LCB File No. T059-99

ADOPTED TEMPORARY REGULATION OF THE STATE BOARD OF HEALTH

EXPLANATION – Underlined material is new; material in [] is to be deleted.

NOTE: Only those sections being changed are provided in this document.

DEFIBRILLATION

GENERAL PROVISIONS

Section 1. "Advanced life support" defined. "Advanced life support" means the use of techniques of emergency care, including the administration of anti-arrhythmic agents and the use of intravenous therapy, intramuscular therapy, and endotracheal intubation devices, provided under the supervision of a physician.

Section 2. "Automatic external defibrillator" defined. "Automatic external defibrillator" means a device that is capable of the automatic analysis of heart rhythm and that will charge and deliver an electrical countershock after electronically detecting the presence of ventricular fibrillation or rapid ventricular tachycardia.

Section 3. "Basic life support" defined. "Basic life support" means the skills related to emergency care that are outlined in the goals and objectives of the basic training course of the Department of Transportation for emergency medical technicians.

Section 4. "Protocol" defined. "Protocol" means the standard of practice for emergency medical services to be delivered in a given situation.

Section 5. "Semiautomatic external defibrillator" defined. "Semiautomatic external defibrillator" means a device that is capable of electronically detecting ventricular fibrillation

and rapid ventricular tachycardia, but which requires a command by the operator to deliver an electrical countershock.

Section 6. "Standing order" defined "Standing order" means a rigidly defined written direction that:

- 1. Establishes the actions to be taken and the techniques to be used in a given situation;
- 2. Is signed by the sponsoring physician; and
- 3. Remains in effect unless specifically canceled.

AUTHORIZED ACTIVITIES

Section 7. NAC 450B.383 is hereby amended to read as follows:

NAC 450B.383 Emergency medical technician: Authorized practices. An emergency medical technician may:

- 1. Render services in rescue, first aid [and], cardiopulmonary resuscitation <u>and automatic or semi-automatic defibrillation.</u>
 - 2. Apply a pneumatic antishock garment:
 - (a) As an attendant for a service or fire-fighting agency; and
- (b) In accordance with procedures established by the medical director of the service or fire-fighting agency.

(Added to NAC by Bd. of Health, eff. 8-1-91)

CERTIFICATION FOR USE OF DEFIBRILLATOR

Section 8. NAC 450B.900 is hereby repealed.

[NAC 450B.900 Definitions. As used in NAC 450B.900 to 450B.936, inclusive, unless the context otherwise requires, the words and terms defined in NAC 450B.902 to 450B.914, inclusive, have the meanings ascribed to them in those sections.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 9. NAC 450B.902 is hereby repealed.

[NAC 450B.902 "Advanced life support" defined. "Advanced life support" means the use of techniques of emergency care, including the administration of anti-arrhythmic agents and the use of intravenous therapy, intramuscular therapy, and endotracheal intubation devices, provided under the direct supervision of a physician.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 10. NAC 450B.904 is hereby repealed.

[NAC 450B.904 "Automatic external defibrillator" defined. "Automatic external defibrillator" means a device that is capable of the automatic analysis of heart rhythm and that will charge and deliver an electrical countershock after electronically detecting the presence of ventricular fibrillation or rapid ventricular tachycardia.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 11. NAC 450B.906 is hereby repealed.

[NAC 450B.906 "Basic life support" defined. "Basic life support" means the skills related to emergency care that are outlined in the goals and objectives of the basic training course of the Department of Transportation for emergency medical technicians.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 12. NAC 450B.910 is hereby repealed.

[NAC 450B.910 "Protocol" defined. "Protocol" means the standard of practice for emergency medical services to be delivered in a given situation.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 13. NAC 450B.912 is hereby repealed.

[NAC 450B.912 "Semiautomatic external defibrillator" defined. "Semiautomatic external defibrillator" means a device that is capable of electronically detecting ventricular fibrillation and rapid ventricular tachycardia, but which requires a command by the operator to deliver an electrical countershock.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 14. NAC 450B.914 is hereby repealed.

[NAC 450B.914 "Standing order" defined. "Standing order" means a rigidly defined written direction that:

- 1. Establishes the actions to be taken and the techniques to be used in a given situation;
- 2. Is signed by the sponsoring physician; and
- 3. Remains in effect unless specifically canceled.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 15. NAC 450B.918 is hereby repealed.

[NAC 450B.918 Qualifications for certification. A person who applies for certification as an emergency medical technician in defibrillation must:

1. Provide evidence that he is currently certified by the health division as an emergency medical technician or intermediate emergency medical technician;

- 2. Provide evidence that he is currently certified in cardiopulmonary resuscitation at the basic life support level equivalent to the standards of the American Heart Association;
- 3. Have 6 months of experience as an emergency medical technician while certified by the health division;
- 4. Provide evidence of his membership in an organized emergency medical service that is capable of transporting a patient to, or obtaining assistance from, persons able to administer advanced life support;
 - 5. Have successfully completed a course of training approved by the health division;
- 6. Have, within 12 months after completing that course of training, passed a written and practical examination approved by the health division; and
- 7. Have written approval from a sponsoring physician for the organized emergency medical service of which the applicant is a member.]

Section 16. NAC 450B.920 is hereby repealed.

[NAC 450B.920 Scope of permissible activities. A person who is certified as an emergency medical technician in defibrillation may, under the direct or indirect supervision of a physician, use an automatic or semiautomatic external defibrillator to defibrillate a patient in ventricular fibrillation if the patient is without a pulse, not breathing and is unconscious.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 17. NAC 450B.922 is hereby repealed.

[NAC 450B.922 Expiration of certificate. 1. An initial certificate as an emergency medical technician in defibrillation expires on the expiration date of the certification as an emergency medical technician or intermediate emergency medical technician.

2. After the initial certificate expires, subsequent certificates expire biennially.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 18. NAC 450B.924 is hereby repealed.

[NAC 450B.924 Requirements for recertification. To obtain recertification as an

emergency medical technician in defibrillation, a technician must, within the 3 months

immediately preceding the expiration of his certificate:

1. Apply for recertification;

2. Provide evidence that he meets all the requirements of the health division for renewal of

his certificate as an emergency medical technician or intermediate emergency medical

technician;

3. Provide evidence that he is currently certified in cardiopulmonary resuscitation at the

basic life support level equivalent to the standards of the American Heart Association;

4. Provide evidence of his membership in an organized emergency medical service that is

capable of transporting a patient to, or obtaining backup from, persons able to administer

advanced life support;

5. Provide written approval from the sponsoring physician for the organized medical service

of which the applicant is a member;

6. Provide documentation of his attendance at quarterly refresher sessions and of having

satisfactorily passed an evaluation of his skills by the sponsoring physician; and

7. Pass the appropriate written and practical examination for recertification approved by the

health division.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 19. NAC 450B.926 is hereby repealed.

[NAC 450B.926 Examination for recertification. The examination for recertification as an emergency medical technician in defibrillation consists of the examination used for initial certification or its equivalent in use at the time of recertification.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 20. NAC 450B.928 is hereby repealed.

[NAC 450B.928 Failure to take or pass examination. An emergency medical technician in defibrillation who fails to pass the examination for recertification on the first attempt, or who fails to take the examination within 6 months after the expiration of his certificate, must:

- 1. Retake and successfully complete a training course that meets the requirements of NAC 450B.930 to 450B.936, inclusive;
- 2. Retake and pass the examination for certification as an emergency medical technician in defibrillation; and
 - 3. Apply for initial certification as provided by NAC 450B.918.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 21. NAC 450B.930 is hereby repealed.

[NAC 450B.930 Courses of training: General requirements. An organization that applies for approval of a course for training emergency medical technicians in defibrillation must show that:

- 1. It has appropriate training equipment;
- 2. The primary instructor of the course is certified by the health division as an instructor in emergency medical services; and

3. The course is sponsored by a physician who will be available throughout the duration of the course to evaluate the performance of students. The physician must be licensed to practice medicine in this state and must have demonstrated competency in advanced cardiac life support procedures meeting the standards of the American Heart Association.]

(Added to NAC by Bd. of Health, eff. 1-17-89)

Section 22. NAC 450B.932 is hereby repealed.

[NAC 450B.932 Courses of training: Required curriculum. An organization that applies for approval of a course of training in the use of automatic or semiautomatic external defibrillators must propose a curriculum that includes not less than 8 hours of instruction in the following topics:

- 1. Cardiac anatomy and physiology.
- 2. The proper technique to be used in attaching monitor cables and self-adhesive monitor and defibrillator pads to the patient.
 - 3. The principles of defibrillation.
 - 4. Safety precautions to be observed in the use of defibrillators.
 - 5. The assessment of the status of the patient after delivery of an electrical countershock.
 - 6. The determination of whether an electrical countershock has been delivered to a patient.
- 7. The significance and importance of adequate care of a patient's airway, advanced life support, and rapid transport as they relate to defibrillation.
 - 8. Any action to be taken if a defibrillator becomes inoperable.
 - 9. The medical control requirements of the system.
- 10. The documentation of activities performed in assessing a patient and delivering an electrical countershock.

- 11. Basic maintenance of the defibrillator.
- 12. A review of relevant statutes, regulations and protocols.]

Section 23. NAC 450B.934 is hereby repealed.

[NAC 450B.934 Courses of training: Duties of sponsoring physician. The sponsoring physician in a course for training emergency medical technicians in defibrillation shall:

- 1. Submit a written plan to the health division for the training of the students and the evaluation of the program under his supervision. The plan must include a description of:
 - (a) The rationale for the program;
 - (b) The geographic area to be served by the program;
- (c) The manner in which the program will affect existing resources of emergency medical services;
 - (d) Data collection and methodology;
 - (e) Protocols and policies; and
- (f) Procedures to be used in the program for the training, evaluation and testing of students on the job.
- 2. Supervise, directly or indirectly, the medical care provided by each emergency medical technician in defibrillation.
 - 3. Approve standing orders that meet the requirements of NAC 450B.936.
- 4. Review the records of each response to an emergency in which a countershock is delivered to determine whether:
 - (a) The records are appropriate and complete;
 - (b) The responding personnel quickly and effectively set up the necessary equipment;

- (c) The pulse of the patient was checked appropriately throughout the response;
- (d) Defibrillation was performed as rapidly as possible;
- (e) The amount of time spent at the scene was appropriate;
- (f) Adequate basic life support was maintained;
- (g) The responding personnel obtained an indication of the need to defibrillate immediately before each attempt to defibrillate the patient;
 - (h) The need to deliver a countershock was assessed correctly;
 - (i) The defibrillator was operated safely and correctly; and
- (j) The care provided was in compliance with approved protocols and standing orders, to the extent they apply.
- 5. Provide training sessions at least biannually that include practice sessions and an assessment of the ability of each student to perform in compliance with local protocols.]

Section 24. NAC 450B.936 is hereby repealed.

[NAC 450B.936 Courses of training: Parameters of standing orders.

- 1. Standing orders approved by the sponsoring physician in a course for training emergency medical technicians in defibrillation must clearly delineate the procedures for emergency care that may be performed by each emergency medical technician in defibrillation and the circumstances under which these procedures may be performed.
 - 2. The standing orders must address at least the following subjects:
 - (a) The sequence of intervention to be performed during a resuscitation attempt.
 - (b) Guidelines for speed of shock delivery and the total time spent at the scene.
 - (c) The method of cardiac monitoring and defibrillation to be used.

- (d) The appropriate management of all potential cardiac arrest rhythms, including ventricular fibrillation, asystole, ventricular tachycardia, and any other pulseless organized rhythm.
 - (e) The selection of energy levels for initial and subsequent defibrillation attempts.
 - (f) Defibrillation safety, both at the scene and during transport.
- (g) The maximum number of defibrillations that an emergency medical technician in defibrillation may deliver to a patient outside of the hospital.
 - (h) The assessment and management of a patient after cardiac arrest.
 - (i) The management of a patient who refibrillates before arrival at the hospital.
 - (j) The criteria for the age and weight of a patient which permit or prohibit defibrillation.
 - (k) The information that must be documented during the course of a resuscitation attempt.
- (l) The need to maintain adequate cardiopulmonary resuscitation throughout the cardiac arrest.]

INFORMATION STATEMENT

1. DESCRIPTION OF HOW PUBLIC COMMENT WAS SOLICITED, SUMMARY OF PUBLIC RESPONSE, AND AN EXPLANATION OF HOW OTHER INTERESTED PERSONS MAY OBTAIN A COPY OF THE SUMMARY.

Workshops were held on December 29, 1998, in Reno and Elko, and December 30, 1998, in Las Vegas. Notice of public workshops was published in the Reno Gazette Journal, Elko Daily Free Press, and Las Vegas Review Journal on or before December 14, 1998. Notice of public workshops and proposed regulations were mailed to all county libraries in Nevada, EMS providers and other interested parties.

Notice of public hearing regarding the Board's intent to adopt amendments to NAC 450B was published in the Las Vegas Review Journal, Reno Gazette Journal, and Elko Daily Free Press on or before January 13, 1999. Notice of public hearing and proposed regulations were mailed to all county libraries in Nevada, EMS providers, and other interested parties on December 11, 1998.

In addition, copies of the proposed regulations were available during normal office hours at:

Bureau of Licensure and Certification - Carson City Bureau of Licensure and Certification - Las Vegas Bureau of Licensure and Certification - Reno Nevada State Library Emergency Medical Services - Elko Emergency Medical Services - Tonopah

- 2. THE NUMBER OF PERSONS WHO:
- (A) ATTENDED THE HEARING;

Approximately 102 people attended the February 12, 1999, Board of Health hearing.

(B) TESTIFIED AT EACH HEARING; AND

No members of the public testified at the February 12, 1999, Board of Health hearing.

(C) SUBMITTED TO THE AGENCY WRITTEN STATEMENTS.

No written statement was submitted at the Board of Health meeting.

3. A DESCRIPTION OF HOW COMMENT WAS SOLICITED FROM AFFECTED BUSINESSES, A SUMMARY OF THEIR RESPONSE, AND AN EXPLANATION HOW OTHER INTERESTED PERSONS MAY OBTAIN A COPY OF THE SUMMARY

Comment was solicited from affected or potentially affected businesses by mailing EMS providers and all interested parties the proposed regulations and notice for the workshops and Board of Health hearing. Public response was in the form of written statements and testimony at the workshops and hearings. Copies the workshop minutes and Board of Health hearing minutes may be obtained by calling the Bureau of Licensure and Certification at (775) 687-4475.

4. IF THE REGULATION WAS ADOPTED WITHOUT CHANGING ANY PART OF THE PROPOSED REGULATION, A SUMMARY OF THE REASONS FOR ADOPTING THE REGULATION WITHOUT CHANGE.

None

- 5. THE ESTIMATED ECONOMIC EFFECT OF THE REGULATION ON THE BUSINESS WHICH IT IS TO REGULATE AND ON THE PUBLIC. THESE MUST BE STATED SEPARATELY, AND IN EACH CASE MUST INCLUDE:
- (A) BOTH ADVERSE AND BENEFICIAL EFFECTS; AND
- (B) BOTH IMMEDIATE AND LONG TERM EFFECTS.

Anticipated effects on emergency medical services are beneficial and immediate. Adoption of this revision will affect emergency medical services in the following ways:

The proposed amendments will eliminate the requirement for defibrillation certification found in sections .900 through .936. The curriculum for Basic EMT training adopted by the Department of Transportation in 1994 includes training in the use of automatic and semi-automatic defibrillation. Therefore, the need for additional training and certification in defibrillation no longer exists.

6. THE ESTIMATED COST TO THE AGENCY FOR ENFORCEMENT OF THE PROPOSED REGULATION.

None

7. A DESCRIPTION OF ANY REGULATIONS OF OTHER STATE OR GOVERNMENT AGENCIES WHICH THE PROPOSED REGULATION OVERLAPS OR DUPLICATES AND A STATEMENT EXPLAINING WHY THE DUPLICATION OR OVERLAPPING IS NECESSARY. IF THE REGULATION OVERLAPS OR DUPLICATES A FEDERAL REGULATION, NAME THE REGULATING FEDERAL AGENCY.

None

8. IF THE REGULATION INCLUDES PROVISION WHICH ARE MORE STRINGENT THAN A FEDERAL REGULATION WHICH REGULATES THE SAME ACTIVITY, A SUMMARY OF SUCH PROVISION.

None

9. IF THE REGULATION PROVIDES A NEW FEE OR INCREASES AN EXISTING FEE, THE TOTAL ANNUAL AMOUNT THE AGENCY EXPECTS TO COLLECT AND THE MANNER IN WHICH THE MONEY WILL BE USED.

None