## Minnesota Dual-Training Pipeline **Competency Model for Health Care Services Occupation:** Respiratory Therapist

Employer Requirements	Occupation-Specific Competencies*
	<ul> <li>Oxygen administration</li> <li>Bronchial hygiene methods</li> <li>Lung hyperinflation techniques</li> <li>Adverse reactions to procedures</li> <li>Performs arterial punctures</li> <li>Certified in CPR procedures</li> <li>Set up and administration of CPAP</li> <li>Respiratory equipment operation</li> <li>Assure proper use of medical gas</li> </ul>
Industry-Sector Technical Competencies*	
Pulmonary Cardiopulmo pathophysiology diagnostic	
HIPAA Neonatal resuscitation	Patient Transcultural Medical Anatomy/ care care terminology physiology
Industry-	Wide Technical Competencies
Health Health industry information indamentals	Health Laws and Healthcare Safety industry regulations delivery systems
W	/orkplace Competencies
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amwork Customer and focus organizing	solving and decision making       with tools and to detail       Attention and recording       Workplace fundamentals         cademic Competencies       Communication:       Critical and analytic       Basic computer       Information
amwork Customer and organizing	solving and decision making       with tools and to detail       Attention and to detail       examining and recording       Workplace fundamentals         cademic Competencies       Communication: listening and       Critical and analytic       Basic computer       Information literacy

Department of Labor, December 2011.

\* Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job training opportunities.

# DUAL-TRAINING PIPELINE

## **Competency Model for Respiratory Therapist**

**Respiratory therapist** – An individual responsible for the assessment, therapeutic intervention and education of patients with cardiopulmonary disorders or associated complications. Respiratory therapists assess individuals to prevent, detect, monitor and manage disease and complications. Respiratory therapists provide therapeutic interventions to directly impact cardiopulmonary health as well as overall health status according to established goals and interdisciplinary care plans. Respiratory therapists provide education to promote preventative care, self-management, enhanced cardiopulmonary health and quality of life. This person performs regular assessments of patients and the equipment they are using in order to adjust therapy. They also collect and/or analyzes patients' blood and other specimens to determine levels of oxygen, carbon dioxide and other gases. Respiratory therapists also measure the patient's lung capacity to determine if there are any impairments and offer diagnosis results and treatment suggestions based on the analysis of the patient.

### **Industry-Sector Technical Competencies**

**Related Instruction** for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Pulmonary pathophysiology** Understand the subspecialty of surgical pathology which deals with the diagnosis and characterization of neoplastic and non-neoplastic diseases of the lungs and thoracic pleura.
- **Respiratory care therapeutics** Understand the exercises and treatments that are concerned with the maintenance or improvement of respiratory functioning (as in patients with pulmonary disease).
- **Cardiopulmonary diagnostics** Understand a range of conditions that affect the heart and lungs.
- **Neonatal resuscitation** Understand a set of interventions that are performed at the time of birth to support the establishment of breathing and circulation.

- **Mechanical ventilation** Understand a form of life support when a machine takes over the work of breathing for a patient who is unable to breathe on their own.
- **Patient care** Know how to treat patients not only from a clinical perspective, but also from an emotional, mental, spiritual, social and financial perspective.
- **Anatomy/physiology** Understand the study of the structure and relationship between body parts and the study of the function of body parts and the body as a whole.
- **Transcultural care** Understand the strong awareness of different cultures and cultural sensitivity with both verbal and non-verbal communications.
- **Health care policy** Understand the health policy that deals with the organization, financing and delivery of health care services.
- Medical terminology Knowledge of medical terms.
- **Respiratory disease education** Understand multiple diseases that affect the lungs and other parts of the respiratory system.

#### **Occupation-Specific Competencies**

**On-the-Job Training (OJT)** is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- **Oxygen administration** Understand the process by which supplemented oxygen is administered to prevent hypoxemia and knowledge of the risks of hypercapnia.
- Bronchial hygiene methods Understand the various airway clearance techniques.
- Lung hyperinflation techniques Understand the slow, deep inspiration, inspiratory pause and fast unobstructed expiration.
- Adverse reactions to procedures Know the reactions to both the upper airway and lower respiratory tract.
- **Performs arterial punctures** Understand the placement of a needle or catheter into an artery to sample blood gases or blood pressure or positioning of a catheter in the aorta or the heart.

- **Certified in CPR procedures** Understand how Cardiopulmonary resuscitation can help save a life during a cardiac or breathing emergency.
- Set up and administration of CPAP Know the continuous Positive Airway Pressure therapy to introduce air flow to stent the airways open, in people who are breathing spontaneously.
- **Respiratory equipment operation** Understand the training in infection control and preventive strategies to avoid patient contamination.
- Assure proper use of medical gas cylinders (oxygen, heliox, nitric oxide) Understand the recommendations to stay in compliance with mandated standards and how to operate medical gas equipment in a manner that is safe and beneficial for the patient.
- **Provide education on enhanced pulmonary health and quality of life** Understand how to educate patients and families to increase coping strategies to improve quality of life.
- **Patient assessment skills** Understand and be able to implement invasive and non-invasive ventilation on adult/peds/neonatal patients.
- **Pulmonary function testing** Know how to do a complete evaluation of the respiratory system including patient history, physical exams and tests of pulmonary function.

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