

POLICY: 555.62
TITLE: Pediatric Hypothermia - Frostbite

EFFECTIVE: 09/01/2026
REVIEW: 8/2028
SUPERCEDES:

APPROVAL SIGNATURES ON FILE IN EMS OFFICE

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

						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