

Day 1 — Code Blue Ready

Case simulation cards — facilitator pack (3 scenarios)

How to run these simulations

- Each scenario runs 10–12 minutes plus a 10-minute debrief. Rotate roles so every participant leads at least once during the campaign.
- Assign 4–6 participants per scenario: team leader, compressor(s), airway, defibrillation, drugs/IV, recorder. Combine roles if fewer staff.
- Use a CPR manikin, trainer AED, bag-valve-mask with oxygen tubing (not connected), the actual crash cart, and printed drug labels — no real drugs.
- One observer completes the Day 1 Audit Tool during the scenario; the facilitator controls the patient state using the progression table.
- Announce vital signs and rhythm only when the team assesses or attaches the monitor — do not volunteer information.
- Stop the scenario at any unsafe action, correct it, and resume. Safety phrases and closed-loop orders are scored, not just clinical steps.

Standard debrief structure (after every case)

- **Reactions** — one word from each participant on how it felt.
- **Description** — what was the case? Confirm the clinical facts.
- **Analysis** — what went well, what would we do differently? Use the audit checklist findings.
- **Summary** — each participant states one thing they will do differently in a real emergency.

Case 1: Witnessed VF Arrest in the Waiting Area

Adult BLS + AED • shockable rhythm • team roles • target: first shock < 3 minutes

Scenario brief — read aloud to the team

A 58-year-old man attending for a routine blood-pressure review suddenly slumps in his chair in the waiting area. The receptionist screams for help. You are the first clinical staff member to arrive. It is 10:30 on a normal working morning; the centre is fully staffed.

Setting, roles & equipment

Location	Waiting area, then floor. Manikin supine on hard floor.
Participants	First responder + code team of 4–5 arriving over the first 2 minutes.
Equipment	CPR manikin, trainer AED, BVM + oropharyngeal airways, crash cart, mock adrenaline 1 mg & amiodarone 300 mg, timer.
Facilitator controls	Rhythm calls at each analysis; announce ROSC only after the 3rd shock IF CPR quality and safety were adequate.

Initial patient status

Response	Breathing	Pulse	Rhythm when AED attached	Other
Unresponsive to shout and shoulder tap	Agonal gasps, ~4/min, then none	No carotid pulse	VF (shock advised)	Bystanders crowding; receptionist panicking

Facilitator progression — how the case unfolds

Stage / trigger	Patient state	Expected team response
0–1 min	Unresponsive, agonal gasps	Recognise arrest ≤10 s, shout CODE BLUE, send named person for crash cart & AED, start compressions
1–3 min	VF on first analysis	Pads on without stopping CPR, all-clear safety sequence, shock 1, resume CPR immediately
3–5 min	VF at second analysis	Shock 2, compressor switch, BVM 30:2 with OPA, IV access, adrenaline 1 mg after 2nd shock
5–7 min	VF at third analysis	Shock 3, amiodarone 300 mg, leader summarises, Hs & Ts verbalised
7–9 min	ROSC: pulse returns, moans	Reassess ABCDE, SpO ₂ 94–98%, 12-lead ECG, keep pads on, prepare urgent transfer

Expected critical actions — observer ticks each

- Arrest recognised and CPR started within 10 seconds of confirming unresponsiveness + abnormal breathing
- Code blue activated with a NAMED person sent for the AED and crash cart
- Compression rate 100–120/min and depth 5–6 cm with full recoil (feedback device or observer count)
- First shock delivered within 3 minutes of collapse
- Verbal all-clear safety check before every shock; compressions resumed immediately after
- Compressor changed every 2 minutes at rhythm checks

- Adrenaline 1 mg IV given after 2nd shock with closed-loop order and time recorded
- Amiodarone 300 mg IV given after 3rd shock
- Post-ROSC: oxygen titrated, BP measured, 12-lead ECG requested, transfer initiated

Debrief points

- How long did the first shock actually take? What delayed it?
- Were any orders given 'into the air' without a name attached?
- What was the longest hands-off pause and why?
- Was the crowd managed and privacy protected?

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Case 2: PEA Arrest During Consultation

Non-shockable rhythm • Hs & Ts • adrenaline early • no shock discipline

Scenario brief — read aloud to the team

A 70-year-old woman with type 2 diabetes and chronic kidney disease becomes unresponsive during a consultation. She missed her last two dialysis sessions. Her daughter says she has been drowsy and 'breathing strangely' since this morning.

Setting, roles & equipment

Location	Consultation room — cramped space; team must move furniture or the patient.
Participants	Consulting doctor + nurse, then full code team.
Equipment	Manikin, trainer AED, BVM, crash cart, mock adrenaline, glucometer prop, IV/IO trainer if available.
Facilitator controls	AED says NO SHOCK ADVISED every cycle. ROSC after ~8 min only if adrenaline given early and hyperkalaemia verbalised as likely cause.

Initial patient status

Response	Breathing	Pulse	Rhythm when AED attached	Other
Unresponsive	None	None palpable	Organised narrow-complex rhythm, no pulse (PEA)	Glucose 6.2 mmol/L when checked; missed dialysis ×2

Facilitator progression — how the case unfolds

Stage / trigger	Patient state	Expected team response
0–1 min	Unresponsive, apnoeic	Recognise arrest, activate code blue, start CPR on the floor or firm surface
1–3 min	AED: no shock advised	High-quality CPR continues, no shock, BVM with OPA, IV access prioritised
3–5 min	Still PEA	Adrenaline 1 mg IV as soon as access obtained, recorder logging times, leader runs Hs & Ts aloud
5–8 min	Still PEA	Team identifies hyperkalaemia (missed dialysis) as likely cause; adrenaline repeated at 3–5 min; plans urgent transfer
8–10 min	ROSC if criteria met	ABCDE reassessment, monitoring, SBAR call to receiving hospital mentioning suspected hyperkalaemia

Expected critical actions — observer ticks each

- Arrest recognised and CPR started ≤10 s; help activated with named tasks
- No shock delivered when AED advises against — CPR resumed immediately after each analysis
- Adrenaline 1 mg IV given as soon as access available and repeated every 3–5 min
- Hs & Ts verbalised systematically by the team leader or delegate
- Hyperkalaemia identified as the likely reversible cause from the history

- Glucose checked to exclude hypoglycaemia
- Compressor switches every 2 min; pauses < 10 s
- Family member handled with dignity — one team member briefly explains and moves her to a supported area
- Receiving hospital told about suspected cause in the SBAR handover

Debrief points

- Why is adrenaline given earlier in non-shockable arrest than shockable?
- What information from the daughter changed your management?
- How did the confined space affect CPR quality — and what did you do about it?

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Case 3: Opioid Overdose Respiratory Arrest

AHA 2025 naloxone pathway • respiratory arrest before cardiac arrest • ventilation first

Scenario brief — read aloud to the team

A 26-year-old man is carried in by friends who then leave quickly. He is unresponsive with pinpoint pupils, blue lips, and is breathing about 4 times per minute. Track marks are visible on his forearm. There is no trauma.

Setting, roles & equipment

Location	Treatment room, trolley.
Participants	Triage nurse first, then doctor + second nurse.
Equipment	Manikin, BVM + oxygen, OPA/NPA, mock naloxone 0.4 mg ampoules, trainer AED, SpO2 prop.
Facilitator controls	If ventilation delayed > 2 min → progress to cardiac arrest (PEA). If BVM effective + naloxone given → gradual recovery over 3–4 min.

Initial patient status

Response	RR	SpO2	Pulse	Pupils	Other
Unresponsive (P on AVPU to painful stimulus only)	4/min, shallow	72% on air	52/min, weak but present	Pinpoint	Cyanosed lips; track marks

Facilitator progression — how the case unfolds

Stage / trigger	Patient state	Expected team response
0–1 min	Breathing 4/min, pulse present	Recognise respiratory arrest/failure NOT cardiac arrest — open airway, start BVM ventilation with O2
1–3 min	SpO2 rises with good BVM	Naloxone 0.4 mg IM/IV given per AHA 2025 pathway while ventilation continues; repeat every 2–3 min if no response
3–5 min	If ventilated: RR improves to 10, wakes agitated	Reassess ABCDE, recovery position, continuous monitoring, do not leave alone
Alternative	If ventilation delayed: pulse lost → PEA arrest	Full BLS + adrenaline; naloxone no longer the priority — CPR is
5–8 min	Recovering or arrested per team performance	Plan observation/transfer — naloxone wears off before many opioids; risk of re-sedation

Expected critical actions — observer ticks each

- Pulse checked and found present — chest compressions correctly withheld initially
- Airway opened and effective BVM ventilation with oxygen started within 60 seconds
- Naloxone given early WITHOUT interrupting ventilation (AHA 2025: naloxone integrated into BLS response)
- Naloxone repeated when no response after 2–3 minutes
- Continuous reassessment — team detects deterioration or improvement within 30 seconds
- If arrest develops: immediate CPR + AED without waiting for more naloxone
- Patient placed in recovery position once breathing adequately, never left unobserved

- Transfer/observation planned with re-sedation risk explicitly stated

Debrief points

- Why is this primarily a ventilation problem, and what kills these patients?
- Where exactly does naloxone sit in the 2025 BLS algorithm?
- What are the risks after the patient wakes — clinical and behavioural?

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