

# Medical and Clinical Laboratory Technician

## **Professional Activities**

Clinical laboratory personnel examine and analyze body fluids, and cells. They look for bacteria, parasites, and other microorganisms; analyze the chemical content of fluids; match blood for transfusions; and test for drug levels in the blood that show how a patient is responding to treatment. Clinical laboratory technicians perform less complex tests and laboratory procedures than technologists perform. Technicians may prepare specimens and operate automated analyzers, for example, or they may perform manual tests in accordance with detailed instructions. Like technologists, they may work in several areas of the clinical laboratory or specialize in one.

Clinical laboratory technicians use automated equipment and computerized instruments capable of performing a number of tests simultaneously, as well as microscopes, cell counters, and other sophisticated laboratory equipment. Then they analyze the results and relay them to physicians. With increasing automation and the use of computer technology, the work of technologists and technicians has become less hands-on and more analytical.

Hours and other working conditions of clinical laboratory technologists and technicians vary, according to the size and type of employment setting. In large hospitals or in independent laboratories that operate continuously, personnel usually work the day, evening, or night shift and may work weekends and holidays. Laboratories usually are well lit and clean. However, specimens, solutions, and reagents used in the laboratory sometimes produce fumes. Laboratory workers may spend a great deal of time on their feet.

## **Educational Requirements**

Medical and clinical laboratory technicians generally have either an associate degree from a community or junior college or a certificate from a hospital, a vocational or technical school, or the Armed Forces. A few technicians learn their skills on the job.

Clinical laboratory personnel need good analytical judgment and the ability to work under pressure. Close attention to detail is essential, because small differences or changes in test substances or numerical readouts can be crucial for patient care. Manual dexterity and normal color vision are highly desirable. With the widespread use of automated laboratory equipment, computer skills are important. Technicians can become technologists through additional education and experience.

## **Academic Programs**

[Danivlle Community College](#)

[Elgin Community College](#)

[Illinois Central College](#)

[Kankakee Community College](#)

[Malcom X College](#)

[Oakton Community College](#)

[Onley Community College](#)

[Southwestern Illinois College](#)

## **Employment/Salary Outlook**

The volume of laboratory tests continues to increase with both population growth and the development of new types of tests. Although hospitals are expected to continue to be the major employer of clinical laboratory workers, employment is expected also to grow rapidly in medical and diagnostic laboratories, offices of physicians, and all other ambulatory healthcare services.

## State and National Wages

Location	Pay Period	2021		
		Low	Median	High
United States	Hourly	\$14.56	\$27.79	\$38.15
	Annual	\$30,280	\$57,800	\$79,340
Illinois	Hourly	\$15.93	\$27.54	\$37.66
	Annual	\$33,140	\$57,280	\$78,340

## State and National Trends

United States	Employment		Percent Change	Job Openings <sup>1</sup>
	2020	2030		
Medical and Clinical Laboratory Technicians	335,500	372,000	11%	25,900
Illinois	Employment		Percent Change	Job Openings <sup>1</sup>
	2018	2028		
Medical and Clinical Laboratory Technicians	12,150	12,660	+4%	830

<sup>1</sup>Job Openings refers to the average annual job openings due to growth and net replacement.

## Professional Organizations

National Accrediting Agency for Clinical Laboratory Sciences ([naaccls.org](http://naaccls.org))

American Society for Clinical Laboratory Science ([ascls.org](http://ascls.org))

American Society for Clinical Pathology ([ascp.org](http://ascp.org))

American Medical Technologists ([americanmedtech.org](http://americanmedtech.org))

## References

*Occupational Outlook Handbook*, U.S. Department of Labor, Bureau of Labor Statistics

(<http://www.bls.gov/ooh/healthcare/medical-and-clinical-laboratory-technologists-and-technicians.htm>)

O\*NET OnLine (<http://online.onetcenter.org/link/summary/29-2012.00>)

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