Medical Technologist

Over 330,000 Medical Technologists and Medical Laboratory Technicians hold jobs in the US today. Since the development of this career profession in the 1920s, laboratory professionals have played a vital role in the diagnosis and prevention of disease.

Nature of the Work

Medical Technologists perform complex chemical, biological, hematological, immunologic, microscopic, and bacteriological analyses, including:

- Microscopically examine blood and other body fluids.
- Make cultures of body fluid and tissue samples to determine the presence of bacteria, fungi, parasites, or other microorganisms.
- Analyze samples for chemical content or a chemical reaction and determine concentrations of compounds such as blood glucose and cholesterol levels.
- Type and cross-match blood samples for transfusions.
- Evaluate test results, develop and modify procedures, and establish and monitor programs to ensure the accuracy of tests.
- Some supervise others in the laboratory.

Education and Training

Medical Technologists generally require a bachelor’s degree in Medical Technology or in one of the sciences (e.g., Chemistry or Biology). Bachelor’s degree programs in Medical Technology include courses in chemistry, biological sciences, microbiology, mathematics, and statistics, as well as courses designed to teach knowledge and skills used in the clinical laboratory. Medical Technology programs are typically offered through a university, with internships in a hospital setting.

Nationally recognized agencies that accredit Medical Technologist programs include the Commission on Accreditation of Allied Health Education Programs (CAAHEP), the Accrediting Bureau of Health Education Schools (ABHES) and The National Accrediting Agency for Clinical Laboratory Sciences (NAACLS).
**Licensure:** Some States require laboratory personnel to be licensed or registered. Licensure of Medical Technologists often requires a bachelor’s degree and the passing of an exam, but requirements vary by state and specialty. Information on licensure is available from state departments of health or boards of occupational licensing.

**Certification:** Many employers prefer applicants who are certified by a recognized professional association, such as the American Medical Technologists.

**Other Skills:** Employers seek laboratory personnel with good analytical judgment and the ability to work under pressure. Medical Technologists in particular are expected to be good at problem solving. Close attention to detail is also essential for laboratory personnel because small differences or changes in test substances or numerical readouts can be crucial to a diagnosis. Manual dexterity and normal color vision are highly desirable, and with the widespread use of automated laboratory equipment, computer skills are important.

**Advancement:** Technicians can advance and become Medical Technologists through additional education and experience. Medical Technologists may advance to supervisory positions in laboratory work or may become chief technologists or laboratory managers in hospitals. Manufacturers of home diagnostic testing kits and laboratory equipment and supplies also seek experienced Medical Technologists to work in product development, marketing, and sales. Professional certification, specialization and/or a graduate degree in Medical Technology, one of the biological sciences, chemistry, management, or education usually speeds advancement.

**Employment**
Medical Technologist hold about 164,300 jobs in 2012. Employment of medical laboratory technologists is expected to grow by 14 percent between 2012 and 2022, about as fast as the average for all occupations. An increase in the aging population will lead to a greater need to diagnose medical conditions, such as cancer or type 2 diabetes, through laboratory procedures. Medical laboratory technologists and technicians will be needed to use and maintain the equipment needed for diagnosis and treatment.

**Salary**
The median annual wage of medical laboratory technologists was $57,580 in May 2012. The median wage is the wage at which half the workers in an occupation earned more than that amount and half earned less. The lowest 10 percent earned more than $39,580, and the highest 10 percent earned more than $78,900. In general, salaries are higher in a hospital setting than in physician offices.

Profession Source: US Bureau of Labor Statistics: