


Section: BLS Trauma – Standing Orders  
Subject: BLS DIVING, SCUBA, AND OTHER FORMS OF DECOMPRESSION SICKNESS (DCS)  
Section #: 321.05  
Issue Date: March 21, 2011  
Revision Date:  
Approved By:  Michael Lozano, Jr., M.D., HCFR Medical Director

Page 1 of 1

1. Basic BLS treatments
2. 100% Oxygen via NRBM
3. Position and transport the patient in the supine position to maximize arterial-venous flow.
4. Document a thorough neurological exam.
5. Have the patient transported to the closest facility.
6. ALS evaluation and transport criteria:
  - a. All diving emergencies require an ALS transport.
7. QA Points:
  - a. The most efficacious intervention for the patient experiencing decompression sickness is 100% oxygen. It reduces intravascular bubble size by increasing the differential pressure for nitrogen diffusion out of the bubbles and speeds the washout of nitrogen from the tissues.<sup>1</sup>
  - b. Ground transport is preferred over air transportation because an increase in altitude lowers the ambient pressure and allows microbubbles to expand.
  - c. Trendelenburg position, once thought to reduce the degree of cerebral embolization, increases intracranial pressure, facilitates coronary gas embolization, and should be avoided.<sup>2</sup>

---

<sup>1</sup> Strauss MB, Borer Jr RC: Diving medicine: Contemporary topics and their controversies. *Am J Emerg Med* 2001; 19:232.

<sup>2</sup> Butler BD, et al: Effect of the Trendelenburg position on the distribution of arterial air emboli in dogs. *Ann Thorac Surg* 1988; 45:198.