

PALS Assessment

Evaluate—Identify—Intervene

Respiratory Emergency

Respiratory
Distress vs Failure?

SaO₂— 94-99%

Upper Airway

- Croup
- Anaphylaxis
- Foreign Body

Lower Airway

- Asthma/RAD
- Bronchiolitis

Lung Tissue Disease

- Infectious Pneumonia
- Aspiration
- Chemical Exposure
- ARDS
- Pulmonary Edema

Disorder of Breathing

- Drug overdose
- Poisoning
- Increased ICP
- Neuromuscular Disease

Circulatory Emergency

Shock

Hypovolemic
- Nonhemorrhagic
- Hemorrhagic
20mL/kg over 5-20min

Obstructive
- Cardiac Tamponade
- Tension Pnemo
- Pulmonary Emboli
- Congenital Lesions
5-10mL/kg over 10-20min

Distributive
- Septic
10-20mL/kg over 5-20min
- Anaphylactic
- Neurogenic
20mL/kg over 5-20 min

Cardiogenic
- pulmonary edema
- venous congestion
- cardiomegaly
5-10 mL/kg over 10-20 min

Evaluate B/P

Pediatric Hypotension

- **1-2 Months** < 70 Systolic
- **1-10 Years** Systolic < 70 + (age in years X2)
- **> 10 Years** < 90 Systolic

Tachycardia
0-1y/o > 220 BPM
> 1 y/o > 180 BPM

Bradycardia
HR < 60 BPM
With Cardiopulmonary compromise
CPR

Pulseless
VF/VT
Or
PEA/Asystole

NOTE:

NS & LR are
Isotonic crystalloid

The standard IV fluids
used for initial volume
resuscitation

CPR CONSULTANTS

TRAINING CENTER

PEDIATRIC ADVANCED LIFE SUPPORT 2025

CARDIAC ARREST

Call for Help/Activate Code Team
START CPR (Hard and Fast)
Give Oxygen
Attach Monitor/Defibrillator

Shockable

YES

VF/VT

Defibrillate 2 j/kg

CPR 2 min
IV/IO access

Shockable Rhythm?

Defibrillate 4j/kg

CPR 2 min

Epi 0.01 mg/kg
q 3-5 min

Shockable Rhythm?

Defibrillate 4-10j/kg

CPR 2 min
Advanced Airway
PETCO₂
Amiodarone 5mg/kg
H & Ts

NO

Asystole/PEA

CPR 2 min
IV/IO access

Shockable Rhythm?
No

Epi 0.01 mg/kg
q 3-5 min

CPR 2 min

Shockable Rhythm?
No

CPR 2 min
Advanced Airway
PETCO₂
H & Ts

H & Ts

Hypovolemia
Hypoxia
Hydrogen Ion (H⁺)
Hypo/hyperkalemia
Hypoglycemia
Hypothermia
Toxins
Trauma;
Tamponade
Tension Pnemo
Thrombosis
Pulmonary
Coronary

PALS Tachycardia (2025 Guidelines)

Identify and Treat Cause

Maintain Airway
Monitor Pulse Oximetry and B/P
Oxygen, IV/IO, Cardiac Monitor, 12 Lead if available

Evaluate QRS Width Evaluate Rhythm

Probable Sinus Tach

Hx suggests known cause
P wave present
Regular R-R and PR interval
Infants: ≤ 220 BPM
Children: ≤ 180 BPM

Treat Reversible Causes Hs & Ts

NO

Consider Vagal Maneuvers

Establish vascular access

Consider
**adenosine 0.1 mg/kg
IV/IO** (max 6 mg)
Rapid push and flush
Second dose
adenosine 0.2 mg/kg
Rapid push and flush

Probable SVT

Vague, non-specific hx
Abrupt Rate Changes in HR
P waves absent/abnormal
Regular R-R and PR interval
Infants: > 220 BPM
Children: > 180 BPM

Cardiopulmonary Compromise?

Hypotension
Altered Mental Status
Signs of Shock

NO

YES

Consider Vagal Maneuvers NO DELAYS

If IV/IO present, give
adenosine

OR
IF IV/IO Access is not
available, or if adenosine
is ineffective,
SYNC Cardioversion

Probable V Tach Wide QRS

**Cardiopulmonary
Compromise?**
Hypotension
Altered Mental Status
Signs of Shock

NO

YES

Consider
Adenosine if
regular and
monomorphic

Expert consultation
advised

CARDIOVERSION

0.5 to 1 J/kg 1st Shock (may
increase if initial dose is
ineffective)
Sedate if possible before
Cardioversion 2j/kg—2nd
shock

Bradycardia

<60 BPM

CARDIOPULMONARY COMPROMISE??

Identify and Treat Underlying Causes

- **Airway and Breathing**
SaO₂? Oxygen? Respiratory Failure?
- **Circulation**
Cardiac Monitor—Blood Pressure-- Skin Color—Cap
Refill
- **IV/ IO established**
- **12 Lead EKG**

HR < 60 BPM
**If Cardiopulmonary is
compromised
then
START CPR**

Cardiopulmonary Compromise

- Altered Mental Status
- Signs of Shock
- Respiratory Failure
- Hypotension

Bradycardia Persists?

YES

- Epinephrine
0.01 mg/kg every 3-5 min..

NO

Airway
Breathing
Circulation
Observe
**CONSIDER EXPERT
CONSULTATION**

NO

Bradycardia
Persists?

YES

- Repeat Epinephrine
- Consider Atropine
- Consider Pacing
- Treat Hs & Ts