

INCLUSION CRITERIA

Any patient who has chest compressions outside the delivery room lasting greater than 1 minute with sustained ROSC

EXCLUSION CRITERIA

Therapeutic hypothermia for HIE

MEASURES

- Percent of time temperature within goal range
- Percent of MAP within goal range
- Percent of glucose within goal range
- Mortality rate

RN PRIORITIES AFTER CPR

- Strict temperature control
- Strict blood pressure control
- Strict oxygen saturation
- Strict glucose control

POST CARDIAC ARREST LABS¹

Every 4 hours:

- Blood glucose (q1h if on insulin infusion)
- Blood gas
- Consider ionized calcium and lactate

Every 12 hours:

- BMP, CBC

Once:

- PT/PTT with fibrinogen
- Magnesium
- Phosphorus

POST-CPR GOALS:

- Normotension for age
- Normoxia for age
- Normocapnia (CO₂ 40-65), use pH if chronic hypercapnia/metabolic alkalosis
- Normoglycemia for age

Sustained Return of Spontaneous Circulation (ROSC)

- Monitor BP closely to prevent hypotension
- Utilize Post Cardiac Arrest Order Set
- RN document time of ROSC in Epic
- RN utilize 'Post Cardiac Arrest' flow sheet

Yes

Next Step

- Maintain core temperature at 36.5° C – 37.5° C for 24-72 hours
- Maintain blood glucose within normal range for age
- Obtain **post cardiac arrest labs¹**
- Monitor and treat seizures
- Consider head ultrasound (US) 24 hours after event

Clinically worsening after 24 hours?

Yes

Further Evaluation

- Consider Echocardiogram, EKG
- Consider EEG
- Consider MRI
- Consider neurology consult
- Continue **post cardiac arrest labs¹**
- Prepare family for prognosis and discuss end of life care
- Contact organ donation program when applicable

Return to Standard Care

Once patient is stable, return to standard NICU care

No

Return to Standard Care

- Consider spacing labs
- Return to standard NICU care

Abbreviation

Abbreviation	Terminology	Abbreviation	Terminology
BMP	Basic Metabolic Panel	HIE	Hypoxic-ischemic encephalopathy
BP	Blood pressure	MRI	Magnetic Resonance Imaging
CBC	Complete blood count	NICU	Neonatal Intensive Care Unit
CO₂	Carbon dioxide	PT/PTT	Prothrombin Time/Partial Thromboplastin Time
CPR	Cardio Pulmonary Resuscitation	Q1H	Every 1 hour
EEG	Electroencephalogram	RN	Registered Nurse
EKG	Electrocardiogram	ROSC	Return of spontaneous circulation

Disclaimer: The clinical pathways are based upon publicly available medical evidence and/or a consensus of medical practitioners at Nemours Children's Health ("Nemours") and are current at the time of publication. These clinical pathways are intended to be a guide for practitioners and may need to be adapted for each specific patient based on the practitioner's professional judgment, consideration of any unique circumstances, the needs of each patient and their family, and/or the availability of various resources at the health care institution where the patient is located.

VERSION MANAGEMENT

- Version 1.0 (5/9/2023): Go Live.
- Version 2.0 (12/23/2025): Look back review completed.

Questions about this pathway should be directed to clinicalpathways@nemours.org.

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