

PALS 2025 Essentials: Pediatric Advanced Life Support Study Guide

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Pediatric arrests mostly don't start in the heart. They're the end of respiratory failure or shock that nobody caught in time. This guide covers the 2025 AHA/AAP Pediatric Advanced Life Support basics you need before the PALS pre-course self-assessment and exam: the systematic approach, breathing problems, shock and fluids, the cardiac arrest algorithm, bradycardia and tachycardia with a pulse, the H's and T's, and post-arrest care. Every dose and energy is quoted exactly as AHA prints it. Where AHA gives no number, the item is marked *per local protocol*.

How to use these citations: Each bracketed number links to the numbered list in "Citations" at the bottom of the page. Each entry names the guideline Part, the section number and heading, and the recommendation number with its Class of Recommendation (COR) and Level of Evidence (LOE). It also gives the supportive-text paragraph (¶), counted in order under "Recommendation-Specific Supportive Text," where that could be determined. Algorithm items cite the figure and the box. Page numbers are the printed *Circulation* journal pages (S-numbers) from the AHA PDF, and each paragraph count was checked against that PDF. On cpr.heart.org, find the same section heading and count paragraphs the same way. A few sources aren't *Circulation* pages (AHA course material, the 2005 guideline, and AHA notices), and those entries say so.

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Guideline version verified: Part 8: Pediatric Advanced Life Support: 2025 American Heart Association and American Academy of Pediatrics Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care. *Circulation* 2025;152(16 suppl 2):S479–S537. doi:10.1161/CIR.0000000000001368. Published online October 22, 2025, and co-published in *Pediatrics* 2026;157(1):e2025074351 (doi:10.1542/peds.2025-074351). Part 6: Pediatric Basic Life Support, *Circulation* 2025;152(suppl 2):S424–S447, doi:10.1161/CIR.0000000000001370. The 2025 Part 8 supersedes the 2020 pediatric recommendations, and topics that weren't re-reviewed carry over the 2020 wording. Checked

October 31, 2026: no 2026 PALS focused update or Part 8 correction was found. The February 2026 AHA change notice covers adult algorithms only. 2025 PALS course materials have been required since March 1, 2026.^[1]

Disclaimer: This is a study aid, not official. For PDF, copy into a word processor and export. Always follow current local protocols, medical direction, and the latest AHA 2025 PALS guidelines and PALS Provider Manual. Doses marked “per local protocol” are not AHA 2025 doses.

Section 1: Why Kids Arrest, and the Systematic Approach

- Pediatric cardiac arrest usually isn't a primary cardiac event. It results from **progressive respiratory failure or shock**, after a period of deterioration that ends in cardiopulmonary failure, bradycardia, and arrest. Most pediatric OHCA are respiratory or asphyxial events that end in **asystole or PEA**, which are nonshockable.^[2]
- **Initial assessment (from the doorway):** appearance, work of breathing, and circulation (color).^[3]
- **Evaluate → Identify → Intervene**, then repeat. Evaluate means the initial, primary, and secondary assessments. If you find cardiac arrest at any point, go to the arrest algorithm.^[3]

Section 2: Respiratory Distress vs. Failure and the Four Types

- **Respiratory failure**, per AHA: breathing becomes inadequate and results in ineffective oxygenation and ventilation.^[4]
- **Causes AHA lists:** disordered control of breathing, upper airway obstruction, lower airway obstruction, respiratory muscle failure, and parenchymal lung disease. In the PALS course these become the four types: upper airway, lower airway, lung tissue disease, and disordered control of breathing.^[4]
- **Distress vs. failure:** PALS classifies severity as distress (increased work of breathing, still compensating) or failure (inadequate oxygenation and/or ventilation).

The sign-by-sign tables are in the PALS Provider Manual, not in the 2025 guideline text. *PALS course concept*.^[5]

- **Airway:** head tilt–chin lift. Jaw thrust without head tilt if you suspect a C-spine injury. If the jaw thrust fails, use head tilt–chin lift.^[6]
- **Pulse present, breathing inadequate:** 1 breath every **2–3 seconds (20–30/min)**.^[7]
- **HR <60/min with poor perfusion** despite oxygenation and ventilation → start CPR. Suspected opioid overdose → naloxone if available.^[8]

Section 3: Shock

- Shock is the failure of oxygen delivery to meet tissue metabolic demands. **Hypovolemic** shock, including hemorrhagic, is the most common type in children. Distributive, cardiogenic, and obstructive shock are less frequent, and more than one type can occur at once.^[9]
- **Compensated → hypotensive (decompensated):** compensation is tachycardia and increased systemic vascular resistance. When it fails you see hypotension, depressed mental status, decreased urine output, acidosis, and weak central pulses.^[9]
- **Hypotension by age (older AHA definition, still taught):** SBP <60 mm Hg in term neonates (0–28 days), <70 in infants (1–12 months), **<70 + (2 × age in years)** for ages 1–10, and <90 for age 10 and older. This comes from the 2005 AHA PALS guideline. The 2025 Part 8 doesn't restate it. Confirm it in your current Provider Manual.^[10]

Fluids and drips	What AHA 2025 says	Class/LOE
Every bolus	Reassess after every fluid bolus for fluid responsiveness and signs of volume overload. ^[11]	1 / C-LD
Fluid choice	Isotonic crystalloid or colloid. Balanced or unbalanced solutions. ^[12]	2a / B-R; 2a / B-NR
Septic shock	10 mL/kg or 20 mL/kg aliquots with frequent reassessment. Fluid overload can increase morbidity. ^[13]	2a / C-LD
Fluid-refractory septic shock	Epinephrine or norepinephrine infusion. Dopamine if neither is available. Stress-dose corticosteroids may be considered. <i>Infusion doses per local protocol</i> (none given in Part 8). ^[14]	2a / C-LD; 2b / C-LD; 2b / B-NR
Cardiogenic shock	Early expert consultation. Epinephrine, dopamine, dobutamine, or milrinone may be reasonable. <i>Doses per local protocol</i> . ^[15]	1 / C-EO; 2b / C-EO
Hemorrhagic shock with hypotension	Blood products, when available, instead of crystalloid for ongoing volume resuscitation. ^[16]	2a / C-EO
Nonseptic, nonhemorrhagic hypovolemia	No separate volume in the 2025 text. <i>Per local protocol</i> .	—

Section 4: High-Quality CPR

Element	What AHA 2025 says
Pulse check	Health care professionals check for up to 10 seconds . ^[17]
Rate / depth	100–120/min . At least one-third of the AP chest diameter: about 1.5 in (4 cm) in infants and about 2 in (5 cm) in children. ^[18, 19]
Recoil / pauses	Complete recoil. Pauses under 10 seconds. Rhythm check no longer than 10 seconds, about every 2 minutes. 100% oxygen during CPR. ^[18]
Ratios, no advanced airway	15:2 with 2 rescuers before puberty. 30:2 with 2 rescuers once puberty has started. 30:2 with 1 rescuer at any age. ^[19, 18]
Advanced airway	Continuous compressions. 1 breath every 2–3 seconds (20–30/min) , accounting for age and clinical condition. Hyperventilation may compromise hemodynamics. ^[20, 19]
Compressor	Change every 2 minutes, or sooner if fatigued. ^[19]
Technique	Infants: 1 hand or 2 thumb–encircling hands. The 2-finger technique was eliminated. Children: 1 or 2 hands. ^[21]
Airway choice	OHCA: bag-mask ventilation is reasonable over an advanced airway. IHCA: either. ^[22]
Physiology	With an arterial line, target DBP ≥25 mm Hg in infants and ≥30 mm Hg in children ≥1 year . ET _{CO} ₂ may be used to monitor CPR quality, but a specific ET _{CO} ₂ cutoff alone should not be used to end resuscitation. ^[23, 24]

Section 5: The Cardiac Arrest Algorithm

- **Start:** CPR, bag-mask ventilation with oxygen, attach the monitor/defibrillator. Is the rhythm shockable?^[25]
- **VF/pVT:** shock → CPR 2 min with IV/IO access → shock → CPR 2 min with epinephrine every 3–5 min (consider an advanced airway and capnography) → shock → CPR 2 min with amiodarone or lidocaine, and treat reversible causes.^[25]
- **Asystole/PEA:** epinephrine ASAP → CPR 2 min with IV/IO access and epinephrine every 3–5 min (consider an advanced airway and capnography) → treat reversible causes. If the rhythm becomes shockable, switch to the VF/pVT side.^[25]
- **Epinephrine timing:** nonshockable, as early as possible. Shockable, after 2 defibrillation attempts, or sooner only if rapid defibrillation isn't possible. Then every 3–5 minutes until ROSC.^[26]
- **One shock, then compressions.** A single shock may be considered over stacked shocks.^[27]

Item	AHA 2025 dose / energy	Source
Defibrillation	Initial 2–4 J/kg (2 J/kg for ease of teaching). Subsequent 4 J/kg ; higher may be considered, not to exceed 10 J/kg or the adult maximum. Algorithm: 1st shock 2 J/kg, 2nd shock 4 J/kg, subsequent ≥ 4 J/kg, max 10 J/kg or adult dose. The adult maximum is set by the adult guideline and the device: <i>per local protocol</i> .	[28, 29]
Epinephrine IV/IO	0.01 mg/kg (0.1 mg/mL concentration). Max dose 1 mg . Every 3–5 min.	[30, 26]
Amiodarone IV/IO	5 mg/kg bolus during cardiac arrest (max 300 mg). May repeat up to 3 doses (max 150 mg for subsequent doses).	[30]
Lidocaine IV/IO	1 mg/kg . Either amiodarone or lidocaine may be considered for shock-refractory VF/pVT.	[30, 31]
Access	Rapid IV/IO. Pick IV or IO by availability, expertise, and timeliness. IV/IO preferred over endotracheal.	[32]
Weight	Dose by body weight, not to exceed the adult dose. A length-based tape or cognitive aid is reasonable when the weight is unknown.	[33]
Bicarbonate / calcium	Not routine . Bicarbonate for sodium channel blocker toxicity or hyperkalemia. Calcium for hypocalcemia, calcium channel blocker overdose, or hyperkalemia. <i>Doses per local protocol</i> (none in Part 8).	[34]
Defibrillator / pads	Manual defibrillator in trained hands. AED for a child under 8: use a pediatric attenuator. If neither is available, an AED without an attenuator. Use the largest pads that fit while staying separated. AP or anterolateral placement.	[35]

Reversible causes (H's and T's): hypovolemia, hypoxia, hydrogen ion (acidosis), hypoglycemia, hypo-/hyperkalemia, hypothermia; tension pneumothorax, tamponade (cardiac), toxins, thrombosis (pulmonary), thrombosis (coronary).^[36] Traumatic arrest: treat

hemorrhage, tension pneumothorax, and pericardial tamponade.^[37] Sepsis-associated arrest: use the standard PALS algorithm.^[38]

Section 6: Airway During PALS

- Cuffed tubes are reasonable over uncuffed. Watch tube size, position, and cuff pressure (usually **<20–25 cm H₂O**).^[39]
- Routine cricoid pressure is not recommended. Stop it if it interferes with ventilation or intubation.^[40]
- Atropine premedication for emergency intubation may be reasonable: **0.02 mg/kg with no minimum dose**.^[41]
- Confirm ETT placement with exhaled CO₂ (colorimetric or capnography) in all settings, and monitor it during transport.^[42]

Section 7: Bradycardia With a Pulse

- **Cardiopulmonary compromise** means acutely altered mental status, signs of shock, or hypotension.^[43]
- Support the airway and oxygen, give PPV as needed, monitor, and check the pulse. **HR <60/min with compromise despite effective ventilation with oxygen → CPR.**^[44, 43]
- Then IV/IO access and **epinephrine**. Atropine for increased vagal tone or primary AV block. Consider transthoracic or transvenous pacing. Transcutaneous pacing may be considered for complete heart block or sinus node dysfunction unresponsive to CPR. Check the pulse every 2 minutes; no pulse → arrest algorithm.^[44, 43]
- **Causes:** hypothermia, hypoxia, toxins/medications, increased ICP, increased vagal tone, heart block, physiologic. The text also lists hypotension, hypoglycemia, and acidosis as correctable factors.^[43, 44]

Drug	AHA 2025 dose (Figure 6)
Epinephrine IV/IO	0.01 mg/kg (0.1 mg/mL), max 1 mg . ^[43]
Atropine IV/IO	0.02 mg/kg , may repeat once. Minimum dose 0.1 mg, max single dose 0.5 mg . ^[43]

Section 8: Tachycardia With a Pulse

	Probable sinus tachycardia	Probable SVT
P waves	Present/normal	Absent/abnormal
RR	Variable	Not variable
Rate	Infant usually <220/min. Child usually <180/min.	Infant usually ≥220/min. Child usually ≥180/min.
Other	Search for and treat the cause	History of abrupt rate change

Source for the table: ^[45]. Narrow QRS is ≤0.09 s; wide is >0.09 s. Initial support includes a 12-lead ECG if available.^[45]

- **SVT, no compromise:** vagal maneuvers first (e.g., ice water to the face, postural modification; upside-down positioning may work in children). Then IV/IO adenosine. If still refractory, expert consultation.^[46, 45]
- **SVT with compromise:** adenosine if IV/IO access is already present, or synchronized cardioversion.^[45]
- **Refractory SVT with compromise, no expert available:** IV procainamide, amiodarone, or sotalol may be considered. *Doses per local protocol* (none in Part 8).^[47]
- **Wide complex:** with compromise, synchronized cardioversion. Without compromise, expert consultation; if the rhythm is regular and monomorphic, consider adenosine.

An irregular WCT may be pre-excited AF, and adenosine can cause VF.^[48, 45]

Item	AHA 2025 dose / energy (Figure 7)
Adenosine IV/IO	0.1 mg/kg (max 6 mg) rapid push followed by an IV flush. Repeat 0.2 mg/kg (max 12 mg) rapid push with a flush. ^[45]
Synchronized cardioversion	Begin with 0.5–1 J/kg . If not effective, increase to 2 J/kg . Sedate if needed, but don't delay cardioversion. ^[45, 49]

Section 9: After ROSC

- Use the Post–Cardiac Arrest Care Checklist.^[50]
- Keep SBP and MAP **>10th percentile for age**. Use continuous arterial monitoring when resources allow.^[51]
- Target normoxemia. It may be reasonable to wean oxygen to **SpO₂ 94%–99%**. Target an appropriate PaCO₂ and limit hypercapnia and hypocapnia.^[52]
- For a child who stays comatose: continuous central temperature monitoring, and avoid **>37.5 °C**. A 5-day course of TTM is reasonable: 32–34 °C then 36–37.5 °C, or 36–37.5 °C only (ages 24 hours to 18 years).^[53]
- Continuous EEG when resources allow, and treat clinical seizures.^[54] Use multimodal neuroprognostication.^[55] Survivors need follow-up for ongoing physical, cognitive, and behavioral problems.^[56]

Section 10: Team and Family

Family presence during resuscitation has its own section in the 2025 guideline.^[57] Team roles, closed-loop communication, and the team leader tracking CPR quality, rhythm checks, and drug timing are taught in the PALS course and tested in the megacode. *They are PALS course concepts, not numbered guideline recommendations.*^[5]

What Changed From 2020

- DBP targets during CPR are now included (≥ 25 mm Hg in infants, ≥ 30 mm Hg at ≥ 1 year).^[58, 23]
- “New data” support a post-arrest SBP/MAP >10 th percentile for age.^[58, 51]
- “New data” support IV sotalol for refractory SVT with compromise when no expert is available.^[58, 47]
- An ETCO₂ cutoff alone is not a reason to end resuscitation.^[58, 24]
- The 2-finger infant compression technique was eliminated; use the 1-hand or 2 thumb–encircling technique.^[21]
- Atropine premedication for intubation has **no minimum dose**; the historical 0.1 mg minimum came from a 1971 study.^[41] The bradycardia algorithm still lists a 0.1 mg minimum.^[43]
- Sepsis-associated cardiac arrest uses the standard PALS algorithm. This recommendation was updated in 2025.^[38]
- A single Chain of Survival is now standardized across infants, children, and adults (outside neonatal care).^[59]
- **Carried over from 2020 unchanged:** weight-based dosing, the septic, cardiogenic, and hemorrhagic shock recommendations (except the sepsis-arrest item), and traumatic arrest.^[60]

Note: the 2020 guideline text itself wasn't re-read for this guide. The list above contains only items the 2025 text describes as new, updated, or carried over.

Putting It Together: Exam Traps

Question: A 4-year-old has a weak pulse, HR 50, is minimally responsive, and stays that way despite good bag-mask ventilation with oxygen. What's next?

Answer: Start CPR. HR <60 with compromise despite effective ventilation with oxygen is a Class 1 CPR indication, even with a pulse.^[44] Then epinephrine 0.01 mg/kg (0.1 mg/mL), max 1 mg.^[43]

Question: Infant, HR 240, no P waves, fixed RR, poor perfusion, IV in place. What's next?

Answer: Probable SVT with compromise. Adenosine 0.1 mg/kg (max 6 mg) rapid push with a flush, or synchronized cardioversion at 0.5–1 J/kg.^[45]

Question: What's the third shock for a 20-kg child in refractory VF?

Answer: Subsequent shocks are ≥ 4 J/kg (at least 80 J here), with a maximum of 10 J/kg or the adult dose. Amiodarone 5 mg/kg or lidocaine 1 mg/kg follows that shock.^[29, 25]

- Don't confuse the defibrillation numbers (2 → 4 → ≥ 4 J/kg) with the cardioversion numbers (0.5–1 → 2 J/kg).
- A normal blood pressure doesn't rule out shock. Hypotension is late.
- Two rescuers before puberty means 15:2. With an advanced airway, 1 breath every 2–3 seconds.
- Reassess after every bolus. No routine bicarbonate or calcium. No adenosine for an irregular WCT.

Sources (American Heart Association only)

- Part 8: Pediatric Advanced Life Support: 2025 AHA and AAP Guidelines for CPR and ECC. *Circulation* 2025;152(16 suppl 2):S479–S537. doi:10.1161/CIR.0000000000001368. Co-published in *Pediatrics* 2026;157(1):e2025074351.
- Part 6: Pediatric Basic Life Support: 2025 AHA and AAP Guidelines for CPR and ECC. *Circulation* 2025;152(suppl 2):S424–S447. doi:10.1161/CIR.0000000000001370.
- AHA 2025 Pediatric Cardiac Arrest, Bradycardia With a Pulse, and Tachyarrhythmia With a Pulse Algorithms (Part 8 Figures 2, 6, 7) and the Post–Cardiac Arrest Care Checklist (Figure 3), on cpr.heart.org
- AHA 2025 Pediatric BLS Algorithms for Healthcare Providers (Part 6 Figures 9 and 10), on cpr.heart.org
- AHA PALS Systematic Approach Algorithm (AHA course material, cpr.heart.org)
- 2005 AHA Guidelines for CPR and ECC, Part 12: Pediatric Advanced Life Support, *Circulation*, doi:10.1161/CIRCULATIONAHA.105.166573. Used only for the

hypotension-by-age definition.

Citations

1. cpr.heart.org 2025 AHA Guidelines for CPR and ECC, Part 8 landing page (publication date, supersession statement); AHA Training Memo, Oct 22, 2025 (2025 course materials required from Mar 1, 2026); AHA Feb 6, 2026 guideline change notice (adult algorithms only).
2. Part 6 (Pediatric BLS), §5 Major Concepts, narrative text ¶1 and ¶3 (no recommendation). *Circulation* 2025;152(suppl 2):S428 (¶1) and S429 (¶3).
3. AHA PALS Systematic Approach Algorithm, AHA PALS course material on cpr.heart.org (2020 edition; 2025 edition not verified). Not a *Circulation* guideline page. Confirm against your current PALS Provider Manual.
4. Part 6, §6 Treatment of Respiratory Failure, introductory text ¶1 (no recommendation). *Circulation* 2025;152(suppl 2):S430.
5. PALS course concept (team dynamics), not a numbered 2025 guideline recommendation. See your PALS Provider Manual.
6. Part 6, §6.1 Opening the Airway, Recs 1–3 (all COR 1, LOE C-EO); supportive text ¶1–3. *Circulation* 2025;152(suppl 2):S430 (recommendation table and ¶1–3).
7. Part 6, §6.2 Treatment of Inadequate Breathing With a Pulse, Rec 1 (COR 1, LOE C-EO) and Rec 2 (COR 2a, LOE C-EO); supportive text ¶1 (“1 and 2”). *Circulation* 2025;152(suppl 2):S431 (recommendation table and ¶1).
8. Part 6, Figure 10, Pediatric Basic Life Support Algorithm for Healthcare Providers—2 or More Rescuers (with Figure 9, single rescuer, for the naloxone step). *Circulation* 2025;152(suppl 2):S436 (Figure 10) and S435 (Figure 9).
9. Part 8 (PALS), §16.1 Fluid Resuscitation and Management of Septic Shock, Synopsis ¶1–2. *Circulation* 2025;152(suppl 2):S515.
10. 2005 AHA Guidelines for CPR and ECC, Part 12: Pediatric Advanced Life Support, *Circulation* 2005, doi:10.1161/CIRCULATIONAHA.105.166573 (hypotension definition). Volume and page not confirmed; definition confirmed only from an ahajournals.org search excerpt. Not restated in the 2025 Part 8.
11. Part 8, §16.1, Rec 1 (COR 1, LOE C-LD); supportive text ¶1. *Circulation* 2025;152(suppl 2):S515 (table and ¶1).
12. Part 8, §16.1, Rec 2 (COR 2a, LOE B-R) and Rec 3 (COR 2a, LOE B-NR); supportive text ¶2–3. *Circulation* 2025;152(suppl 2):S515 (table and ¶2–3).
13. Part 8, §16.1, Rec 4 (COR 2a, LOE C-LD); supportive text ¶1 (fluid overload) and ¶4. *Circulation* 2025;152(suppl 2):S515 (table, ¶1, ¶4).

14. Part 8, §16.1, Rec 5 (COR 2a, LOE C-LD), Rec 7 (COR 2b, LOE B-NR), Rec 8 (COR 2b, LOE C-LD); supportive text ¶5, ¶7, ¶8. *Circulation* 2025;152(suppl 2):S515 (table; ¶5 begins S515, ends S516) and S516 (¶7–8).
15. Part 8, §16.2 Management of Cardiogenic Shock, Rec 1 (COR 1, LOE C-EO) and Rec 2 (COR 2b, LOE C-EO); supportive text ¶1 (“1 and 2”). *Circulation* 2025;152(suppl 2):S516 (table and ¶1).
16. Part 8, §16.3 Management of Traumatic Hemorrhagic Shock, Rec 1 (COR 2a, LOE C-EO); supportive text ¶1. *Circulation* 2025;152(suppl 2):S516 (table; ¶1 begins S516, continues S517).
17. Part 6, §7.1 Initiation of CPR, Rec 2 (COR 2a, LOE C-LD); supportive text ¶2. *Circulation* 2025;152(suppl 2):S437 (table and ¶2).
18. Part 6, §7.2 Components of High-Quality CPR, Rec 2 (COR 1, LOE B-NR), Rec 3 (COR 1, LOE C-EO), Rec 5 (COR 2a, LOE C-LD), Rec 6 (COR 2a, LOE C-LD), Rec 7 (COR 2a, LOE C-EO), Rec 8 (COR 2a, LOE C-EO), Rec 9 (COR 2a, LOE C-EO); supportive text ¶ matching each Rec number. *Circulation* 2025;152(suppl 2):S437–S438 (table begins S437; Recs 3–9 on S438) and S438–S439 (¶2–9; ¶9 on S439).
19. Part 8, §8, Figure 2 Pediatric Cardiac Arrest Algorithm, “CPR Quality” box. *Circulation* 2025;152(suppl 2):S491.
20. Part 8, §6 Ventilation and Advanced Airway Strategies During CPR, Rec 3 (COR 2b, LOE C-LD); supportive text ¶3. *Circulation* 2025;152(suppl 2):S485 (table) and S486 (¶3).
21. Part 6, §7.3 CPR Technique, infant Rec (COR 1, LOE B-NR) and child Rec (COR 2b, LOE C-LD); supportive text, infant and child paragraphs; Part 6 Top 10 Take-Home Messages (2-finger technique eliminated). *Circulation* 2025;152(suppl 2):S440 (table and supportive text); Top 10 on S424.
22. Part 8, §6, Rec 1 (COR 2a, LOE C-LD) and Rec 2 (COR 2b, LOE C-LD); supportive text ¶1–2. *Circulation* 2025;152(suppl 2):S485 (table and ¶1–2).
23. Part 8, §9 Measuring CPR Physiology and Quality, Rec 1 (COR 2a, LOE B-NR) and Rec 3 (COR 2b, LOE C-LD); supportive text ¶1 (“1 and 3”). *Circulation* 2025;152(suppl 2):S492 (table) and S493 (¶1, labeled “1 and 3”).
24. Part 8, §9, Rec 2 (COR 2b, LOE B-NR; supportive text ¶2) and Rec 7 (COR 3: Harm, LOE C-LD; supportive text ¶6, labeled “7”). *Circulation* 2025;152(suppl 2):S492 (table) and S493 (¶2 and ¶6, labeled “2” and “7”).
25. Part 8, §8, Figure 2 Pediatric Cardiac Arrest Algorithm (flow boxes). *Circulation* 2025;152(suppl 2):S491.
26. Part 8, §7.2 Drug Administration During Cardiac Arrest, Rec 1 (COR 2a, LOE C-LD), Rec 2 (COR 2b, LOE C-LD), Rec 3 (COR 2b, LOE C-LD); supportive text ¶1–3. *Circulation* 2025;152(suppl 2):S486 (table) and S487 (¶1–3).
27. Part 8, §8, Rec 3 (COR 2b, LOE C-LD); supportive text ¶3; and Part 6, §8.1 Coordination of Shock and CPR, Rec 2 (COR 1, LOE C-EO), supportive text ¶2. *Circulation* 2025;152(suppl

- 2):S490 (table and ¶3); Part 6 at *Circulation* 2025;152(suppl 2):S442 (table and ¶2).
28. Part 8, §8 Energy Doses for Defibrillation in Cardiac Arrest, Rec 1 (COR 2a, LOE C-LD) and Rec 2 (COR 2b, LOE C-LD); supportive text ¶1–2 (¶2 refers to the adult guideline and the device for the adult maximum). *Circulation* 2025;152(suppl 2):S490 (table and ¶1–2).
29. Part 8, §8, Figure 2 Pediatric Cardiac Arrest Algorithm, “Shock Energy for Defibrillation” box. *Circulation* 2025;152(suppl 2):S491.
30. Part 8, §8, Figure 2 Pediatric Cardiac Arrest Algorithm, “Drug Therapy” box. *Circulation* 2025;152(suppl 2):S491.
31. Part 8, §7.2, Rec 4 (COR 2b, LOE C-LD); supportive text ¶4. *Circulation* 2025;152(suppl 2):S487 (table and ¶4).
32. Part 8, §7.1 Drug Administration Methods During Cardiac Arrest, Rec 1 (COR 1, LOE C-LD) and Rec 2 (COR 1, LOE C-EO); Synopsis; supportive text ¶1–2. *Circulation* 2025;152(suppl 2):S486 (table, Synopsis, ¶1–2).
33. Part 8, §7.3 Weight-Based Dosing of Resuscitation Medications, Rec 1 (COR 1, LOE C-EO) and Rec 3 (COR 2b, LOE C-LD); supportive text ¶1 and ¶3. Recommendation table confirmed from the *Circulation* PDF (the cpr.heart.org page repeats the §7.2 table here in error). *Circulation* 2025;152(suppl 2):S488 (table and ¶1, ¶3).
34. Part 8, §7.2, Rec 5 and Rec 6 (COR 3: No Benefit, LOE B-NR; class confirmed from the journal PDF); supportive text ¶5–6. *Circulation* 2025;152(suppl 2):S487 (table and ¶5–6).
35. Part 6, §8.2 Type of Defibrillator, Rec 1 (COR 1, LOE C-LD), Rec 2 (COR 2a, LOE C-LD), Rec 3 (COR 2b, LOE C-EO); and §8.3 Defibrillator Paddles and Pads, Rec 1 (COR 1, LOE C-EO) and Rec 2 (COR 2b, LOE C-LD). *Circulation* 2025;152(suppl 2):S443 (§8.2 table) and S444 (§8.3 table).
36. Part 8, §8, Figure 2 Pediatric Cardiac Arrest Algorithm, “Reversible Causes” box. *Circulation* 2025;152(suppl 2):S491.
37. Part 8, §23 Management of Traumatic Cardiac Arrest, Rec 1 (COR 1, LOE C-EO); supportive text ¶1. *Circulation* 2025;152(suppl 2):S533 (table and ¶1).
38. Part 8, §16.1, Rec 6 (COR 2a, LOE C-EO; reviewed and updated 2025); supportive text ¶6. *Circulation* 2025;152(suppl 2):S515 (table) and S516 (¶6).
39. Part 8, §17.1 Use of Cuffed Endotracheal Tubes for Intubation, Rec 1 (COR 1, LOE C-EO) and Rec 2 (COR 2a, LOE B-NR); supportive text ¶1–2. *Circulation* 2025;152(suppl 2):S518 (table and ¶1–2).
40. Part 8, §17.2 Use of Cricoid Pressure During Intubation, Recs 1–2 (COR 3: No Benefit, LOE C-LD; confirmed from the journal PDF) and Rec 3 (COR 3: Harm, LOE C-LD); supportive text ¶1 and ¶2 (“2 and 3”). *Circulation* 2025;152(suppl 2):S518 (table and ¶1; ¶2 begins S518, continues S519).
41. Part 8, §17.3 Atropine Use for Emergency Intubation, both recommendations (COR 2b, LOE C-LD); supportive text ¶2 (historical 0.1 mg minimum). *Circulation* 2025;152(suppl 2):S519 (table

and ¶2).

42. Part 8, §17.4 Monitoring Exhaled CO₂ in Patients with Advanced Airways, Rec 1 (COR 1, LOE C-LD) and Rec 2 (COR 2a, LOE C-LD); supportive text ¶1–2. *Circulation* 2025;152(suppl 2):S519 (table and ¶1; ¶2 continues to S520).
43. Part 8, §18, Figure 6 Pediatric Bradycardia With a Pulse Algorithm (flow boxes and “Doses/Details” box). *Circulation* 2025;152(suppl 2):S522.
44. Part 8, §18 Management of Bradycardia, Rec 1 (COR 1, LOE C-LD), Rec 2 (COR 1, LOE C-EO), Rec 3 (COR 1, LOE C-EO), Rec 4 (COR 2b, LOE C-EO); Synopsis; supportive text ¶1–4. *Circulation* 2025;152(suppl 2):S521 (table, Synopsis, ¶1–4).
45. Part 8, §19, Figure 7 Pediatric Tachyarrhythmia With a Pulse Algorithm (flow boxes and “Doses/Details” box). *Circulation* 2025;152(suppl 2):S525.
46. Part 8, §19.1 Treatment of Supraventricular Tachycardia With a Pulse, Rec 1 (COR 1, LOE C-LD), Rec 2 (COR 1, LOE C-LD), Rec 3 (COR 1, LOE C-EO); supportive text ¶1–3. *Circulation* 2025;152(suppl 2):S523 (table and ¶1–2; ¶3 begins S523, ends S524).
47. Part 8, §19.1, Rec 5 (COR 2b, LOE C-LD); supportive text ¶5; Part 8 Top 10 Take-Home Messages (sotalol). *Circulation* 2025;152(suppl 2):S523 (table) and S524 (¶5); Top 10 on S480.
48. Part 8, §19.2 Treatment of Wide-Complex Tachycardia With a Pulse, Rec 1 (COR 1, LOE C-LD), Rec 2 (COR 2a, LOE C-EO), Rec 3 (COR 2a, LOE C-EO); supportive text ¶1–3. *Circulation* 2025;152(suppl 2):S524 (table and ¶1–3).
49. Part 8, §19.1, Rec 4 (COR 2a, LOE C-LD); supportive text ¶4. *Circulation* 2025;152(suppl 2):S523 (table) and S524 (¶4).
50. Part 8, §11.4, Figure 3 Post–Cardiac Arrest Care Checklist. *Circulation* 2025;152(suppl 2):S499.
51. Part 8, §11.2 Post–Cardiac Arrest Blood Pressure Management, Rec 1 (COR 1, LOE B-NR) and Rec 2 (COR 1, LOE C-EO); supportive text ¶1 (“1 and 2”). *Circulation* 2025;152(suppl 2):S496 (table) and S497 (¶1).
52. Part 8, §11.3 Post–Cardiac Arrest Oxygenation and Ventilation Management, Recs 1–3 (each COR 2b, LOE C-LD); supportive text ¶1 (“1 and 2”) and ¶2 (“3”). *Circulation* 2025;152(suppl 2):S497 (table and ¶1) and S498 (¶2).
53. Part 8, §11.1 Post–Cardiac Arrest Targeted Temperature Management, Rec 1 (COR 1, LOE A), Rec 2 (COR 1, LOE B-NR), Rec 3 (COR 2a, LOE B-R); supportive text ¶1–3. *Circulation* 2025;152(suppl 2):S496 (table and ¶1–3).
54. Part 8, §11.4 Post–Cardiac Arrest Electroencephalography Monitoring and Seizure Treatment, Rec 1 (COR 1, LOE C-LD) and Rec 2 (COR 1, LOE C-LD); supportive text ¶1 and ¶2 (“2 and 3”). *Circulation* 2025;152(suppl 2):S498 (table and ¶1–2).
55. Part 8, §12.2 Multimodal Prognostication, Rec 1 (COR 1, LOE B-NR); supportive text ¶1; Part 8 Top 10 Take-Home Messages. *Circulation* 2025;152(suppl 2):S501 (table), S502 (¶1); Top 10 on S480.

56. Part 8, §13 Post–Cardiac Arrest Recovery and Survivorship; Part 8 Top 10 Take-Home Messages. *Circulation* 2025;152(suppl 2):S509–S510; Top 10 on S480.
57. Part 8, §14 Family Presence During Resuscitation. *Circulation* 2025;152(suppl 2):S511–S512.
58. Part 8, Top 10 Take-Home Messages. *Circulation* 2025;152(suppl 2):S479–S480.
59. Part 6, §5.1 The Pediatric Chain of Survival, narrative text ¶1. *Circulation* 2025;152(suppl 2):S429.
60. Part 8, §7.3, §16.1–16.3, and §23 Synopses (each says the topic was last reviewed in 2020 and the recommendations carry over). *Circulation* 2025;152(suppl 2):S488 (§7.3), S515–S516 (§16.1–16.3), S533 (§23).