

**POSITION STATEMENT  
TENNESSEE BOARD OF RESPIRATORY CARE**

---

**Tennessee Licensed Registered Respiratory Therapists as  
Extracorporeal Membrane Oxygenation (ECMO) Specialists**

---

Pursuant to TENN. CODE ANN. § 63-27-102(4)(A)(i) the practice of respiratory care means, under the supervision, control, and responsibility of a licensed physician, the therapy, management, education and instruction, rehabilitation, diagnostic testing evaluation, and care of patients with deficiencies and abnormalities that affect the cardiorespiratory system and associated aspects of other system functions.

TENN. CODE ANN. § 63-27-102(4)(A)(i)(a) and (c), define a Respiratory Therapist's scope of practice to include the "administration of pharmacologic agents and medical gasses necessary to diagnose, implement treatment, promote disease prevention, and provide rehabilitation to the cardiorespiratory system," and the "establishment and maintenance of the airways, bronchopulmonary hygiene, and cardiopulmonary resuscitation, and cardiac and respiratory life support."

It is the position of the Tennessee Board of Respiratory Care (the "Board") that a Tennessee licensed Registered Respiratory Therapist, who is qualified and appropriately educated, may perform duties as an Extracorporeal Membrane Oxygenation ("ECMO") Specialist, under the supervision, control, and responsibility of a licensed physician who is educated and trained concerning ECMO. The Board believes that the scope of practice of a Tennessee licensed Registered Respiratory Therapist includes performing duties as an ECMO Specialist. The Board's position is in accordance with the American Association for Respiratory Care ("AARC"), the Tennessee Society of Respiratory Care ("TSRC"), and the Extracorporeal Life Support Organization ("ELSO"), which each endorse the use of qualified and appropriately educated Respiratory Therapists as ECMO Specialists.

ECMO is a modified cardiopulmonary bypass technique used to treat life threatening cardiac or respiratory failure. An ECMO Specialist is a technical specialist trained and educated to manage the ECMO system including the blood pump, tubing, artificial oxygenator, and related equipment. An ECMO Specialist, under the medical direction and supervision of a licensed and ECMO-trained physician, is also trained and educated to be responsible for the clinical needs of the patient on ECMO which can include: (1) maintenance of normal acid-base balance, oxygenation, and ventilation, (2) administration of blood and blood by-products, (3) medication delivery, and (4) maintenance of appropriate anticoagulation.

A Respiratory Therapist's education provides extensive training in maintenance of normal acid-base balance; oxygenation and oxygen delivery; ventilation; and cardiorespiratory anatomy, physiology, and pathophysiology, which make a Respiratory Therapist qualified to undertake further education as an ECMO Specialist.

The requisite qualifications for a Tennessee Respiratory Therapist to perform services as an ECMO Specialist shall include: (1) the successful completion of an accredited respiratory care educational program, (2) an earned Registered Respiratory Therapist (RRT) credential from the National Board for Respiratory Care (NBRC), (3) an active and unencumbered Tennessee Registered Respiratory Therapist license, and (4) a minimum of at least one (1) year of clinical experience in critical care. Education as an ECMO Specialist should be in accordance with the Extracorporeal Life Support Organization's (ELSO) document entitled "ELSO Guidelines for Training and Continuing Education of ECMO Specialists."

The Board believes that this position statement will help address the extensive needs of the people in Tennessee by protecting their health and safety by ensuring that only licensed Registered Respiratory Therapists who are properly trained and who perform under the supervision, control, and responsibility of a licensed physician trained and educated in ECMO may perform duties as an ECMO Specialist. The Board further believes this position statement will help address the need for highly trained professionals to assist with performing ECMO.

Adopted by the Respiratory Care Board on this 30<sup>th</sup> day of March ~~February~~ 2017.

  
Chair, Board of Respiratory Care