



BUNDLE

Post-ROSC bundle

The first hour after return of spontaneous circulation



EM Orbit

Patient reference

Date

Time zero

Completed by

ROSC is the start of the next resuscitation, not the end. Re-arrest is most likely in the first minutes. Work A to E, then find the cause.

Airway and breathing

☐ **Secure the airway if the patient is not protecting it; confirm with waveform capnography**

An intact airway in a patient who is waking is not an indication to intubate.

☐ **SpO₂ 92–98%. Avoid both hypoxia and hyperoxia**

Titrate FiO₂ down as soon as a reliable saturation is available.

☐ **Normocapnia: PaCO₂ 35–45 mmHg (4.7–6.0 kPa); 10 breaths/min as a start**

Lung-protective tidal volumes 6–8 mL/kg ideal body weight.
Chest X-ray for tube position and complications.

☐ **Glucose 7.8–10 mmol/L (140–180 mg/dL); treat hypoglycaemia immediately**

Avoid tight control.

☐ **Seizures: treat clinically; EEG early if comatose**

Do not give seizure prophylaxis. Myoclonus is not automatically a poor prognostic sign.

☐ **Sedation and analgesia titrated; head of bed 30°**

Short-acting agents so that neurological assessment is possible.

☐ **No prognostication before 72 hours after return to normothermia**

Early pupillary or motor findings must not drive withdrawal decisions.

Circulation

☐ **SBP > 90 mmHg and MAP > 65 mmHg — fluid, then vasopressor**

Noradrenaline first line. Avoid hypotension: it is associated with worse neurological outcome.

☐ **12-lead ECG as soon as possible**

Repeat after 10 minutes if the first is non-diagnostic — early post-ROSC ECGs over-call ST elevation.

☐ **STEMI on ECG → emergent coronary angiography**

Without ST elevation: angiography is reasonable when a cardiac cause is suspected, especially with electrical or haemodynamic instability (AHA 2020).

☐ **Treat arrhythmia and electrolytes: K⁺, Mg²⁺, Ca²⁺**

Aim K⁺ 4.0–5.0 mmol/L. Do not give prophylactic antiarrhythmics.

☐ **Point-of-care echo: tamponade, RV strain, LV function, volume**

Consider PE, hypovolaemia and mechanical causes.

Find and treat the cause

☐ **H's and T's again: hypoxia, hypovolaemia, hypo/hyperkalaemia, hypothermia, hydrogen ion; tension, tamponade, toxins, thrombosis (coronary, pulmonary)**

☐ **Bloods: ABG, lactate, electrolytes, glucose, troponin, FBC, coagulation, cultures if infection possible**

☐ **CT head if a neurological cause is possible or the history is unclear; CT pulmonary angiogram if PE suspected**

☐ **Toxicology history and antidote where indicated**

Disposition

☐ **ICU, cath lab or both — refer early and transfer with a monitor, drugs and a doctor**

Use the transfer checklist.

☐ **Family updated; document time of ROSC, interventions and the plan**

Consider organ donation pathways where appropriate.

Neurological protection

☐ **Not following commands → temperature control now**

AHA 2020: targeted temperature 32–36 °C for ≥ 24 h. AHA 2023 update: a constant target of 32–37.5 °C, with active fever prevention for at least 72 h in patients who remain comatose. Follow the local protocol and start in the ED.

Re-arrest: return immediately to the Code Blue runner — it resumes the cycle timer. · Paediatric post-ROSC targets differ (normal SBP for age, SpO₂ 94–99%); see APLS.



A drafted aid to memory, awaiting senior review. It does not replace your local protocol or your clinical judgement. Source: AHA ACLS 2020 · ERC 2021 · AHA 2023 focused update.
EM Orbit · Emergency medicine, in one orbit · post-rosC · red rows are the steps that must not be missed