


## TRANSCUTANEOUS PACING (TCP)

**Document Owner:** M.James      **Program/Service Area:** Centre for Prehospital Care      **Issue Date:** April 2009  
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**Approval:** Chair, CPC Program Council : Corey Petrie      **Frequency:** As required.  
**Signature:** 

**Purpose:** To ensure a consistent standardized practice for transcutaneous pacing

	Content	Details / Visual Component
1.	Ensure that the patient qualifies for TCP.	***Mandatory Patch Point has been removed for this directive***
2.	Communicate the need for TCP, and its effects to the patient/family member whenever possible.	Transcutaneous pacing (TCP) is contraindicated in the hypothermic patient
3.	Attach monitor leads to the patient.	
4.	Place multipurpose pads in the anterior/posterior location	Clip rather than shave excessive chest hair as nicks in the skin can increase the patient's discomfort level.
5.	Select the pacing mode.	
6.	Set pacing rate at 80 beats per minute and slowly increase milliamps until electrical and mechanical capture is achieved.	<p><b>If unable to gain capture at maximum mAmps, pacing should be discontinued. Do not turn off the monitor but rather attempt to consult a BHP. Treatment should not be discontinued if the patient responds and develops an improved blood pressure.</b></p> <p>Mechanical capture is evidenced by signs of improved cardiac output including but not limited to a palpable pulse, rise in blood pressure, improved level of consciousness, and improved skin color and temperature.</p>
7.	Increase the voltage 10% above the capture voltage to maintain capture.	Electrical capture is usually evidenced by a wide QRS and a tall broad T wave. In some patients, capture may be less obvious noted only as a change in QRS configuration.

	Content	Details / Visual Component
8.	Discontinue TCP as directed by the BHP. Potential complications include: <ul style="list-style-type: none"> <li>• equipment failure</li> <li>• failure to capture (BHP direction)</li> </ul>	If, at any point, the patient becomes pulseless, treat according to the applicable cardiac arrest directive
9.	Document the procedure on the patient care record as per the Ministry of Health and Long Term Care Emergency Health Services Branch Ambulance Call Report Documentation Standards and your Service Provider policy.	this includes: <ul style="list-style-type: none"> <li>• name of the skill</li> <li>• name and time of BHP contact and receipt of verbal order(s)</li> <li>• pacing rate and milliamps when TCP was effective (mechanical and electrical capture)</li> <li>• time of attempt</li> <li>• associated equipment used</li> <li>• outcome</li> </ul>
10.	Document patient condition before and after TCP	

**Expected Outcome:** Successfully perform transcutaneous pacing.