


# 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**

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## **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. Cardiovascular technicians who specialize in electrocardiograms (EKGs), stress testing, and Holter monitors are known as cardiographic technicians, or EKG technicians.

## **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?**

\$27,890–50,130

## **What do I need to know?**

Although a few cardiovascular technologists, vascular technologists, and cardiac sonographers are currently trained on the job, most receive training in two- to four-year programs. The majority of technologists complete a two-year junior or community college program, but four-year programs are increasingly available. The first year is dedicated to core courses and is followed by a year of specialized instruction in either invasive, noninvasive cardiovascular, or noninvasive vascular technology.

## **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.

## **Where can I find more information?**

Alliance of Cardiovascular Professionals  
ACVP National Office  
PO Box 2007  
Midlothian, VA 23112  
(804) 632-0078  
[www.acp-online.org](http://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](http://www.cci-online.org)

Joint Review Committee for Education in  
Cardiovascular Technology  
1248 Harwood Road  
Bedford, Texas 76021-4244  
(214) 206-3117  
[www.jrccvt.org](http://www.jrccvt.org)

# **Electroneurodiagnostic Technologist**

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## **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 now prefer 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.

### **Where can I find more information?**

American Society of Electroneurodiagnostic Technologists, Inc.  
6501 E. Commerce Avenue, Suite 120  
Kansas City, MO 64120  
(816) 931-1120  
[www.aset.org](http://www.aset.org)

## **Perfusionist**

### **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?**

\$60,000–90,000

### **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.

### **Where can I find more information?**

American Academy of Cardiovascular Perfusion  
PO Box 3596  
Allentown, PA 18106-0596  
(610) 395-4853  
[www.perfusion.com](http://www.perfusion.com)

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

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

