario Script

Instructor to read out this section

"An alarm is set off from the Paediatric ED patient toilet opposite the main work-station. A 15-year-old female presented with abdominal pain has given birth unexpectedly. A baby is on the toilet floor attached by its cord."

Minute One

"Baby is breathing and starting to cry, mother is alert, distraught but looking OK". **Team Leader** should call for a trolley to move to clinical area. Should ask for the normal delivery pack and neonatal pack from the ER stacks and request 2222 obstetric emergency team and paediatric ED senior staff help. Cord should be ideally be clamped before moving. *Do not prompt if incorrect.*

Minute Two

Whole team, mother and baby should be moved to adjoining cubicles in the Resus/ER area. *Prompt if this is not done (scenario cannot continue in the toilet).* ***"The baby looks OK."***

Minute Three

Team Leader should allocate 3x team leader roles – **Overseeing Team Leader (OTL)** plus one per cubicle (**TL1** and **TL2**). ED consultant could facilitate this if called. *Do not prompt.*

Cubicle 1, Mother – Time check, vital signs ***"HR 100, RR 25, BP 120/80, SpO2 96% air, GCS 15, Temp normal."*** Mother to be positioned comfortably and reassured.

Cubicle 2, Baby – condition recheck. Auscultation for heart rate. ***"HR 120."*** Resuscitation is not needed. ***"Baby is crying and active with a good colour."*** Dry the baby and keep warm (towels and TransWarmer). *Do not prompt.*

Minute Four

Cubicle 1, Mother – Obstetric team has not arrived. ***"Mother remains alert, minimal blood loss per vaginally, cord intact, and placenta not visible"*** **TL1** to focus on 3rd stage and IV access.

Cubicle 2, Baby – Paediatric team has not arrived. ***"Baby's condition is unchanged but the baby appears small."***

Minute Five

Cubicle 1, Mother – Prompt **TL1** to describe what they would do next. Includes Incopads on floor, bowl for placenta, syntometrine IM. **TL1** to lead discussion as to who should take over as **TL1** if specialist help arrives.

Cubicle 2, Baby – Prompt **TL2** to describe what they would do next. Includes assessing prematurity and getting the right equipment. **TL2** to lead discussion as to who should take over as **TL2.**

Unexpected Delivery

Drill #4

Debrief and Feedback

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

1. Was the correct help immediately called for? *(obstetric emergency team and paediatric ED senior staff)*
2. Was there a rapid decision to move out of the toilet?
3. How did the team pull together?
4. Were **TWO** teams formed? *(mother and baby)*
5. Were the right stacks brought? *(normal delivery stack, neonatal resuscitation stack)*
6. Were the right actions taken to for the baby? *(rapid assessment, keeping warm)*
7. Were the right actions taken for the mother? *(basic assessment, 3rd stage management)*
8. Was ownership of the patients established once specialist teams arrived?
9. Were there any instances of:
    a. Equipment issues?
    b. Human factors negatively impacting communication or patient care?

Additional Resources

Management of an Unexpected Delivery in the Emergency Department (Gupta AG, Adler MD) https://bit.ly/3DTjNuR

Lightning Learning: Precipitous Delivery (EM3) https://bit.ly/2FVe626

Lightning Learning: Newborn Life Support (EM3) https://bit.ly/2AVRefS

Neonatal Resuscitation and the Emergency Physician (ED Central) https://bit.ly/3xVW0b7

Call The Midwife! (...and other tips on ED deliveries) (RCEM Learning) https://bit.ly/2s0wTAO

Precipitation Labour in the Emergency Department (RCEM) https://bit.ly/3mSGBSx