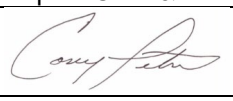
SYNCHRONIZED CARDIOVERSION

Document Owner: M. James	**Program/Service Area**: Centre for Prehospital Care	**Issue Date:** April 2009
Review Date: September 2024	**Revision Date**: September 2024	
Approval: Corey Petrie, Interim Regional Manager, Centre for Prehospital Care & Trauma Services	**Frequency:** In accordance with the Tachydysrhythmia Medical Directive	
Signature: 		

Purpose: To ensure a consistent standardized practice for synchronized cardioversions.

	Content	Details
1.	Communicate the need for cardioversion and its effects to the patient/family member whenever possible.	
2.	Attach monitor leads to the patient.	
3.	Place multipurpose pads in the anterior/lateral or anterior/posterior location.	
4.	Initiate intravenous (IV) access and initiate fluid therapy as indicated.	
5.	Contact the BHP for consideration of orders to administer synchronized cardioversion and for sedation/analgesia as necessary. If every attempt to contact the Base Hospital Physician (BHP) has failed and the patient is worsening, the paramedic may deliver up to three (3) synchronized shocks. The energy settings to be used are: 100 Joules, 200 Joules, manufacturer maximum settings.	The paramedic should attempt contact with the BHP at the earliest convenience.
6.	Consider obtaining a 12 Lead ECG prior to cardioversion if time permits.	
7.	Activate synchronization by pressing the button labelled “sync.” The ECG should display a marker denoting where in the cardiac cycle the energy will be discharged. The marker should appear on the R wave; if it does not, select another lead with a positive QRS complex.	You may have to adjust the ECG gain setting (size) to assure “sync” markers are on each QRS complex.
8.	Select the appropriate energy level as ordered by the BHP.	
9.	Ensure that all personnel are clear of the patient. Call “clear” and visually check the patient area from head to toe and from toe to head to ensure that the area is clear before discharge.	
10.	Charge the defibrillator by depressing the “**CHARGE**” button.	
11.	Administer the cardioversion by depressing the “**SHOCK**” button	
12.	If unable to perform synchronized cardioversion, adjust the gain. If still unable to synchronize, deliver an unsynchronized shock at the same settings as per BHP order.	
13.	Evaluate the patient after each shock is delivered, with continuing consideration for sedation.	

14.	Reset the "**SYNC**" button with coinciding cardioversions.	
15.	If the patient worsens, the rhythm changes, or cardioversion is unsuccessful, re-establish BHP contact on route	Potential complications include: • asystole • ventricular fibrillation • embolic cerebrovascular accident (CVA) • refractory ventricular tachycardia
16.	If the cardioversion is successful, re-evaluate the patient's vital signs and print 2 copies of the post-cardioversion rhythm.	If patient condition and time permits, consider acquiring a 12 Lead ECG
17.	Document the procedure on the Ambulance Call Report as per the MoH Ambulance Documentation Standards and your Service Provider's policy	Including : • name of the skill • name, CPSO #, time of BHP contact and receipt of verbal order(s) • time of delivery of treatment • amount of Joules ordered, selected and delivered • associated equipment used
18.	Document patient condition before and after the cardioversion.	

Expected Outcome: Successfully perform synchronized cardioversion.