POLICY: 555.62
TITLE: Pediatric Hypothermia - Frostbite

EFFECTIVE: ~~02/01/2026~~DRAFT
REVIEW: ~~02/2028~~DRAFT
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

PEDIATRIC HYPOTHERMIA - FROSTBITE

I. AUTHORITY
Health and Safety Code, Division 2.5, California Code of Regulations, Title 22, Division 9

II. PURPOSE
To serve as a patient treatment standard for EMRs, EMTs, AEMT's, and Paramedics within their scope of practice.

III. PROTOCOL
Patients with severe hypothermia may appear dead (absent pulse, respiration, and fixed pupils) but still have cardiac electrical activity.

USE EXTREME CAUTION WHEN MOVING PATIENT

Provider Key: F = First Responder/EMR E = EMT O = EMT Local Optional SOP
P = Paramedic A=Advanced EMT D = Base Hospital Physician Order Required

Moderate Hypothermia (92°-95° F/ 33°-35° C) **Severe Hypothermia (Core temp < 92° F / < 33° C)**	F	E	O	A	P	D
ASSESSMENT	X	X	X	X	X	
BLS AIRWAY: okay if airway patent. Support ventilations with appropriate airway adjuncts.	X	X	X	X	X	
SUPRAGLOTTIC AIRWAY: if patient's GCS is less than 8 and not rapidly improving, consider SGA.			X	X	X	
PULSE OXIMETRY: apply and monitor.		X	X	X	X	
CAPNOGRAPHY: apply and monitor if SGA has been placed.					X	
OXYGEN: if pulse oximetry < 94% or signs of respiratory distress or hypoperfusion.	X	X	X	X	X	
WARMING MEASURES: remove wet clothing and cover with warm dry blankets. Use ambient heat and heat packs as able.	X	X	X	X	X	
ECG MONITOR: lead placement may be delegated. Treat as indicated.					X	
VASCULAR ACCESS: IV/IO, rate as indicated with warm fluids.				X	X	
TEST FOR GLUCOSE		X	X	X	X	
ORAL GLUCOSE: 15 gm. Consider if conscious with an intact gag reflex if blood sugar < 70 mg/dL.		X	X	X	X	
D10: 2-4 mL/kg IV/IO if blood sugar < 70 mg/dL for age > 28 days old or 2 mL/kg IV/IO if blood sugar < 40 mg/dL age ≤ 28 days old. Recheck blood glucose 10 minutes post infusion and repeat as needed.				X	X	
GLUCAGON: If no IV/IO access and unable to tolerate oral glucose, give 0.05 mg/kg IM (max 1 mg) if blood glucose < 70 mg/dL. Recheck blood glucose 10				X	X	

minutes post injection. If blood glucose remains < 70 mg/dL, repeat dose.						

	F	E	O	A	P	D
FROSTBITE (skin is white, numb or burning, soft to touch and does not recolor with touch)						
WARMING MEASURES: move patient to warm environment and wrap affected extremity with thick, warmed blankets or clothing. **DO NOT RUB AFFECTED EXTREMITY AND AVOID CHEMICAL HEAT PACKS.**	X	X	X	X	X	
Refer to 555.43 PEDIATRIC PAIN MANAGEMENT as indicated.					X	

Pediatric Normal Vital Signs

Age	HR	RR	BP	Temp (C)	Temp (F)
Premie	120-170	40-70	55-75/35-45	36-38	96.8-100.4
0-3 months	100-160	35-60	65-85/45-55	36-38	96.8-100.4
3-6 months	90-120	30-45	70-90/50-65	36-38	96.8-100.4
6-12 months	80-120	25-40	80-100/55-65	36-38	96.8-100.4
1-3 years	70-110	20-30	90-105/55-70	36-38	96.8-100.4
3-6 years	65-110	20-25	90-110/60-75	36-38	96.8-100.4
6-12 years	65-100	14-22	90-120/60-75	36-38	96.8-100.4
12+	55-100	12-20	100-135/65-85	36-38	96.8-100.4