

	Department Name Address	ALS	Paramedic
		Revision #	
		Implementation Date	
Protocol	2.1.12 Pulseless Electrical Activity	Last Reviewed/Update Date	
Author / Owner		Medical Director	

1. Baseline care standards.
2. BLS Algorithm.
3. Secure airway with ET tube or other advanced airway device.
4. Ventilate at a rate of 8-10 breaths per minute. Avoid hyperventilation.
5. Attach cardiac monitor and confirm pulseless rhythm in 2 leads.
6. Start IV / IO of Normal Saline run wide open.
7. Administer:
  - 1.0mg of Epinephrine IV / IO. May administer 2.0mg of Epinephrine via ET tube if IV not available. **OR**
  - 40u of Vasopressin IV/IO. DO NOT repeat dose. Then after 10 minutes administer:
  - 1.0mg of epinephrine IV.
  - Consider Atropine 1.0mg IV. Repeat every 3 to 5 minutes (up to 3 doses).
8. Treat possible contributing factors
  - a. Hypovolemia
  - b. Hypoxia
  - c. Hydrogen ion (acidosis)
  - d. Hypo / Hyperkalemia
  - e. Hypoglycemia
  - f. Hypothermia
  - g. Toxins
  - h. Tamponade (Cardiac)
  - i. Tension Pneumothorax
  - j. Thrombosis
  - k. Trauma
9. Contact Medical Control.

10. Resuscitative efforts may be terminated after 30 minutes if appropriate.

---

*Medical Director's Signature*

---

*Date*

Disclaimer:

The protocols have been developed by the North Dakota Department of Health are meant to be used as general guidance for developing protocols for individual emergency medical services agencies. These sample protocols are not meant to be medical or legal advice; nor do they establish standards of care. Each emergency medical services agency must tailor protocols based on their specific needs or capabilities. Local medical directors must be consulted with and approve any protocol(s) prior to becoming operational in an emergency medical services agency. directors must be consulted with and approve any protocol(s) prior to becoming operational in an emergency medical services agency. The North Dakota Department of Health make no representation on the accuracy of information contained herein and accepts no liability for any loss or damage arising from any content error or omission.