



NCPR2020 Algorithm

Team briefing, PPE, and Equipment check

Birth

• Preterm?
• Weak respiration?
• Weak tone?

Target SpO2	
Time	SpO2 (%)
1min.	≥60
3min.	≥70
5min.	≥80
10min.	≥90

Warm, open airway (positioning, etc.), dry, and stimulate

Routine Care
(stay with mother)
• Provide warmth
• Open airway
• Dry
Ongoing evaluation

Maintain temperature

Within 60 seconds

Breathing · HR
(Consider SpO₂ monitoring)

Spontaneous breathing and HR ≥ 100/min.

Labored breathing or cyanosis (low SpO₂)

• PPV (a)
• SpO₂ monitoring
• Consider ECG monitoring

Apnea /Gaspings or HR < 100/min.

• SpO₂ monitoring
• CPAP or O₂ as needed

HR ≥ 100/min.

HR

60/min ≤ HR < 100/min.

Improving

Labored breathing or cyanosis (low SpO₂)

• Check ventilation (b)
• Consider intubation

HR < 60/min.

PPV(+O₂) + Chest compression (1:3) (c)

HR

HR ≥ 60/min.

HR < 60/min.

Consider IV adrenaline

HR

HR ≥ 60/min.

HR < 60/min.

PPV + Chest compression and.....
• Normal saline for suspected hypovolemia
• Searching for the cause of cardiac arrest
After ROSC (HR ≥ 60/min.)
Stop chest compression and continue PPV

• Search for the cause and...
• Consider PPV if labored breathing and low SpO₂ continues.
• Check congenital heart disease if low SpO₂ continues without labored breathing.

Post Resuscitation care
• Careful observation on respiration

(a) Add or increase supplemental oxygen if HR or SpO₂ are not improved.

(b) If the ventilation is not optimal, focus on improving ventilation before proceeding to the chest compressions.

(c) PPV 30/min. and chest compression 90/min