

# Colorado Pediatric Preparedness for the Emergency Room (COPPER)



**Abnormal Appearance & Breathing = Respiratory Failure  
ACT NOW**

- Position airway
- If hypoxemia – give O2 supplement (NC, Face mask, NRB)
- If increased WOB – support with flow (NC, hold PEEP for CPAP, HHFNC, BVM)

**Abnormal Appearance**

- Glucose?
- Pupil check?
- Trauma visible?
- Fever?
- Abnormal movements?

**Abnormal Breathing**

- RR?
- SpO2?
- Increased WOB? (Look at skin – any retractions? Tracheal tugging? Nasal flaring?)
- Lung sounds?

**CNS Causes**

- Seizure
- Toxin
- Trauma
- Tumor
- Infection
- Stroke

**Other Causes**

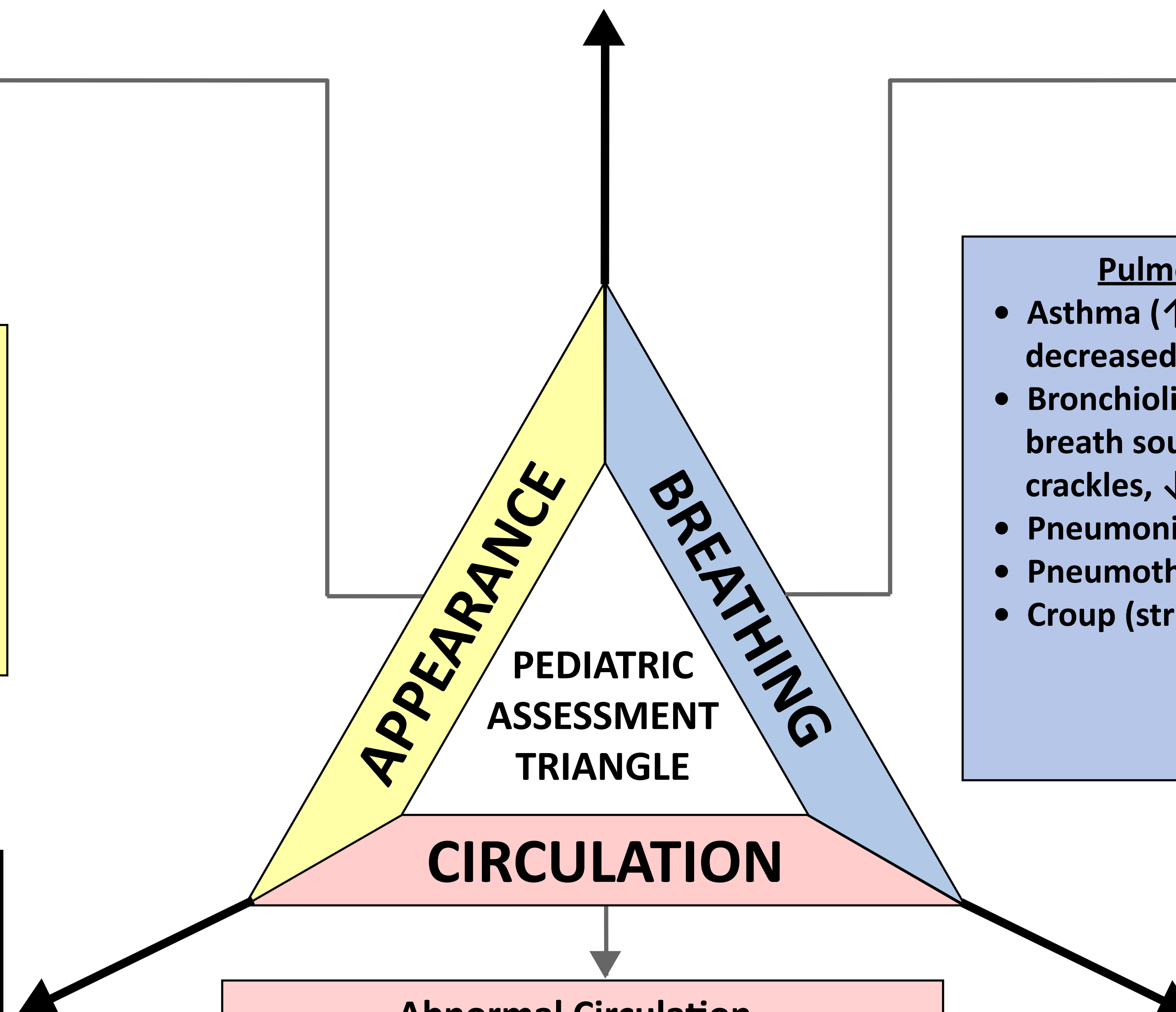
- Sepsis
- Toxin
- Hypoxemia
- Metabolic

**Pulmonary Causes**

- Asthma (↑ RR, wheeze or decreased air entry, ↑WOB)
- Bronchiolitis (↑ RR, changing breath sounds, wheezes/crackles, ↓ SpO2)
- Pneumonia (↓ SpO2, fever)
- Pneumothorax
- Croup (stridor, ↑RR, ↑WOB)

**Non-Pulmonary Causes**

- Sepsis (+/- fever)
- Acute abdomen – ↑ RR, normal SpO2, normal WOB (pain)
- DKA (hyperpnea)
- Metabolic
- Cardiac (normal lung sounds, RR > 80, +/- hypoxemia, possible hepatomegaly, any murmur?)
- Toxins



**Abnormal Circulation and Appearance  
ACT NOW**

- Unless known contraindication – give O2
- Determine if hypovolemic or cardiogenic shock
- If hypovolemic (sepsis, dehydration, toxin)
  - Give 20mL/kg fluid bolus fast
  - Re-evaluate
- Consider sepsis
- If cardiogenic – CXR, ECG, call for consult, consider pressors

**Abnormal Circulation**

- HR
- Cap refill (check several places)
- BP (check cuff size)

**Cardiac Causes**

- Neonate? Consider ductal dependent lesion? (give PGE, monitor for apnea)
- Myocarditis
- Congenital heart disease

**Other Causes**

- Sepsis
- Hypovolemic / neurogenic shock
- Metabolic
- Pain

**Abnormal Breathing and Circulation = Impending CV Collapse  
ACT NOW**

- If hypoxemia – give O2 (NC, Face mask, NRB)
- If increased WOB – support with flow (NC, hold PEEP for CPAP, BMV, HHFNC)
- Consider sepsis
- Consider toxin – give naloxone
- NS 20mL/kg bolus, pressors (consider push/pull fluid administration when pressure bag is not appropriate due to volume)