

SCHOOL DISTRICT OF WAUPACA

SERIES 700 SUPPORT SERVICES

CODE: 721-R1

AED USE:

PROVIDER NAME: _____ PROVIDER NO. 60- _____

AED Consideration:

- A. Consider ALS backup
- B. Preparation for transport of patient should begin immediately as staffing allows.
- C. Assuming no on-scene ALS, the patient should be transported when one of the following occurs:
 - 1. The patient regains a pulse.
 - 2. Six shocks are delivered (in addition to shocks delivered by Public Access Defibrillator or PAD).
 - 3. The machine gives three consecutive messages (separated by one minute of CPR) that no shock is advised.
- D. *For adult patients* defibrillation comes first. Don't hook up oxygen or do anything that delays analysis of rhythm or defibrillation. **For pediatric patients, the ABC's come first.**
- E. All contact with patient must be avoided during analysis of rhythm and/or delivery of shock(s).
- F. Automated external defibrillation can be used in cardiac arrest in **children ages 1 to 8 years of age or anyone weighing less than 55 lbs. if utilizing an AED with "Pediatric Capabilities"** (meaning an AED capable of a maximum energy setting of 50 joules).
- G. Automated external defibrillators can not analyze rhythm properly with emergency vehicle is in motion. It is not safe to defibrillate in a moving vehicle.

Use of automated external defibrillators during resuscitation attempts:

- A. Operational steps - multiple rescuer resuscitation of a PNB patient
 - 1. Take body substance isolation precautions - en route to scene
 - 2. Arrive on scene and perform initial assessment
 - 3. Stop CPR if in progress
 - 4. Verify pulselessness and apnea
 - 5. Have partner resume CPR
 - 6. **If Public Access Defibrillator (PAD) utilized prior to your arrival, switch from PAD to your defibrillator. Pediatrics: If EMS AED is not pediatric capable, then continue the use of PAD-pediatric capable device.**
 - 7. Turn on defibrillator power and attach device
 - 8. Stop CPR
 - 9. Clear patient
- 10. Initiate analysis of rhythm
 - a. Machine advises shock
 - 1) deliver shock
 - 2) re-analyze rhythm
 - 3) if machine advises shock, deliver second shock
 - 4) re-analyze rhythm

- 5) if machine advises shock, deliver third shock
 - 6) check pulse
 - a) if pulse, check breathing
 - (1) if breathing adequately, give high concentration oxygen by non-rebreather mask and transport promptly
 - (2) if not breathing adequately (consider insertion of an advanced airway here), artificially ventilate with high concentration oxygen and transport promptly
 - b) if no pulse, resume CPR for one minute
 - (1) as appropriate, consider insertion of an advanced airway
 - (2) stop CPR
 - (3) re-analyze rhythm
 - (4) if shock advised, repeat one cycle of up to three stacked shocks
 - (5) contact medical control
 - (6) transport promptly
 - b. If, after any rhythm analysis, the machine advised no shock, check pulse
 - 1) if pulse, check breathing
 - a) if breathing adequately give high concentration oxygen by non-rebreather mask, transport promptly
 - b) if not breathing adequately, artificially ventilate with high concentration oxygen (consider insertion of an advanced airway here), transport promptly
 - 2) if no pulse, resume CPR for one minute
 - a) consider insertion of an advanced airway here
 - b) repeat rhythm analysis
 - (1) if shock advised, deliver if necessary, up to two sets of three stacked shocks separated by one minute of CPR
 - (2) if no shock advised and no pulse resume CPR for 1 minute
 - (3) analyze rhythm third time
 - (a) if shock advised, deliver if necessary, up to two cycles of three stacked shocks separated by one minute of CPR (if transport is impossible - ie: ambulance not at scene, continue to shock as long as shockable rhythm persists or until transport becomes possible).
 - (b) if not shock advised, resume CPR and transport promptly
- B. Persistent ventricular fibrillation and no available ALS backup
1. After a maximum of six shocks on scene, (three initial, three after one minute of CPR), transport patient promptly. If transport is impossible [i.e. ambulance not at scene] continue the sequence of three (3) stacked shocks followed by one(1) minute of CPR for as long as shockable rhythm persists or until transport becomes possible.

2. After initial six (6) shocks, additional shocks may be delivered at the scene or en route **only** by approval of on-line medical direction.
- C. Operational steps – single rescuer with an automated external defibrillator
 1. Follow sequence
 - a. Perform initial assessment
 - b. Assure pulselessness and apnea
 - c. **If Public Access Defibrillation (PAD) utilized prior to your arrival, switch from the PAD to your defibrillator. Pediatrics: If EMS AED is not pediatric capable, then continue the use of PAD-pediatric capable device.**
 - d. Turn on AED power (defibrillation is initial step and CPR should not be performed prior to rhythm analysis).
 - e. Attach device
 - f. Initiate analysis of rhythm
 - G. deliver shock(s) as advised
 - h. follow protocol

Special considerations:

- A. All certified First Responders and licensed EMTs must now also be trained on the defibrillation of children less than 8 years of age. Every effort must be made to purchase “pediatric capable” devices. If the prehospital responder does not have a “pediatric capable” device and they arrive on the scene where a “pediatric capable” device is being utilized, they should continue with the use of that device for treatment and transport the child.
- B. The adult pads should not be utilized on a child less than 8 years of age.

NOTES:

1. Time is valuable. Rapid defibrillation with airway placement when necessary must be accomplished as rapidly as possible. Initiate transport early.
2. If you are transporting a patient who is in or develops cardiac arrest, you must pull over and stop the vehicle to analyze. Use common sense. Do not stop so often that it takes a lengthy period of time to get to the hospital.
3. If you have successfully resuscitated a patient from V-fib and the patient subsequently reverts back to a shockable rhythm, you may re-institute the entire protocol without verbal command. This may be done a third time if necessary. **Medical control must be attempted after a third sequence.**
4. Pulse checks should be done carefully for 5-10 seconds. Remember that no pulse checks are done between shocks. Recheck after the 3 shocks are given. No CPR can be done while the machine is analyzing.
5. The shocks should be delivered as close to each other as possible. The closer together they are, the more effective they are. No pulse checks and no CPR should be done between shocks unless there is a delay.

6. The EMT shall shock 3 times as necessary, then place the Combitube/Advanced Airway according to the airway protocol. After a period of CPR, three more shocks are attempted if indicated. If no conversion, move to the ambulance and begin transport.
7. Although medical control is highly advised to provide more than six initial shocks, if communication with a physician cannot be obtained for some reason, additional shocks as indicated may be given.
8. Sustained Ventricular Fibrillation in children is not common. Your adult AED may deliver too much energy for the pediatric patient. **Defibrillation in a child under the age of 8 must be accomplished with an AED that is "Pediatric Capable"**.

Approved by Anthony George, M.D. Medical Director (Print)
 _____ Medical Director Signature
 _____ Date

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