|  |
| --- |
| 4-2 Mains electricity failure v1v.1 |
| Unexpected total power failure is rare and unpredictable. Ability to safely deliver and maintain anaesthesia is immediately compromised.  |

 START.

❶ Call for help – extra staff to monitor patient and source additional equipment.

❷ Liaise with local coordinator to activate appropriate local plan (Box A):

* If immediate evacuation necessary **→ 4-3**

❸ Get additional light into theatre (Box B).

❹ Ensure ventilation continues:

* Manual ventilation if required.
* Consider moving to spontaneous ventilation.
* Maintain anaesthesia.

❺ Check the pulse and blood pressure manually if monitors have failed.

❻ Check mains oxygen supply intact. If failed**→ 4-1**

❼ Unplug unnecessary equipment. Use correct socket for essential equipment (Box C).

❽ Assess reliability of power supply, duration of surgery and patient condition:

* Consider stopping surgery immediately.
* Consider continuing surgery until patient is stable and wound is closed (may be temporary closure).
* Consider evacuation to theatre with intact mains supply **→ 4-3**

**❾** Prepare recovery facilities. Consider theatres, recovery, ICU.

|  |
| --- |
| Box A: ACTION FROM LOCAL COORDINATOR |
| Local coordinator should activate any local incident plan and urgently establish and brief teams on:* Extent of failure.
* Likely duration of failure.
* Interruption to other services (eg oxygen, water).
 |

|  |
| --- |
| Box B: SOURCES OF ADDITIONAL LIGHT |
| * Open doors and blinds.
* Hand torches, portable lights, mobile phones, laryngoscopes.
 |

|  |
| --- |
| Box C: TYPES OF POWER SUPPLY |
| * Standard power socket: not protected.
* SPS: Secondary supply (red socket) for devices that can sustain brief periods of loss of power (eg those with internal battery back-up).
* UPS: Uninterrupted supply (blue socket) for instantaneous and continuous protection. This supply is limited therefore avoid using UPS sockets unless absolutely necessary.
* Devices’ internal battery backup: this may not supply all functions of the device and duration may be variable.
 |

|  |
| --- |
| Box D: CRITICAL CHANGES |
| Mains oxygen failure→ 4-1Emergency evacuation → 4-3 |

**The Association Of Anaesthetists of Great Britain & Ireland 2018. www.aagbi.org/qrh** Subject to Creative Commons license CC BY-NC-SA 4.0. You may distribute original version or adapt for yourself and distribute with acknowledgement of source. You may not use for commercial purposes. Visit website for details. The guidelines in this handbook are not intended to be standards of medical care. The ultimate judgement with regard to a particular clinical procedure or treatment plan must be made by the clinician in the light of the clinical data presented and the diagnostic and treatment options available.

4-2