

Impedance Threshold Device (November 2012)

Item:

- A brand of Impedance Threshold Device (ITD) used to enhance the changes in intrathoracic pressures during cardiopulmonary resuscitation.

Classification:

- Basic Life Support procedure
- Specified in existing regulations

Use and Level:

Authorized for EMT, Advanced EMT, and Paramedic as a mechanical adjunct to basic CPR.

Authority:

- Section 100063 (a) (4) of the EMT Regulations, Chapter 2, Division 9, Title 22, California Code of Regulations. Section 100063 is the EMT scope of practice and subsection (a) (4) allows EMT to use mechanical adjuncts to cardiopulmonary resuscitation.
- Section 100106 (a) of the AEMT Regulations. Chapter 3, Division 9, Title 22, California Code of Regulations. Section 100106 is the AEMT Scope of Practice and subsection (a) refers to AEMTs being able to provide any activity identified in the scope of practice for an EMT.
- Section 100146 (a) of the Paramedic Regulations (Chapter 4, Division 9, Title 22, California Code of Regulations). Subsection (a) states that an EMT-Paramedic may perform any activity identified in the scope of practice for an EMT.

Training:

Specific training for this device is necessary because no standard training exists in the national training standards and should include:

- Indications for use and when to remove the device for both basic and advanced airways.
- Use of two person bag-valve-mask ventilation when used in the absence of an advanced airway to ensure adequate seal to maintain the intended effect of the device.
- Use in conjunction with optimized CPR, keeping compression rates between 90 and 110 per minute.

Equipment:

Must be used in conjunction with a bag-valve-mask device for both basic and advanced airways.

Medical Direction:

Used in accordance with a protocol written and approved by the local EMS agency medical director (HS 1797.220).

Considerations and Recommendations:

No additional guidance at this time.