

Diagnostic and Technical Instrumentation

Individuals working in this field prepare and/or monitor patients for medical procedures. Technological improvements have allowed health professionals to use advanced equipment to diagnose disease.

Careers within this section include:

- **Cardiovascular Technologist**
- **Electrocardiograph Technician**
- **Electroneurodiagnostic Technologist**
- **Perfusionist**

Cardiovascular Technologist



To be a successful Cardiovascular Technologist you should

- **Be able to remain calm and work well under stress**
- **Enjoy detailed work and working with precision**
- **Enjoy working with technology**
- **Be an effective and compassionate communicator**
- **Be flexible and adapt well to change**



What would I do?

Cardiovascular Technologists assist physicians in diagnosing and treating heart disorders by performing invasive and noninvasive tests. In addition to performing diagnostic procedures, Cardiovascular Technologists prepare patients for the test by cleaning, shaving areas of the skin, and administering anesthesia. During procedures, they also monitor patients' blood pressure and heart rate.

Cardiovascular Technologists may specialize in invasive technology, noninvasive technology, noninvasive peripheral vascular study, and electrophysiology.

Where would I work?

Most Cardiovascular Technologists work in hospitals, but some also work in medical centers, physicians' offices, and mobile diagnostic units.

What would I earn?

\$31,013–\$52,083

What do I need to know?

Most Cardiovascular Technologists complete a two-year program and receive an associate's degree. Some programs may last up to four years depending on the area of specialization.

What schools can I attend?

At the current time there are no academic institutions in New Hampshire offering a program for Cardiovascular Technologists. In the past, New Hampshire students have attended out-of-state schools such as Molloy College in Rockville Centre, NY.

Please contact your guidance office or career counselor for more information.

Where can I find more information?

Alliance of Cardiovascular Professionals
4356 Bonney Road, Suite 2-103
Virginia Beach, VA 23452
(757) 497-1225
www.acp-online.org

Cardiovascular Credentialing International
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
(919) 861-4539
(800) 326-0268
www.cci-online.org

Joint Review Committee for Education
in Cardiovascular Technology
3525 Ellicott Mills Drive, Suite N
Ellicott City, MD 21043-4547
(410) 418-4800
www.sicp.com/jrc-cvt



Electrocardiograph Technician



To be a successful Electrocardiograph Technician you should

- **Enjoy working with mechanical equipment**
- **Be able to follow instructions**
- **Be able to communicate well**
- **Be able to put others at ease**

What would I do?

Electrocardiograph (EKG or ECG) Technicians operate the equipment that records heart activity to help a cardiologist diagnose and monitor patients' heart problems. EKG Technicians prepare patients for the test by attaching electrodes to the chest, arms, and legs, and administering the test. They must be able to recognize emergencies and assist the physician during an emergency. With additional on-the-job training, EKG Technicians are able to perform additional tests and procedures.

Where would I work?

EKG Technicians often work under the direction of cardiologists and work in hospitals, physicians' offices, and cardiac rehabilitation centers.

What would I earn?

\$26,754–\$44,540

What do I need to know?

EKG Technicians need at least a high school diploma and three to six months of on-the-job training. Community and technical colleges offer more specialized training in one- to two-year programs.

What schools can I attend?

Health Career Training Associates
60 Rogers Street
Manchester, NH 03103
(603) 622-8400
www.hcta.net

Please contact your guidance office or career counselor for more information.

Where can I find more information?

Alliance of Cardiovascular Professionals
4356 Bonney Road, Suite 103
Virginia Beach, VA 23452
(757) 497-1225
www.acp-online.org

Electroneurodiagnostic Technologist



To be a successful Electroneurodiagnostic Technologist you should

- Have strong manual dexterity skills and good vision
- Enjoy working with people of all ages and backgrounds
- Be adept at working with mechanical and electronic equipment and understanding technical data
- Communicate effectively, both verbally and in writing
- Possess good stress management skills



What would I do?

Electroneurodiagnostic (END) Technologists use the electroencephalograph (EEG) machine and other instruments to record the electrical activity of the brain and central nervous system. The EEG produces a graph that neurologists use to diagnose and monitor diseases of the central nervous system, like epilepsy or Alzheimer's disease. END Technologists prepare patients for the EEG test by placing electrodes on the scalp or other parts of the body. During diagnostic studies, END Technologists monitor instrument settings, and prepare written reports for physicians.

Where would I work?

END Technologists may specialize in areas such as sleep disorder, interoperative monitoring, or long-term monitoring of epilepsy.

Electroneurodiagnostic Technologists usually work in hospitals, but others may work in neurology laboratories, neurologists' offices, psychiatric facilities, or large medical centers.

What would I earn?

\$31,000–\$46,000

What do I need to know?

Some END Technologists receive their training on the job, but employers are now preferring those who have completed a one- to two-year formal program at a community college.

What schools can I attend?

At the current time there are no academic institutions in New Hampshire offering a program for Electroneurodiagnostic Technologists. In the past, New Hampshire students have attended out-of-state schools such as Labouré College in Boston, MA.

Please contact your guidance office or career counselor for more information.

Where can I find more information?

American Society of Electroneurodiagnostic Technologists, Inc.
426 W. 42nd Street
Kansas City, MO 64111
(816) 931-1120
www.aset.org

Committee on Accreditation for Education
in Electroneurodiagnostic Technology
7600 Hunters Hollow Trail
Novelty, OH 44072-9541
(440) 338-5845



Perfusionist



To be a successful Perfusionist you should

- **Have the ability to concentrate for long periods of time**
- **Have good communication skills**
- **Have a strong sense of responsibility**
- **Work well as part of a team**
- **Know how to take and carry out orders**
- **Think independently**
- **Have the ability to respond to emergencies quickly and correctly**
- **Cope well under extreme stress**

What would I do?

Perfusionists are important members of an open heart surgical team. During open heart surgery, Perfusionists set up and operate the heart-lung machine that pumps and oxygenates the patient's blood while the heart is being operated on. Throughout the surgery, Perfusionists monitor the patient's blood circulation and keep the surgical team informed of the patient's condition.

Where would I work?

Perfusionists are employed by hospitals, surgeons, and perfusion groups. They work under extremely stressful conditions.

What would I earn?

\$50,000–\$60,000

What do I need to know?

Perfusionists complete a bachelor's degree before being admitted into a one- to two-year perfusionist training program. Admission into perfusionist programs is highly competitive.

What schools can I attend?

At the current time there are no academic institutions in New Hampshire offering a program for Perfusionists. In the past, New Hampshire students have attended out-of-state schools such as Northeastern University in Boston, MA, or Quinnipiac University in Hamden, CT.

Please contact your guidance office or career counselor for more information.

Where can I find more information?

American Academy of Cardiovascular Perfusion
PO Box 3596
Allentown, PA 18106-0596
(610) 395-4853
<http://users.aol.com/OfficeAACP>
www.perfusion.com

American Board of Cardiovascular Perfusion
207 North 25th Avenue
Hattiesburg, MS 39401
(601) 582-2227
www.abcp.org

American Society of Extra-Corporeal Technology
503 Carlisle Drive, Suite 125
Herndon, VA 20170
(703) 435-8556
www.amsect.org