

FNIHB-OR Nursing Policy and Procedure

Section: **Procedures and Diagnostics**

Policy Number: **II - 40**

Subject: **Defibrillation**

Issued: **2006-09-29**

Revised: **2018-01-22**

1. POLICY

1.1 Under the *Regulated Health Professions Act* (RHPA), defibrillation falls within the controlled act “applying or ordering the application of a form of energy prescribed in the regulation.” This controlled act is not directly authorized to nurses. However, nurses may perform the act of applying a form of energy in one of two scenarios:

- **Through delegation:** When someone authorized to perform the act can transfers the authority to a nurse through a delegation process.
- **Through the emergency exemption:** When providing first aid or temporary assistance during an emergency.

1.2 In order to perform defibrillation in a First Nations Inuit Health Branch Ontario-Region (FNIHB-OR) facility, a Community Health Nurse (CHN) must have the authority to perform the procedure delegated by a physician with expertise in the use of defibrillators who is available either in person or via video/phone. In addition, the CHN must have current certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advance Life Support (PALS), or have an alternate nurse with such certification immediately available. The CHN must have the knowledge, skills and judgement required to perform the procedure. If any of these criteria are not met, the defibrillator must be set to Automatic External Defibrillation (AED) mode.

1.3 Changes to provincial legislation to allow Nurse Practitioners (NP) to independently perform defibrillation are underway, however this authorization is not yet in place. In order to perform defibrillation in a FNIHB-OR facility, an NP must have the authority to perform the procedure delegated by a physician with expertise in the use of defibrillators who is available either in person or via video/phone. In addition, the CHN must have current certification in Advanced Cardiac Life Support (ACLS) and Pediatric Advance Life Support (PALS), or have an alternate nurse with such certification immediately available. The NP must have the knowledge, skills and judgement required to perform the procedure. If any of these criteria are not met, the defibrillator must be set to AED mode.

1.4 In Health Centers with Treatment or Public Health Centers where ACLS and PALS are not a condition of employment, portable AEDs may be used. Nurses must have current Basic Cardiac Life Support (BCLS) to use an AED.

2. PRINCIPLES

- 2.1 The defibrillator may be used in semi-automated or manual mode only by a physician or NP who is physically present in the health facility or is in attendance virtually via telephone or videoconference. If the CHN is performing defibrillation as ordered by a physician or NP via telephone or videoconference they are doing so through delegation.
- 2.2 In an emergency situation, CHNs may initiate defibrillation through emergency exemption, provided the following are satisfied:
- a) The defibrillator is an automated defibrillator, or semi-automated defibrillator that has been placed in the automated (AED) mode;
 - b) ECG reading indicates the client is in pulseless ventricular tachycardia or ventricular fibrillation;
 - c) The nurse contacts the physician on-call as soon as possible, and obtains continuous consultation via telephone or videoconference, as long as the client is unconscious or unresponsive;
 - d) The nurse obtains consultation for post-defibrillation care from the physician.
- 2.3 CHNs in communities that provide services at a Health Centre with Treatment and/or a Public Health Centre with no on-call physician and only an AED at their disposal must activate emergency services (i.e. 9-1-1), begin Cardiopulmonary Resuscitation (CPR) and apply the AED as outlined in BCLS guidelines if attempting to resuscitate a non-responsive, pulseless client.

3. DEFINITIONS

Defibrillation: A common treatment for life-threatening cardiac dysrhythmias. Defibrillation consists of delivering a therapeutic dose of electrical energy to the heart via a defibrillator. The application of electrical therapy stops the dysrhythmia, allowing the heart to reestablish an effective rhythm.

Automated External Defibrillator (AED): A defibrillator that automatically diagnoses the life-threatening cardiac arrhythmias (Shockable rhythms) of ventricular fibrillation and pulseless ventricular tachycardia in a patient, and is able to treat them through defibrillation. The AED prompts the operator to perform the actions and only delivers energy when a shockable rhythm is detected, thereby mitigating risk of operator error, and being a safe option for rescuers with less training.

AED mode: An option with certain manual defibrillators, which turns the defibrillator into an AED automatically diagnosing and prompting treatment for shockable rhythms.

Manual mode: A mode in which the defibrillator can perform manual defibrillation, synchronized cardioversion and transcutaneous pacing.

4. PROCEDURE

- 4.1 The Nurse in Charge (NIC) or designate will ensure that an equipment check of the defibrillator is completed once weekly and a record of checks maintained (See *Policy I-11 Standard Emergency Equipment Checks and Maintenance*).

4.2 Defibrillation must be performed according to the following principles:

- a) In settings where a physician, they may operate a manual defibrillator;
- b) In Nursing Stations where a physician (in person, on the phone, or via video-conference), that physician may delegate the CHN to perform defibrillation, cardio-version, or transcutaneous pacing on patients with a cardiac rhythm identified on ECG that could be corrected with these therapies. To perform this delegated act the CHN must hold valid certification in ACLS and PALS.
- c) In Nursing Stations, CHNs holding valid ACLS and PALS certification may operate an AED or manual defibrillator placed in AED mode to treat a patient with an identified shockable rhythm through emergency exemption;
- d) In Nursing Stations, Health Centres with Treatment, or Public Health Facilities CHNs may use an AED to perform defibrillation on patients as per AED instructions through emergency exemption.

4.3 A patient plan of care post-defibrillation will be established by the most responsible provider or designate, and will be adhered to by all CHNs.

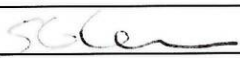
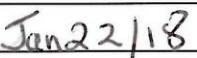
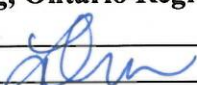
4.4 Following a clinical event requiring the use of a defibrillator, the Nurse Manager (NM) must be informed. The NIC or designate will write, in consultation with the attending physician (if available), a review of the case management (Appendix A) of any client requiring defibrillation and will submit the report to the zone nursing office within 24 hours of the event

5. RELATED POLICIES

FNIHB-OR Policy: Standard Emergency Equipment Checks
FNIHB-OR Policy: Documentation
FNIHB-OR Policy: Mandatory Certifications

6. REFERENCES AND FURTHER READING

Regulated Health Professions Act, *Ontario Regulation 107/96, Controlled Acts* (1991)
College of Nurses of Ontario Practice Guideline, *Authorizing Mechanisms* (2015)
College of Nurses of Ontario Practice Standard, *Decisions about Procedures and Authority* (2014)
Heart and Stroke Foundation Guidelines (2015)

Approved by:		Effective Date:	
			
Director of Nursing, Ontario Region		Date:	
FNIHB		Jan 22 2018	
			
Regional Executive, Ontario Region,		Date: JAN 26 2018	
FNIHB			

Appendix A

Case Management Form for Patients Requiring Defibrillation

Send to ZNO within 24 hours of the event

Date of Occurrence: _____ Health Facility: _____

Attending Physician/s: _____

Attending CHN/s: _____

Patient Age: _____ Patient Gender: _____

Pre-existing Conditions/Medical History: _____

Medications: _____

Presenting Problem: _____

Location (health centre, patient's home, public area): _____

Time Patient/Family called health centre for assistance: ____:____

Time of CHN arrival: _____ (please explain any delays) _____

Time physician contacted ____:____ (please explain any delays) _____

Initial ECG Rhythm: _____

Treatment Given: _____

Outcome of Treatment: _____

Disposition (medevaced, death): _____

Time of Medevac if Applicable: _____

Time of Death if Available: _____

Nursing Debriefing Completed by: _____

Community Followup Required: _____

Equipment restocked as necessary: yes ☐

Any damaged or missing medication or equipment in need of immediate restock: _____

Person preparing report: Name: _____ Signature: _____