Respiratory Therapy

History

Over the past 40 years, the field of Respiratory Therapy has grown considerably. There was a time when respiratory therapists had little formal education and were trained on the job. Their main function was to ensure safe oxygen use, to administer intermittent positive pressure breathing (IPPB) treatments, to perform cardiopulmonary resuscitation (CPR) and to operate negative pressure (iron lung) ventilators. In fact, they were originally called inhalation therapists. With the advent of positive pressure mechanical ventilators, more widespread provision of neonatal and pediatric care, more sophisticated pulmonary function testing (PFT), there was a need for more thoroughly trained clinical practitioners. Today these respiratory technicians are college- and university-trained clinicians who work in a variety of settings.

Respiratory Therapy as a Career Today

Respiratory therapy is used in the diagnosis, treatment, management and care of patients’ cardiopulmonary problems. Increasing numbers of people suffering from respiratory diseases need complex treatment and rehabilitation, creating a need for specialists to assist doctors and nurses. As a result, respiratory therapists, also known as respiratory care practitioners, have become an essential part of the healthcare team.

Respiratory therapists work under the direction of physicians and follow their prescriptions for treating patients. Their duties range from giving temporary relief to persons with asthma, pulmonary edema, or emphysema to giving emergency care for asphyxiation, heart failure, stroke, drowning or shock. Respiratory therapists are among the first persons called to work with doctors and other specialists to give treatments for acute respiratory conditions, head injuries and drug poisoning. Therapists’ duties can also include treating gangrene, carbon monoxide poisoning, tetanus and the respiratory care of newborn infants.

Respiratory therapists ensure that physician’s orders are carefully followed. They set up and operate respirators, masks, incubators and positive breathing machines designed to give respiratory assistance to patients. They use other mechanical devices such as percussors to stimulate the flow of mucus from the lungs, as well as aerosol inhalants and sprays that supply the lungs with medication. They do blood gas analysis. They explain treatment to patients so as to gain cooperation and to reduce fears. They also instruct patients and their families on the performance of breathing exercises, handling of equipment and continuation of treatment at home.
Therapists monitor equipment, observe patient reactions, assess conditions, assure comfort and recommend changes in therapy to physicians. They record relevant information on patients’ charts. They may also use a variety of testing techniques to assist doctors in medical research and to diagnose disorders. Respiratory technicians, who perform similar duties but with less critical patients, assist them. Other duties may include the maintenance, sterilization, proper assembly and testing of the machines and equipment they use.

Aptitude

A genuine interest in people, a strong sense of responsibility, patience, tact, good judgment and the ability to endure stress are personal traits important to success in this occupation. The job requires good vision and hearing, manual dexterity and mechanical aptitudes. Some employers may give achievement tests and require physical examinations. Applicants for civil service positions must take and pass written and oral examinations.

Education

An Associate degree is required to become a respiratory therapist. Training is offered at the postsecondary level by colleges and universities, medical schools, vocational-technical institutes and the armed forces. Most programs award an Associate or Bachelor’s degree and prepare graduates for jobs as advanced respiratory therapists. A limited number of Associate degree programs lead to jobs as entry-level respiratory therapists. According to the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 45 entry-level and 334 advanced respiratory therapy programs were accredited in the United States in 2006.

Among the areas of study in respiratory therapy programs are human anatomy and physiology, pathophysiology, chemistry, physics, microbiology, pharmacology and mathematics. Other courses deal with therapeutic and diagnostic procedures and tests, equipment, patient assessment, cardiopulmonary resuscitation, the application of clinical practice guidelines, patient care outside of hospitals, cardiac and pulmonary rehabilitation, respiratory health promotion and disease prevention and medical recordkeeping and reimbursement.

High school students interested in applying to respiratory therapy programs should take courses in health, biology, mathematics, chemistry and physics. Respiratory care involves basic mathematical problem solving and an understanding of chemical and physical principles. For example, respiratory care workers must be able to compute dosages of medication and calculate gas concentrations.

A license is required to practice as a respiratory therapist, except in Alaska and Hawaii. Also, most employers require respiratory therapists to maintain a
cardiopulmonary resuscitation (CPR) certification. Licensure is usually based, in large part, on meeting the requirements for certification from the National Board for Respiratory Care (NBRC). The board offers the Certified Respiratory Therapist (CRT) credential to those who graduate from entry-level or advanced programs accredited by CAAHEP or the Committee on Accreditation for Respiratory Care (CoARC) and who also pass an exam. In addition, the NBRC offers a Registered Respiratory Therapist (RRT) credential for advanced practitioners.

Respiratory Therapy Programs in Louisiana

Bossier Parish Community College, Bossier City, LA; for further information, visit www.bpcc.edu

Delgado Community College, New Orleans, LA; for further information, visit www.dcc.edu

Louisiana State University - Eunice, Eunice, LA; for further information, visit http://www.lsue.edu/academic/career.asp#rc

Louisiana State University Health Sciences Center, New Orleans, LA; for further information, visit http://alliedhealth.lsuhsc.edu/cardiopulmonaryscience

Louisiana State University Health Sciences Center - Shreveport, LA; for further information, visit http://www.medcom.lsuhsc-s.edu/cfide/alliedhealth/ACD_cardiopulmonary_science.cfm

Louisiana Technical College-West Jefferson Campus - Harvey, LA; for further information, visit http://www.ltc.edu/curriculum/ProgramDetails.asp?id=62&name=Respiratory%20Therap\ist&nbr=510812&type=Associate%20of%20Applied%20Science

Nicholls State University, Houma, LA; for further information, visit http://www.nicholls.edu/respiratory_therapy/degree-programs-and-course-offerings/certificate-program-in-advanced-respiratory-therapy

Our Lady of Holy Cross/Alton Ochsner Medical Foundation, New Orleans, LA; for further information, visit http://www.olhcc.edu/x994.xml

Our Lady of the Lake College, Baton Rouge, LA; for further information, visit http://www.ololcollege.edu/Respiratory_Therapy_rev04.html

Southern University at Shreveport - Bossier City, Shreveport, LA; for further information, visit http://www.susla.edu/alliedhealth/programs/resp.pdf
Scholarship Opportunities

Jimmy A. Young Memorial Education Recognition Award
http://www.arcfoundation.org/awards/undergraduate/young.cfm
Awarded to a student of minority origin currently enrolled in an accredited respiratory care education program.

NBRC/AMP William W. Burgin, Jr. MD Education Recognition Award
http://www.arcfoundation.org/awards/undergraduate/burgin.cfm
Awarded to a student currently in their second year of an accredited respiratory care education program leading to an Associate degree.

NBRC/AMP Robert M. Lawrence, MD Education Recognition Award
http://www.arcfoundation.org/awards/undergraduate/lawrence.cfm
Awarded to a student currently in their third or fourth year of an accredited respiratory care education program leading to a Baccalaureate degree.

Salaries

The average hourly wage for the United States is $22.80 per hour with an annual earning of $47,000 per year. For Louisiana, the average hourly wage is $20.60 per hour with an annual earning of $43,000 per year. In Louisiana, respiratory therapists’ annual salaries range from $31,800 to $56,800 per year.

Professional Associations

American Association for Respiratory Care
http://www.aarc.org

American Respiratory Care Foundation
http://www.arcfoundation.org

The National Board for Respiratory Care
http://www.nbrc.org

Committee on Accreditation of Respiratory Care
http://www.coarc.com/fees.htm

Lambda Beta Society
https://www.nbrc.org
Additional Web Resources

http://www.bls.gov/oco/ocos084.htm
http://www.mayo.edu/mshs/resp-career.html
http://www.calmis.cahwnet.gov/file/occguide/RESPHER.HTML
http://www.careerinfonet.org
http://www.caahep.org/Find_An_Accredited_Program.aspx