

Cardiovascular Technologist

The certified cardiovascular technologist performs diagnostic examinations and therapeutic interventions of the heart and/or blood vessels at the request or direction of a physician in one or more of the following concentrations:

- Invasive cardiology—Cardiac catheterization
- Noninvasive cardiology—Echocardiography
- Noninvasive peripheral vascular study—Vascular ultrasound
- Cardiac electrophysiology

Through examination, sampling, and objective recording, the technologist creates an easily definable foundation of data from which a correct anatomic and physiologic diagnosis may be established for each patient.



History

In December 1981, the AMA Council on Medical Education (CME) officially recognized cardiovascular technology as an allied health profession. Subsequently, an initial draft of the proposed *Standards and Guidelines of an Accredited Educational Program in Cardiovascular Technology* were finalized in 1983.



Career Description

The cardiovascular technologist is qualified by specific didactic, laboratory, and clinical technological education to perform various cardiovascular/peripheral vascular diagnostic and therapeutic procedures. The role of the cardiovascular technologist may include but is not limited to:

- Reviewing and/or recording pertinent patient history and supporting clinical data
- Performing appropriate clinical procedures and obtaining a record of anatomical, pathological, and/or physiological data for interpretation by a physician
- Exercising discretion and judgment in the performance of cardiovascular diagnostic and therapeutic services
- Participating in interventional cardiovascular catheterization and/or cardiac electrophysiology procedures, including balloon angioplasty, stent insertion, radiofrequency ablation, and pacemaker and/or implantable defibrillator insertion.



Employment Characteristics

Cardiovascular technologists may provide their services to patients in any medical setting under the supervision of a doctor of medicine or osteopathy (MD or DO). The procedures performed by the cardiovascular technologist may be found in, but are not limited to, one of the following general settings:

- Invasive cardiovascular laboratories—cardiac catheterization, blood gas, and electrophysiology testing and interventional procedures
- Noninvasive cardiovascular laboratories—echocardiography, exercise stress test, and electrocardiography testing
- Noninvasive peripheral vascular studies laboratories—duplex ultrasound studies of the peripheral vascular system, segmental blood pressure measurements of extremities, and plethysmography testing



Salary

Entry-level salaries range from \$36,000 to \$45,000. The overall average is \$50,000 to \$65,000, with the upper ranges at \$75,000 plus. For more information, refer to www.ama-assn.org/go/hpsalary.



Educational Programs

Length. Programs may be from 1 to 4 years, depending on student qualifications and concentration(s) studied, and are located in colleges, hospitals, medical centers, or branches of the United States Armed Forces.

Prerequisites. High school diploma or equivalent or qualifications in a clinically related allied health profession.

Curriculum. Curricula of accredited programs include didactic instruction, laboratory experiences, and patient-based clinical instruction. Suggested areas of instruction in the core curriculum include an introduction to the field of cardiovascular technology, general and/or applied sciences, human anatomy and physiology, basic pharmacology, and basic medical electronics and medical instrumentation. Emphasis, following the core curriculum, is given in the concentration(s) selected: invasive cardiology, noninvasive/echocardiology, noninvasive peripheral vascular, and cardiac electrophysiology study. Both didactic instruction and clinical experiences are provided in these areas.



Inquiries

Careers/Curriculum

Society for Vascular Ultrasound
4601 Presidents Drive, Suite 260
Lanham, MD 20706-4831
301 459-7550 or 800 SVU-VEIN (800 788-8346)
301 459-5651 Fax
www.svunet.org

American Society of Echocardiography
2100 Gateway Centre Boulevard, Suite 310
Morrisville, NC 27560
919 861-5574
919 882-9900 Fax
www.asecho.org

Society of Invasive Cardiovascular Professionals
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
919 861-4546
919 787-4916 Fax
www.sicp.com

Certification/Registration

Cardiovascular Credentialing International
1500 Sunday Drive, Suite 102
Raleigh, NC 27607
800 326-0268
919 787-4916 Fax
www.cci-online.org

American Registry for Diagnostic Medical Sonography
51 Monroe Street, Plaza East One
Rockville, MD 20850-2400
301 738-8401
301 738-0312 Fax
www.ardms.org

Program Accreditation

Commission on Accreditation of Allied Health Education Programs
(CAAHEP) in collaboration with:
Joint Review Committee on Education in Cardiovascular
Technology
6 Pine Knoll Drive
Beverly, MA 01915-1425
978 456-5594
978 927-1214 Fax
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