

# QRH instructions for use

The QRH is intended for use by individuals who are familiar with it and who are practised in its use.

Each action card guidance follows the same format:

v.1 Obstetric Anaesthetists' Association 2024. Issued under Creative Commons license CC BY-NC-SA 4.0. See [www.oaa-anaes.ac.uk/qrh](http://www.oaa-anaes.ac.uk/qrh)

**2-4a Anaphylaxis** 1

Anaphylaxis is a life-threatening hypersensitivity reaction featuring rapidly developing hypotension and tachycardia, and potentially life threatening airway obstruction or respiratory arrest. Common causative agents: antibiotics, anaesthetic agents, IV colloids, blood products. Latex: catheters, dressings, gloves. Chlorhexidine: skin preparation, grafted lubricants, or catheters

**START** 2

- 1** Call for help (obstetrician, midwife, anaesthetist +/- neonatal team +/- cardiac arrest team)
  - ▶ Ask: "who will be the team leader?"
  - ▶ Team leader assigns checklist reader and scribe
  - ▶ Note time
- 2** Assess clinical status using the ABCDE approach
  - ▶ Position woman appropriately (Box A)
  - ▶ Check airway –then– give high flow oxygen
  - ▶ If airway involvement → call anaesthetics/ICU
  - ▶ Start continuous monitoring: SpO<sub>2</sub>, respiratory rate, 3-lead ECG and blood pressure
- 3** Treat anaphylaxis
  - ▶ Give adrenaline 500 mcg IM. If no improvement → repeat at 5 minute intervals (Box B)
  - ▶ Give rapid IV crystalloid bolus
  - ▶ Remove any suspected causative agents
- 4** Assess response
  - ▶ If no improvement in cardiac or respiratory symptoms after two doses of IM adrenaline state 'refractory anaphylaxis' –then– go to **Refractory anaphylaxis 2-4b**
- 5** Take mast-cell tryptase sample
  - ▶ 5-10 mL clotted blood drawn as soon as feasible following initial resuscitation
- 6** Consider transfer of the woman to critical care setting
- 7** Start post event action (Box C)

**Box A: Position**

If cardiovascular compromise. Lie flat, tilt bed head down

**Avoid aortocaval compression:**

- ▶ Place in full left lateral position; or
- ▶ Supine with manual uterine displacement; or
- ▶ 15° lateral tilt (if bed/operating table permits)

If respiratory problems without cardiovascular compromise:

- ▶ Place in sitting position

**Box B: Drug doses and treatments**

**Adrenaline bolus**

\*500 micrograms IM (0.5 mL of 1:1000 adrenaline) to anterolateral aspect of mid-thigh –or– [specialist use] 50 micrograms IO/IV with appropriate monitoring. \*IM generally preferred; IV/IO adrenaline ONLY to be given by experienced specialists

**Oxygen**

15L / min via reservoir mask –then– titrate to SpO<sub>2</sub> 94-98%

**Crystalloid bolus**

e.g., 500-1000 ml Hartmann's titrate to response (reduce to 250-500 ml if pre-eclamptic)

**Box C: Post event actions**

- ▶ Stop suspected triggers currently prescribed
- ▶ Take 2nd tryptase sample at 1-2 hrs, and 3rd after 24 hrs
- ▶ Consider cetirizine (10-20 mg PO) for cutaneous symptoms
- ▶ Make referral to specialist allergy clinic or immunology centre to identify the causative agent (see [www.bsaci.org](http://www.bsaci.org))
- ▶ Report anaphylactic drug reactions ([www.mhra.gov.uk](http://www.mhra.gov.uk))
- ▶ Inform the woman and her GP

**Box D: Critical Changes**

Refractory anaphylaxis → 2-4b

Cardiac arrest → 1-1

1. Guidance number, name and version number.
2. A brief description of the clinical situation for which the guidance is written.
3. The body of the guidance.
4. Call out boxes, which may be referred to in the body text.
  - ▶ Blue = drug doses
  - ▶ Green = CPR information
  - ▶ Black = equipment instructions
  - ▶ Purple = other reference information
  - ▶ Red = post-resuscitation / birth care
  - ▶ Orange = \*critical changes \*Critical changes are not referred to in the body of the text
5. Guidance may suggest changing to one of the other action cards, like this: → 2-1.
6. The guidance number is repeated for easy finding without the need for a tabbed folder.

Each guidance should be used in the same simple way:

- ▶ Start at **START**.
- ▶ Work through the numbered bullet points in order.
- ▶ Where indicated, refer to the call out boxes on the right.
- ▶ Where indicated, move to another action card.

We recommend:

- ▶ Having a copy available in all clinical areas where pregnant women are cared for.
- ▶ One person should read the guidance aloud; they should NOT be the person performing the actions.
- ▶ The reader should ensure that the guidance is followed systematically, thoroughly and completely and that steps are not omitted.
- ▶ Whenever experienced help arrives, consider delegating leadership to them; they have a fresh pair of eyes and may be able to make a more clear-headed assessment.