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Medical and Clinical Laboratory... Louisiana

Summary of Job Duties

Medical and Clinical Laboratory Technologists [Video](#) - Perform complex medical laboratory tests for diagnosis, treatment, and prevention of disease. May train or supervise staff.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Detailed Job Description

Medical and Clinical Laboratory Technologists Laboratory personnel wear protective masks, gloves, and goggles to ensure their safety.

Medical laboratory technologists (commonly known as medical laboratory scientists) and medical laboratory technicians collect samples and perform tests to analyze body fluids, tissue, and other substances.

Duties

Medical laboratory technologists and technicians typically do the following:

- Analyze body fluids, such as blood, urine, and tissue samples, and record normal or abnormal findings
- Study blood samples for use in transfusions by identifying the number of cells, the cell morphology or the blood group, blood type, and compatibility with other blood types
- Operate sophisticated laboratory equipment, such as microscopes and cell counters
- Use automated equipment and computerized instruments capable of performing a number of tests at the same time
- Log data from medical tests and enter results into a patient's medical record
- Discuss results and findings of laboratory tests and procedures with physicians
- Supervise or train medical laboratory technicians

Both technicians and technologists perform tests and procedures that physicians and surgeons or other healthcare personnel order. However, technologists perform more complex tests and laboratory procedures than technicians do. For example, technologists may prepare specimens and

perform detailed manual tests, whereas technicians perform routine tests that may be more automated. Medical laboratory technicians usually work under the general supervision of medical laboratory technologists or laboratory managers.

Technologists in small laboratories perform many types of tests; in large laboratories, they sometimes specialize. The following are examples of types of specialized medical laboratory technologists:

Blood bank technologists, or immunohematology technologists, collect blood, classify it by type, and prepare blood and its components for transfusions.

Clinical chemistry technologists prepare specimens and analyze the chemical and hormonal contents of body fluids.

Cytotechnologists prepare slides of body cells and examine these cells under a microscope for abnormalities that may signal the beginning of a cancerous growth.

Immunology technologists examine elements of the human immune system and its response to foreign bodies.

Microbiology technologists examine and identify bacteria and other microorganisms.

Molecular biology technologists perform complex protein and nucleic acid tests on cell samples.

Like technologists, medical laboratory technicians may work in several areas of the laboratory or specialize in one area. For example, histotechnicians are a type of medical laboratory technician who cut and stain tissue specimens for pathologists— doctors who study the cause and development of diseases at a microscopic level.

Technologists and technicians often specialize after they have worked in a particular area for a long time or have received advanced education or training in that area.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

Job Zone

The section below shows the job zone information for Medical and Clinical Laboratory Technologists. Job Zone Four: Considerable Preparation Needed.

Education	Experience	Training
Most of these occupations require a four-year bachelor's degree, but some do not.	A considerable amount of work-related skill, knowledge, or experience is needed for these occupations. For example, an accountant must complete four years of college and work for several years in accounting to be considered qualified.	Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Jobs Available

This section shows the number of job openings advertised online in Louisiana for Medical and Clinical Laboratory Technologists and for the related occupational group of Healthcare Practitioners and Technical Occupations on November 23, 2020 (Jobs De-duplication Level 2).

Occupation	Job Openings
Medical and Clinical Laboratory Technologists🌟	<u>190</u>

Occupation	Job Openings
Healthcare Practitioners and Technical Occupations	<u>10,407</u>

🌟 BRIGHT OUTLOOK NATIONALLY

Source: Online advertised jobs data

Monthly Job Count

This section shows the number of job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana October, 2020 (Jobs De-duplication Level 2).

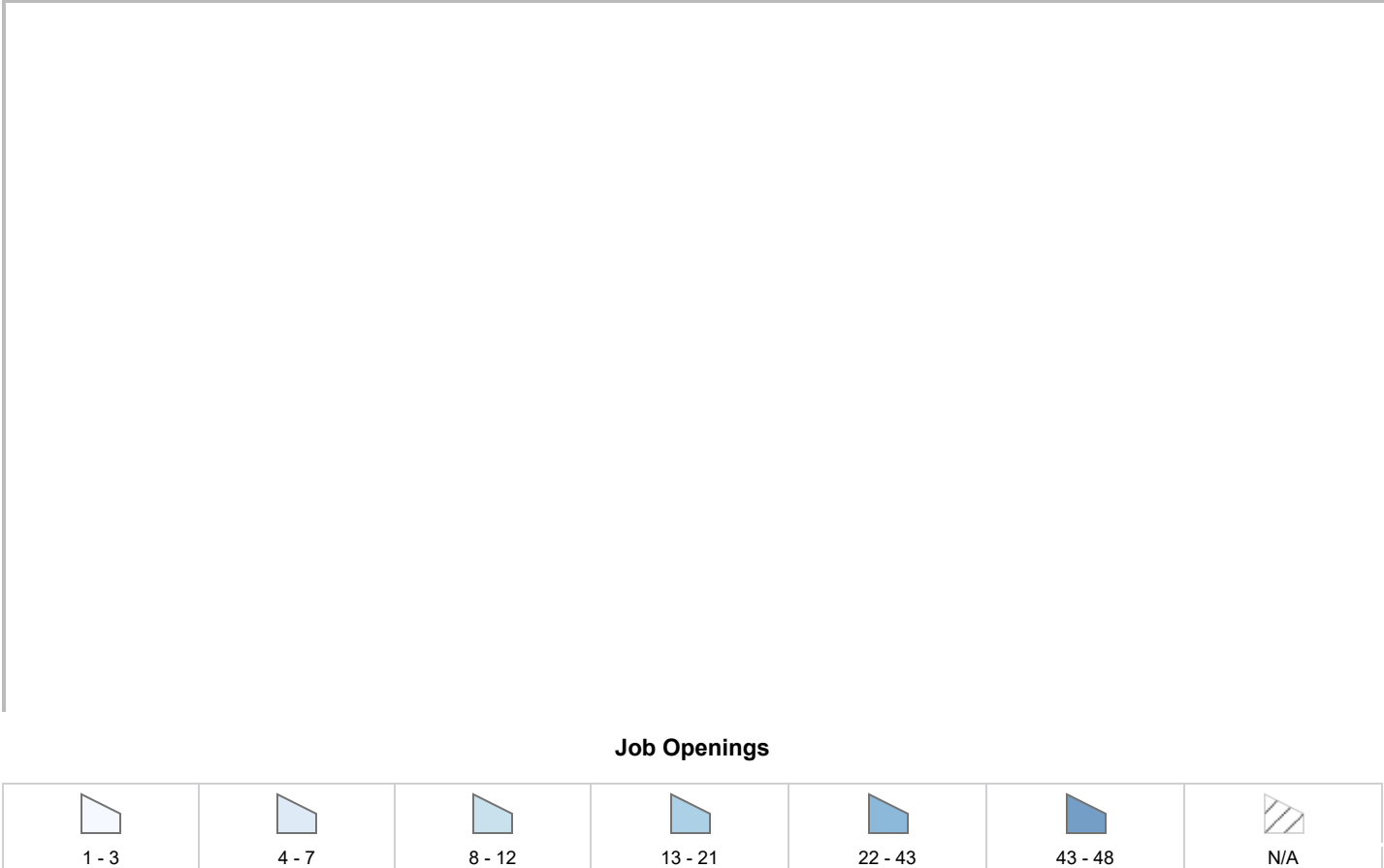
Occupation	Job Openings
Medical and Clinical Laboratory Technologists🌟	292

🌟 BRIGHT OUTLOOK NATIONALLY

Source: Online advertised jobs data

Jobs Area Distribution

This section shows the distribution of number of job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana by parishes on November 23, 2020 (Jobs De-duplication Level 2).



Job Source: Online advertised jobs data

Jobs in Related Occupations

This section shows the number of job openings advertised online in Louisiana for occupations related to Medical and Clinical Laboratory Technologists on November 23, 2020 (Jobs De-duplication Level 2).

Rank	Occupation	Median Wage	Job Openings	*Related By
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Rank	Occupation	Median Wage	Job Openings	*Related By
1	<u>Licensed Practical and Licensed Vocational Nurses</u> 🟡	\$37,892	<u>697</u>	SOC4
2	<u>Surgical Technologists</u> 🟡	\$38,815	<u>222</u>	SOC4
3	Medical and Clinical Laboratory Technologists 🟡	\$52,662	<u>190</u>	N/A
4	<u>Radiologic Technologists</u> 🟡	\$49,034	<u>168</u>	SOC4
5	<u>Pharmacy Technicians</u> 🟡	\$29,860	<u>166</u>	SOC4
6	<u>Emergency Medical Technicians and Paramedics</u> 🟡	Confidential	<u>122</u>	SOC4
7	<u>Pharmacists</u>	\$117,094	<u>103</u>	O*NET
8	<u>Medical and Clinical Laboratory Technicians</u> 🟡	\$32,699	<u>83</u>	O*NET
9	<u>Diagnostic Medical Sonographers</u> 🟡	\$56,868	<u>77</u>	O*NET
10	<u>Respiratory Therapy Technicians</u>	\$46,597	<u>66</u>	O*NET
11	<u>Psychiatric Technicians</u> 🟡	\$25,483	<u>51</u>	SOC4
12	<u>Cardiovascular Technologists and Technicians</u> 🟡	\$37,249	<u>44</u>	SOC4
13	<u>Nuclear Medicine Technologists</u> 🟡	\$66,757	<u>39</u>	O*NET
14	<u>Medical Records and Health Information Technicians</u> 🟡	\$33,446	<u>31</u>	SOC4
15	<u>Nurse Anesthetists</u> 🟡	\$146,382	<u>30</u>	O*NET
16	<u>Dietetic Technicians</u>	\$20,605	<u>28</u>	SOC4
17	<u>Veterinary Technologists and Technicians</u> 🟡	\$24,953	<u>26</u>	O*NET
18	<u>Dental Hygienists</u> 🟡	\$56,410	<u>20</u>	SOC4
19	<u>Electrical Engineering Technicians</u> 🟢	\$50,274	<u>17</u>	O*NET
20	<u>Chemists</u> 🟢	\$64,420	<u>14</u>	O*NET
21	<u>Cytotechnologists</u> 🟡	\$52,662	<u>11</u>	O*NET
22	<u>Health Technologists and Technicians, All Other</u> 🟡	\$30,547	<u>11</u>	SOC4
23	<u>Power Distributors and Dispatchers</u> 🟢	\$40,233	<u>11</u>	O*NET
24	<u>Industrial Engineering Technicians</u> 🟢	\$60,082	<u>10</u>	O*NET
25	<u>Biological Technicians</u> 🟡	\$40,284	<u>8</u>	O*NET
26	<u>Chemical Technicians</u> 🟢	\$61,306	<u>5</u>	O*NET
27	<u>Histotechnologists and Histologic Technicians</u> 🟡	\$52,662	<u>5</u>	O*NET
28	<u>Medical Equipment Repairers</u>	\$35,153	<u>5</u>	O*NET
29	<u>Electro-Mechanical Technicians</u> 🟢	\$50,291	<u>4</u>	O*NET
30	<u>Opticians, Dispensing</u> 🟡	\$30,746	<u>4</u>	SOC4
31	<u>Zoologists and Wildlife Biologists</u> 🟢	\$72,247	<u>3</u>	O*NET
32	<u>Geological Sample Test Technicians</u> 🟡 🟢	\$63,199	<u>3</u>	O*NET
33	<u>Orthotists and Prosthetists</u> 🟡	\$62,606	<u>2</u>	SOC4

Rank	Occupation	Median Wage	Job Openings	*Related By
34	Food Science Technicians	\$33,772	1	O*NET
35	Forensic Science Technicians 🌟	\$45,147	1	O*NET
36	Neurodiagnostic Technologists 🌟	\$30,547	1	O*NET
37	Fire Investigators	\$46,062	1	O*NET

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

Job Source: Online advertised jobs data

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2017 survey.

*Related By: O*NET™ - The [Occupational Information Network](#). O*NET is a registered trademark of the [US Department of Labor/Employment and Training Administration](#).

SOC4 - Occupational grouping based on 1st 4 digits of the [Standard Occupational Classification](#) system.

Candidates Available

This section shows potential candidates in the workforce system in Louisiana for Medical and Clinical Laboratory Technologists and for the related occupational group of Healthcare Practitioners and Technical Occupations on November 23, 2020.

Occupation	Candidates
Medical and Clinical Laboratory Technologists🌟	41
Healthcare Practitioners and Technical Occupations	5,240

🌟 BRIGHT OUTLOOK NATIONALLY

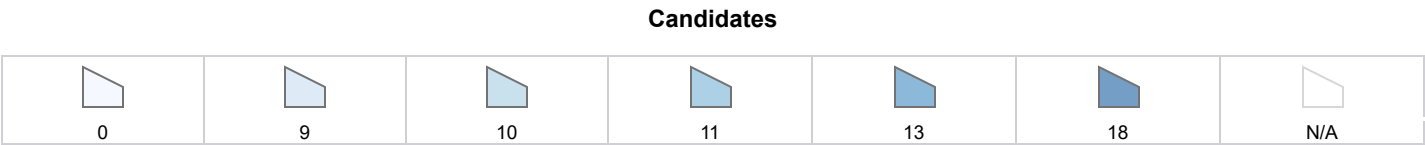
Source: Individuals with active résumés in the workforce system.

Candidate Area Distribution

This section shows the distribution of potential candidates in the workforce system for Medical and Clinical Laboratory Technologists in Louisiana by parishes on November 23, 2020.

Rank	Area Name	Median Wage	Candidates
1	Jefferson Parish	\$52,662 state level wages	18
2	Orleans Parish	\$52,662 state level wages	18
3	East Baton Rouge Parish	\$52,662 state level wages	13
4	Lafayette Parish	\$52,662 state level wages	13
5	Bossier Parish	\$52,662 state level wages	11
6	Caddo Parish	\$52,662 state level wages	11

Rank	Area Name	Median Wage	Candidates
7	<u>Calcasieu Parish</u>	\$52,662 state level wages	11
8	<u>Iberia Parish</u>	\$52,662 state level wages	11
9	<u>Livingston Parish</u>	\$52,662 state level wages	11
10	<u>Ouachita Parish</u>	\$52,662 state level wages	11



Candidate Source: Individuals with active résumés in the workforce system.

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2017 survey.

Candidates in Related Occupations

This section shows how many potential candidates in the workforce system were looking for work in Louisiana in occupations related to Medical and Clinical Laboratory Technologists on November 23, 2020.

Rank	Occupation	Median Wage	Candidates	*Related By
1	<u>Licensed Practical and Licensed Vocational Nurses</u> 🌟	\$37,892	815	SOC4
2	<u>Medical Records and Health Information Technicians</u> 🌟	\$33,446	594	SOC4

Rank	Occupation	Median Wage	Candidates	*Related By
3	<u>Pharmacy Technicians</u> 🌟	\$29,860	298	SOC4
4	<u>Medical and Clinical Laboratory Technicians</u> 🌟	\$32,699	248	O*NET
5	<u>Chemical Technicians</u> 🌿	\$61,306	245	O*NET
6	<u>Health Technologists and Technicians, All Other</u> 🌟	\$30,547	181	SOC4
7	<u>Emergency Medical Technicians and Paramedics</u> 🌟	Confidential	129	SOC4
8	<u>Psychiatric Technicians</u> 🌟	\$25,483	115	SOC4
9	<u>Industrial Engineering Technicians</u> 🌿	\$60,082	111	O*NET
10	<u>Dental Hygienists</u> 🌟	\$56,410	109	SOC4
11	<u>Surgical Technologists</u> 🌟	\$38,815	108	SOC4
12	<u>Electrical Engineering Technicians</u> 🌿	\$50,274	96	O*NET
13	<u>Aerospace Engineering and Operations Technicians</u>	\$64,324	76	O*NET
14	<u>Cardiovascular Technologists and Technicians</u> 🌟	\$37,249	73	SOC4
15	<u>Chemists</u> 🌿	\$64,420	70	O*NET
16	<u>Opticians, Dispensing</u> 🌟	\$30,746	67	SOC4
17	<u>Biological Technicians</u> 🌟	\$40,284	65	O*NET
18	<u>Pharmacists</u>	\$117,094	57	O*NET
19	<u>Dietetic Technicians</u>	\$20,605	53	SOC4
20	<u>Electro-Mechanical Technicians</u> 🌿	\$50,291	52	O*NET
21	<u>Veterinary Technologists and Technicians</u> 🌟	\$24,953	48	O*NET
22	<u>Medical and Clinical Laboratory Technologists</u> 🌟	\$52,662	41	N/A
23	<u>Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic</u> 🌟	\$52,647	39	O*NET
24	<u>Geological Sample Test Technicians</u> 🌟 🌿	\$63,199	35	O*NET
25	<u>Radiologic Technologists</u> 🌟	\$49,034	34	SOC4
26	<u>Aviation Inspectors</u>	\$74,585	29	O*NET
27	<u>Diagnostic Medical Sonographers</u> 🌟	\$56,868	25	O*NET
28	<u>Electronics Engineering Technologists</u> 🌿	\$55,415	19	O*NET
29	<u>Food Science Technicians</u>	\$33,772	15	O*NET
30	<u>Power Distributors and Dispatchers</u> 🌿	\$40,233	15	O*NET
31	<u>Zoologists and Wildlife Biologists</u> 🌿	\$72,247	14	O*NET
32	<u>Forensic Science Technicians</u> 🌟	\$45,147	11	O*NET
33	<u>Police Identification and Records Officers</u>	\$50,342	11	O*NET
34	<u>Medical Equipment Repairers</u>	\$35,153	10	O*NET
35	<u>Nuclear Medicine Technologists</u> 🌟	\$66,757	8	O*NET
36	<u>Nuclear Monitoring Technicians</u>	\$50,688	6	O*NET

Rank	Occupation	Median Wage	Candidates	*Related By
37	Neurodiagnostic Technologists 🌟	\$30,547	6	O*NET
38	Coroners	\$57,101	5	O*NET
39	Nurse Anesthetists 🌟	\$146,382	4	O*NET
40	Respiratory Therapy Technicians	\$46,597	4	O*NET
41	Fire Investigators	\$46,062	4	O*NET
42	Orthotists and Prosthetists 🌟	\$62,606	2	SOC4
43	Histotechnologists and Histologic Technicians 🌟	\$52,662	1	O*NET

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

Candidate Source: Individuals with active résumés in the workforce system.

Wage Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2017 survey.

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SOC4 - Occupational grouping based on 1st 4 digits of the [Standard Occupational Classification](#) system.

Jobs and Candidates Available

This section shows the number of job openings advertised online, as well as potential candidates in the workforce system in Louisiana for Medical and Clinical Laboratory Technologists and for the related occupational group of Healthcare Practitioners and Technical Occupations on November 23, 2020 (Jobs De-duplication Level [2](#)).

Occupation	Job Openings	Candidates	Candidates per Job
Medical and Clinical Laboratory Technologists🌟	190	41	0.22
Healthcare Practitioners and Technical Occupations	10,407	5,240	0.50

🌟 BRIGHT OUTLOOK NATIONALLY

Job Source: Online advertised jobs data

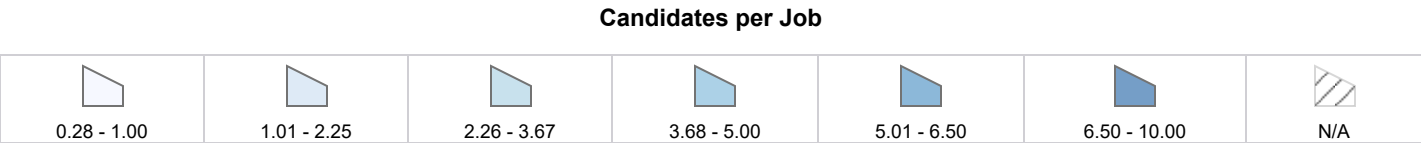
Candidate Source: Individuals with active résumés in the workforce system.

Jobs and Candidates Area Distribution

This section shows the distribution of number of job openings advertised online, as well as potential candidates in the workforce system for Medical and Clinical Laboratory Technologists in Louisiana by parishes on November 23, 2020 (Jobs De-duplication Level [2](#)).

Rank	Area Name	Median Wage	Job Openings	Candidates	Candidates per Job
1	Acadia Parish	\$52,662 state level wages	1	10	10.00
2	Iberville Parish	\$52,662 state level wages	1	10	10.00
3	St. Landry Parish	\$52,662 state level wages	1	10	10.00

Rank	Area Name	Median Wage	Job Openings	Candidates	Candidates per Job
4	<u>Beauregard Parish</u>	\$52,662 state level wages	<u>1</u>	9	9.00
5	<u>Lafayette Parish</u>	\$52,662 state level wages	<u>2</u>	13	6.50
6	<u>Lincoln Parish</u>	\$52,662 state level wages	<u>2</u>	10	5.00
7	<u>Assumption Parish</u>	\$52,662 state level wages	<u>2</u>	9	4.50
8	<u>Bossier Parish</u>	\$52,662 state level wages	<u>3</u>	11	3.67
9	<u>St. Bernard Parish</u>	\$52,662 state level wages	<u>3</u>	10	3.33
10	<u>St. Martin Parish</u>	\$52,662 state level wages	<u>3</u>	10	3.33



Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.
Wage Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Data is from a 2017 survey.

National Supply and Demand Summary

Medical and Clinical Laboratory Technologists Employment of medical laboratory technologists is projected to grow 12 percent from 2016 to 2026, faster the average for all occupations. Employment of medical laboratory technicians is projected to grow 14 percent from 2016 to 2026, faster than the average for all occupations.

An increase in the aging population is expected to lead to a greater need to diagnose medical conditions, such as cancer or type 2 diabetes, through laboratory procedures. Prenatal testing for various types of genetic conditions also is increasingly common. Medical laboratory technologists and technicians will be in demand to use and maintain the equipment needed for diagnosis and treatment.

Job Prospects

Job prospects will be best for medical and clinical laboratory technologists and technicians who complete an accredited education program and earn professional certification.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

Employers by Number of Job Openings

This section shows the employers with the highest number of job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana on November 23, 2020 (Jobs De-duplication Level 2).

Rank	Employer Name	Job Openings
1	Ochsner Health System	<u>31</u>
2	Louisiana State University	<u>16</u>
3	Franciscan Missionaries of Our Lady Health System	<u>11</u>
4	CHRISTUS Health	<u>9</u>
5	HCA Healthcare, Inc.	<u>9</u>
6	Clinical Pathology Laboratories, Inc.	<u>7</u>
7	LCMC Health	<u>6</u>
8	Veterans Health Administration	<u>6</u>
9	Lafayette General Health	<u>5</u>
10	Lake Charles Memorial Health System	<u>5</u>

Source: Online advertised jobs data

Advertised Job Skills

This section shows the top advertised detailed job skills found in job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Job Skill	Advertised Skill Group	Job Opening Match Count
1	Problem solving	Basic Skills	<u>49</u>
2	Customer service	Customer Service Skills	<u>36</u>
3	Interpersonal skills	Interpersonal Skills	<u>35</u>
4	Specimen handling	Surgical Technologist Skills	<u>32</u>
5	Regulatory compliance	Chief Financial Officer Skills	<u>31</u>
6	Conflict management	Interpersonal Skills	<u>28</u>

Rank	Advertised Detailed Job Skill	Advertised Skill Group	Job Opening Match Count
7	Diagnostic testing	Medical Technologist Skills	<u>28</u>
8	Performs laboratory tests	Medical Technologist Skills	<u>26</u>
9	Developing new business	Business Development Skills	<u>26</u>
10	Clinical laboratory experience	Medical Technologist Skills	<u>25</u>

Source: Online advertised jobs data

Advertised Tools and Technology

This section shows the top advertised detailed tools and technologies found in job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Detailed Tool or Technology	Advertised Tool and Technology Group	Job Opening Match Count
1	Keyboard	Keyboards	<u>34</u>
2	Gmail	Electronic Mail Software	<u>28</u>
3	Multiple Listing Service (MLS)	Database User Interface and Query Software	<u>24</u>
4	Microscopes	Surgical Microscopes/Loops/Magnifiers or Accessories	<u>20</u>
5	Alarms	Alarm Systems	<u>20</u>
6	Automated pipettes	Dropping Pipettes	<u>20</u>
7	Centrifuges	Benchtop Centrifuges	<u>20</u>
8	Pipettes	Dropping Pipettes	<u>20</u>
9	Dollies	Dollies	<u>19</u>
10	Calculators	Desktop Calculators	<u>14</u>

Source: Online advertised jobs data

Typical Job Skills

This section shows the job skills that are related to Medical and Clinical Laboratory Technologists.

Rank	Typical Job Skills	Typical Skill Category
1	Analyze laboratory specimens to detect abnormalities or other problems	Mental Processes
2	Analyze laboratory findings	Mental Processes
3	Maintain medical laboratory equipment	Work Output
4	Operate laboratory equipment to analyze medical samples	Work Output
5	Collect biological specimens from patients	Work Output
6	Enter patient or treatment data into computers	Work Output
7	Develop healthcare quality and safety procedures	Mental Processes
8	Clean medical equipment or facilities	Work Output
9	Prepare medical supplies or equipment for use	Work Output

Rank	Typical Job Skills	Typical Skill Category
10	Prepare biological specimens for laboratory analysis	Work Output
11	Communicate detailed medical information to patients or family members	Interacting With Others
12	Communicate test or assessment results to medical professionals	Interacting With Others
13	Cultivate micro-organisms for study, testing, or medical preparations	Work Output
14	Supervise technical medical personnel	Interacting With Others
15	Train medical providers	Interacting With Others
16	Determine protocols for medical procedures	Mental Processes
17	Conduct research to increase knowledge about medical issues	Information Input

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Personal Skills

This section shows the personal skills that are most useful for Medical and Clinical Laboratory Technologists. Click on a link in the Personal Skills column to view more detailed information.

Personal Skill	Skill Description	Rank by Importance (Out of 100)
Reading Comprehension	Understanding written sentences and paragraphs in work related documents.	69
Active Listening	Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.	69
Critical Thinking	Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.	69
Science	Using scientific rules and methods to solve problems.	66
Operation Monitoring	Watching gauges, dials, or other indicators to make sure a machine is working properly.	60
Quality Control Analysis	Conducting tests and inspections of products, services, or processes to evaluate quality or performance.	56
Active Learning	Understanding the implications of new information for both current and future problem-solving and decision-making.	56
Complex Problem Solving	Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.	56
Speaking	Talking to others to convey information effectively.	56

Personal Skill	Skill Description	Rank by Importance (Out of 100)
<u>Monitoring</u>	Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.	56
<u>Writing</u>	Communicating effectively in writing as appropriate for the needs of the audience.	53
<u>Instructing</u>	Teaching others how to do something.	53
<u>Judgment and Decision Making</u>	Considering the relative costs and benefits of potential actions to choose the most appropriate one.	53
<u>Time Management</u>	Managing one's own time and the time of others.	53
<u>Service Orientation</u>	Actively looking for ways to help people.	50
<u>Mathematics</u>	Using mathematics to solve problems.	50
<u>Social Perceptiveness</u>	Being aware of others' reactions and understanding why they react as they do.	50
<u>Coordination</u>	Adjusting actions in relation to others' actions.	50
<u>Persuasion</u>	Persuading others to change their minds or behavior.	47
<u>Learning Strategies</u>	Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.	47
<u>Equipment Selection</u>	Determining the kind of tools and equipment needed to do a job.	47
<u>Management of Personnel Resources</u>	Motivating, developing, and directing people as they work, identifying the best people for the job.	47
<u>Systems Analysis</u>	Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.	47
<u>Systems Evaluation</u>	Identifying measures or indicators of system performance and the actions needed to improve or correct performance, relative to the goals of the system.	47
<u>Operation and Control</u>	Controlling operations of equipment or systems.	47
<u>Troubleshooting</u>	Determining causes of operating errors and deciding what to do about it.	44
<u>Equipment Maintenance</u>	Performing routine maintenance on equipment and determining when and what kind of maintenance is needed.	41
<u>Negotiation</u>	Bringing others together and trying to reconcile differences.	38
<u>Repairing</u>	Repairing machines or systems using the needed tools.	35
<u>Operations Analysis</u>	Analyzing needs and product requirements to create a design.	28

Personal Skill	Skill Description	Rank by Importance (Out of 100)
<u>Management of Financial Resources</u>	Determining how money will be spent to get the work done, and accounting for these expenditures.	25
<u>Management of Material Resources</u>	Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work.	25
<u>Programming</u>	Writing computer programs for various purposes.	25
<u>Technology Design</u>	Generating or adapting equipment and technology to serve user needs.	10
<u>Installation</u>	Installing equipment, machines, wiring, or programs to meet specifications.	6

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Education Requirements

Medical and Clinical Laboratory Technologists Medical and Clinical Laboratory Technologists usually require at least a Bachelor's degree. However, not all employers may make this a hiring requirement.

Source: This information is based on the BLS Occupational Outlook Handbook (OOH).

Required Level of Education

This section shows the results of a national survey listing the most common required level of education for Medical and Clinical Laboratory Technologists.

Rank	Required Level of Education	Percentage of Respondents
1	Bachelor's Degree	59.36%
2	Associate's Degree (or other 2-year degree)	30.10%
3	Master's Degree	5.48%
4	Post-Baccalaureate Certificate - awarded for completion of an organized program of study; designed for people who have completed a Baccalaureate degree but do not meet the requirements of academic degrees carrying the title of Master.	3.56%
5	Some College Courses	1.21%
6	High School Diploma - or the equivalent (for example, GED)	0.30%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

On The Job Training

This section shows the results of a national survey listing the most common lengths of on the job training for Medical and Clinical Laboratory Technologists.

Rank	On The Job Training	Percentage of Respondents
1	Over 3 months, up to and including 6 months	32.60%

Rank	On The Job Training	Percentage of Respondents
2	Over 1 month, up to and including 3 months	31.86%
3	Over 6 months, up to and including 1 year	15.06%
4	Over 1 year, up to and including 2 years	9.75%
5	Anything beyond short demonstration, up to and including 1 month	8.77%
6	Over 4 years, up to and including 10 years	1.43%
7	None or short demonstration	0.52%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

On-Site or In-Plant Training

This section shows the results of a national survey listing the most common lengths of on-site or in-plant training for Medical and Clinical Laboratory Technologists.

Rank	On-Site or In-Plant Training	Percentage of Respondents
1	Over 6 months, up to and including 1 year	33.79%
2	None	17.97%
3	Over 3 months, up to and including 6 months	15.98%
4	Up to and including 1 month	10.57%
5	Over 1 month, up to and including 3 months	9.82%
6	Over 1 year, up to and including 2 years	9.18%
7	Over 2 years, up to and including 4 years	2.70%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Education Level of Jobs and Candidates

This section shows the minimum level of education requested by employers on job openings advertised online, as well as the educational attainment of potential candidates in the workforce system that are looking for jobs as Medical and Clinical Laboratory Technologists in Louisiana on November 23, 2020. There were 132 job openings advertised online that did not specify a minimum education requirement (Jobs De-duplication Level 2).

Rank	Education Level	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
1	High School Diploma or Equivalent	<u>8</u>	4.21%	3	7.32%
2	1 Year of College or a Technical or Vocational School	<u>1</u>	0.53%	4	9.76%
3	2 Years of College or a Technical or Vocational School	0	N/A	2	4.88%
4	3 Years of College or a Technical or Vocational School	0	N/A	1	2.44%
5	Vocational School Certificate	0	N/A	5	12.20%

Rank	Education Level	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
6	Associate's Degree	1	0.53%	5	12.20%
7	Bachelor's Degree	47	24.74%	15	36.59%
8	Master's Degree	1	0.53%	4	9.76%
9	Doctorate Degree	0	N/A	2	4.88%
10	Not Specified	132	69.47%	0	N/A



Job Source: Online advertised jobs data

Candidate Source: Individuals with active résumés in the workforce system.

Education Training Programs

This section shows the Education Training Programs for Medical and Clinical Laboratory Technologists in Louisiana.

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
Louisiana State University at Alexandria	Associate of Science in Clinical Laboratory Science An industry-recognized certificate or certification, A license recognized by the State involved or the Federal Government, An associate degree	Alexandria, LA	\$17,748	6 Semesters	
Louisiana Tech University - Ruston	Medical Technology A baccalaureate degree	Ruston, LA	\$40,740	1500 Hours	
McNeese State University	Medical Laboratory Science - BS A baccalaureate degree	Lake Charles, LA	\$33,382	8 Semesters	
Medical Careers College	Phlebotomy Technician	Shreveport, LA	\$3,000	300 Hours	
Northwestern State University of LA Natchitoches (MC)	Medical Technology	NATCHITOCHES, LA	\$1,812	125 Hours	

Provider Name	Program Name	Location	Tuition	Length	WIOA Eligible
Unitech Training Academy - Lafayette	EKG/Phlebotomy Technician An industry-recognized certificate or certification, Employment	Lafayette, LA	\$14,500	905 Hours	
Unitech Training Academy - Lafayette	Electrocardiograph Technician	Lafayette, LA	\$2,550	352 Hours	
University of Louisiana at Monroe	Medical Laboratory Science A baccalaureate degree	Monroe, LA	\$26,202	6 Semesters	

Source: U.S. Department of Commerce, Bureau of the Census, Midyear Estimates

Advertised Job Certifications

This section shows the top advertised certification groups found in job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana in October, 2020. (Jobs De-duplication Level 1)

Rank	Advertised Certification Group	Advertised Certification Sub-Category	Job Opening Match Count
1	American Society for Clinical Pathology (ASCP) Certifications	Laboratory and Research	<u>27</u>
2	American Heart Association (AHA) CPR & First Aid Certifications	Nursing	<u>19</u>
3	National Registry of Emergency Medical Technicians (NREMT)	Fire Rescue	<u>2</u>
4	Commercial Drivers License (CDL)	Ground Transportation	<u>1</u>
5	Information Quality (IQ) International Certifications	Safety and Quality	<u>1</u>

Source: Online advertised jobs data

Training Program Completers

There is no data available for Medical and Clinical Laboratory Technologists in Louisiana.

National Education, Training, Licensing and Qualifications

Medical and Clinical Laboratory Technologists Education

An entry-level job for technologists usually requires a bachelor's degree in medical technology or life sciences.

A bachelor's degree program in medical laboratory technology, also known as a medical laboratory scientist degree, includes courses in chemistry, biology, microbiology, math, and statistics. Students typically complete college coursework and then apply to the clinical portion of the program. Coursework emphasizes laboratory skills, including safety procedures and lab management, while

the clinical portion includes hands-on training in a typical work setting like a hospital. Some laboratory science programs can be completed in 2 years or less and require prior college coursework or a bachelor's degree.

Medical laboratory technicians often complete an associate's degree program in clinical laboratory science. The Armed Forces and vocational or technical schools also may offer certificate programs for medical laboratory technicians. Technician coursework addresses the theoretical and practical aspects of each of the major laboratory disciplines.

High school students who are interested in pursuing a career in the medical laboratory sciences should take classes in chemistry, biology, and math.

Licenses, Certifications, and Registrations

Some states require laboratory personnel to be licensed. Requirements vary by state and specialty. For specific requirements, contact state departments of health, state boards of occupational licensing, or visit The American Society for Clinical Laboratory Science.

Certification of medical laboratory technologists and technicians is required for licensure in some states. Although certification is not required to enter the occupation in all cases, employers typically prefer to hire certified technologists and technicians.

Medical laboratory technologists and technicians can obtain a general certification as a medical laboratory technologist or technician, respectively, or a certification in a specialty, such as cytotechnology or medical biology. Most credentialing institutions require that technologists complete an accredited education program in order to qualify to sit for an exam. For more credentialing information, visit the National Accrediting Agency for Clinical Laboratory Sciences, American Medical Technologists, and the American Society for Clinical Pathology.

Important Qualities

Ability to use technology. Medical laboratory technologists and technicians must understand how to operate computerized lab equipment.

Detail oriented. Medical laboratory technologists and technicians must follow exact instructions in order to perform tests or procedures correctly.

Dexterity. Medical laboratory technologists and technicians need to be skilled with their hands. They work closely with needles and precision laboratory instruments and must handle these tools effectively.

Physical stamina. Medical laboratory technologists and technicians may work on their feet for long periods while collecting samples. They may need to lift or turn disabled patients to collect samples for testing.

Advancement

After additional education, work experience, or certification, technologists and technicians may specialize in one of many areas of laboratory science, such as immunology, histotechnology, or clinical chemistry. Some medical laboratory technicians advance to technologist positions after gaining experience and additional education. Some colleges have bachelor's degree programs for medical laboratory technicians to become technologists (often referred to as MLT to MLS programs).

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

Typical Work Experience Requirements

Medical and Clinical Laboratory Technologists Employees in these occupations usually need several years of work-related experience, on-the-job training, and/or vocational training.

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Related Work Experience

This section shows the results of a national survey listing the most common related work experience for Medical and Clinical Laboratory Technologists.

Rank	Related Work Experience	Percentage of Respondents
1	Over 1 year, up to and including 2 years	28.28%
2	None	24.83%
3	Over 6 months, up to and including 1 year	18.63%
4	Over 2 years, up to and including 4 years	13.45%
5	Up to and including 1 month	7.56%
6	Over 4 years, up to and including 6 years	3.83%
7	Over 8 years, up to and including 10 years	1.35%
8	Over 3 months, up to and including 6 months	1.27%
9	Over 1 month, up to and including 3 months	0.81%

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Work Experience of Jobs and Candidates

This section shows the minimum required work experience requested by employers on job openings advertised online, as well as the experience level of potential candidates in the workforce system that are looking for jobs as Medical and Clinical Laboratory Technologists in Louisiana on November 23, 2020. There were 139 job openings advertised online that did not specify a minimum experience requirement (Jobs De-duplication Level 2).

Rank	Experience	Job Openings	Percentage of Job Openings	Potential Candidates	Percentage of Potential Candidates
1	Not Specified	139	73.16%	0	N/A
2	Entry Level	36	18.95%	0	N/A
3	Less than 1 year	3	1.58%	0	N/A
4	1 Year to 2 Years	10	5.26%	0	N/A
5	2 Years to 5 Years	2	1.05%	2	4.88%
6	5 Years to 10 Years	0	N/A	5	12.20%
7	More than 10 Years	0	N/A	34	82.93%

Job Source: Online advertised jobs data
Candidate Source: Individuals with active résumés in the workforce system.

Current Job Order Wage Information

The employer has NOT indicated a salary range for this job. The information below shows statistics on typical salaries in the local labor market for Medical and Clinical Laboratory Technologists. This data is NOT an indication of what this employer is willing to pay for this job.

Employment Wage Statistics

This section shows the estimated employment wage statistics for individuals in Louisiana employed for Medical and Clinical Laboratory Technologists in 2017.

Rate Type / Statistical Type	Entry level	Median	Experienced
Annual wage or salary	\$38,793	\$52,662	\$60,158
Hourly wage	\$18.65	\$25.32	\$28.92

Source: Labor Market Statistics, Occupational Employment Statistics Program

The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.

Wage Rates on Advertised Jobs

This section shows a statistical breakdown of available wage data on the 190 job openings advertised online for Medical and Clinical Laboratory Technologists in Louisiana that posted a salary on November 23, 2020.

Rate Type / Statistical Type	Entry Level	Median	Experienced
Annual wage or salary	\$42,911	\$53,592	\$76,129
Hourly Wage	\$20.63	\$25.77	\$36.60

Source: Online advertised jobs data

Note: This information is based on actual job orders and is not based on a statistically valid labor market survey. Hourly wage rate calculations in this section assume a 40 hour work week.

Desired Salary of Available Candidates

This section shows the desired salary of potential candidates in the workforce system that are looking for jobs as Medical and Clinical Laboratory Technologists in Louisiana on November 23, 2020.

Rank	Desired Salary	Potential Candidates	Percentage of Potential Candidates
1	Not Specified	10	23.81%
2	\$5,000 - \$19,999	2	4.76%
3	\$20,000 - \$34,999	13	30.95%
4	\$35,000 - \$49,999	7	16.67%
5	\$50,000 - \$64,999	6	14.29%
6	\$65,000 - \$79,999	1	2.38%
7	\$80,000 - \$94,999	1	2.38%
8	\$95,000 or more	2	4.76%

Source: Individuals with active résumés in the workforce system.

Wage Rates Area Distribution

There is no data available for Medical and Clinical Laboratory Technologists in Louisiana.

Wage Rates in Related Occupations

This section shows a comparison of 2017 median annual rates for occupations that are in the same occupational family as Medical and Clinical Laboratory Technologists for Louisiana.

Rank	Occupation	Median	*Related By
1	<u>Nurse Anesthetists</u> 🌟	\$146,382	O*NET
2	<u>Pharmacists</u>	\$117,094	O*NET
3	<u>Aviation Inspectors</u>	\$74,585	O*NET
4	<u>Zoologists and Wildlife Biologists</u> 🌿	\$72,247	O*NET
5	<u>Nuclear Medicine Technologists</u> 🌟	\$66,757	O*NET
6	<u>Chemists</u> 🌿	\$64,420	O*NET
7	<u>Aerospace Engineering and Operations Technicians</u>	\$64,324	O*NET
8	<u>Geological Sample Test Technicians</u> 🌟 🌿	\$63,199	O*NET
9	<u>Orthotists and Prosthetists</u> 🌟	\$62,606	SOC4
10	<u>Chemical Technicians</u> 🌿	\$61,306	O*NET
11	<u>Industrial Engineering Technicians</u> 🌿	\$60,082	O*NET
12	<u>Coroners</u>	\$57,101	O*NET
13	<u>Diagnostic Medical Sonographers</u> 🌟	\$56,868	O*NET
14	<u>Dental Hygienists</u> 🌟	\$56,410	SOC4
15	<u>Electronics Engineering Technologists</u> 🌿	\$55,415	O*NET
16	Medical and Clinical Laboratory Technologists 🌟	\$52,662	N/A
17	<u>Cytogenetic Technologists</u> 🌟	\$52,662	O*NET
18	<u>Cytotechnologists</u> 🌟	\$52,662	O*NET
19	<u>Histotechnologists and Histologic Technicians</u> 🌟	\$52,662	O*NET
20	<u>Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic</u> 🌟	\$52,647	O*NET
21	<u>Nuclear Monitoring Technicians</u>	\$50,688	O*NET
22	<u>Police Identification and Records Officers</u>	\$50,342	O*NET
23	<u>Electro-Mechanical Technicians</u> 🌿	\$50,291	O*NET
24	<u>Electrical Engineering Technicians</u> 🌿	\$50,274	O*NET
25	<u>Radiologic Technologists</u> 🌟	\$49,034	SOC4
26	<u>Respiratory Therapy Technicians</u>	\$46,597	O*NET
27	<u>Fire Investigators</u>	\$46,062	O*NET
28	<u>Forensic Science Technicians</u> 🌟	\$45,147	O*NET
29	<u>Biological Technicians</u> 🌟	\$40,284	O*NET
30	<u>Power Distributors and Dispatchers</u> 🌿	\$40,233	O*NET
31	<u>Surgical Technologists</u> 🌟	\$38,815	SOC4
32	<u>Licensed Practical and Licensed Vocational Nurses</u> 🌟	\$37,892	SOC4
33	<u>Cardiovascular Technologists and Technicians</u> 🌟	\$37,249	SOC4
34	<u>Medical Equipment Repairers</u>	\$35,153	O*NET
35	<u>Food Science Technicians</u>	\$33,772	O*NET
36	<u>Medical Records and Health Information Technicians</u> 🌟	\$33,446	SOC4

Rank	Occupation	Median	*Related By
37	<u>Medical and Clinical Laboratory Technicians</u> 🌟	\$32,699	O*NET
38	<u>Opticians, Dispensing</u> 🌟	\$30,746	SOC4
39	<u>Health Technologists and Technicians, All Other</u> 🌟	\$30,547	SOC4
40	<u>Neurodiagnostic Technologists</u> 🌟	\$30,547	O*NET
41	<u>Pharmacy Technicians</u> 🌟	\$29,860	SOC4
42	<u>Psychiatric Technicians</u> 🌟	\$25,483	SOC4
43	<u>Veterinary Technologists and Technicians</u> 🌟	\$24,953	O*NET
44	<u>Dietetic Technicians</u>	\$20,605	SOC4
*	<u>Emergency Medical Technicians and Paramedics</u> 🌟	Confidential	SOC4

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

* Rank is suppressed for confidential data.

Source: Labor Market Statistics, Occupational Employment Statistics Program
The median wage is the estimated 50th percentile; 50 percent of workers in an occupation earn less than the median wage, and 50 percent earn more than the median wage. Entry level and Experienced wage rates represent the means of the lower 1/3 and upper 2/3 of the wage distribution, respectively. Data is from an annual survey.
*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.
SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Wage Rates by Industry

There is no data available for Medical and Clinical Laboratory Technologists in Louisiana.

National Earnings Data Summary

Medical and Clinical Laboratory Technologists The median annual wage for medical and clinical laboratory technologists was \$61,070 in May 2016. The lowest 10 percent earned less than \$41,550, and the highest 10 percent earned more than \$85,160.

In May 2016, the median annual wages for medical and clinical laboratory technicians in the top industries in which they worked were as follows:

- Colleges, universities, and professional schools; state, local, and private \$40,870
- Outpatient care centers 40,030
- Hospitals; state, local, and private 39,690
- Offices of physicians 39,150
- Medical and diagnostic laboratories 37,420

In May 2016, the median annual wages for medical and clinical laboratory technologists in the top industries in which they worked were as follows:

- Federal government \$64,210
- Hospitals; state, local, and private 62,000
- Medical and diagnostic laboratories 61,390
- Offices of physicians 58,330
- Colleges, universities, and professional schools; state, local, and private 54,760

Most medical laboratory technologists and technicians work full time. Technologists and technicians who work in facilities that are always open, such as hospitals and some independent laboratories, may work evening, weekend, or overnight hours.

Occupational Employment & Future Employment Outlook

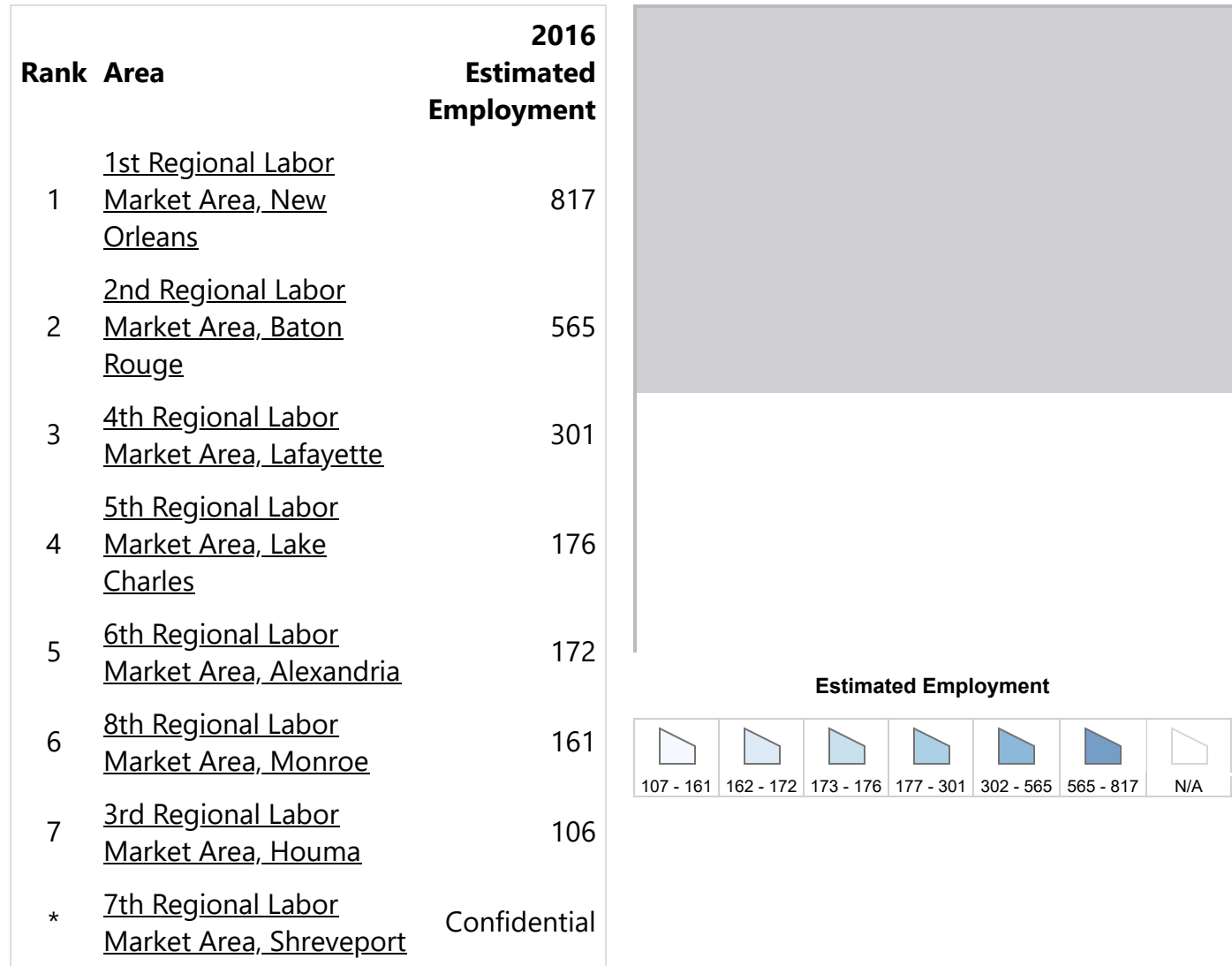
This section shows the long term employment projections for Medical and Clinical Laboratory Technologists in Louisiana from 2016-2026.

Occupation	2016 Estimated Employment	2026 Projected Employment	Total 2016- 2026 Employment Change	2016-2026 Annual Avg. Percent Change
Medical and Clinical Laboratory Technologists	2,759	2,995	236	0.82%
Total All	2,034,986	2,203,144	168,158	0.80%

Source: Occupational Employment Projections

Employment Data Area Distribution

This section shows the distribution of the 2016 estimated employment for Medical and Clinical Laboratory Technologists in Louisiana by regional labor market area.



* Rank is suppressed for confidential data.

Source: Labor Market Statistics, Occupational Employment Projections Program

Employment Data in Related Occupations

This section shows the 2016 Estimated Employment in Louisiana for occupations related to Medical and Clinical Laboratory Technologists.

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Rank	Occupation	2016 Estimated Employment	*Related By
1	<u>Licensed Practical and Licensed Vocational Nurses</u> 🌟	21,051	SOC4
2	<u>Pharmacy Technicians</u> 🌟	6,182	SOC4
3	<u>Pharmacists</u>	4,640	O*NET
4	<u>Coroners</u>	4,346	O*NET
5	<u>Medical Records and Health Information Technicians</u> 🌟	2,924	SOC4
6	<u>Radiologic Technologists</u> 🌟	2,806	SOC4
7	<u>Cytogenetic Technologists</u> 🌟	2,759	O*NET
8	<u>Cytotechnologists</u> 🌟	2,759	O*NET
9	<u>Histotechnologists and Histologic Technicians</u> 🌟	2,759	O*NET
10	<u>Medical and Clinical Laboratory Technologists</u> 🌟	2,759	SOC4
11	<u>Medical and Clinical Laboratory Technicians</u> 🌟	2,586	O*NET
12	<u>Health Technologists and Technicians, All Other</u> 🌟	2,346	SOC4
13	<u>Neurodiagnostic Technologists</u> 🌟	2,346	O*NET
14	<u>Surgical Technologists</u> 🌟	2,124	SOC4
15	<u>Police Identification and Records Officers</u>	2,120	O*NET
16	<u>Chemical Technicians</u> 🌿	2,061	O*NET
17	<u>Dental Hygienists</u> 🌟	1,942	SOC4
18	<u>Electronics Engineering Technologists</u> 🌿	1,566	O*NET
19	<u>Electrical Engineering Technicians</u> 🌿	1,471	O*NET
20	<u>Psychiatric Technicians</u> 🌟	1,263	SOC4
21	<u>Opticians, Dispensing</u> 🌟	1,243	SOC4
22	<u>Nurse Anesthetists</u> 🌟	1,209	O*NET
23	<u>Veterinary Technologists and Technicians</u> 🌟	1,085	O*NET
24	<u>Diagnostic Medical Sonographers</u> 🌟	971	O*NET
25	<u>Cardiovascular Technologists and Technicians</u> 🌟	957	SOC4
26	<u>Chemists</u> 🌿	737	O*NET
27	<u>Geological Sample Test Technicians</u> 🌟 🌿	707	O*NET
28	<u>Dietetic Technicians</u>	538	SOC4
29	<u>Respiratory Therapy Technicians</u>	519	O*NET
30	<u>Nuclear Medicine Technologists</u> 🌟	439	O*NET
31	<u>Industrial Engineering Technicians</u> 🌿	404	O*NET
32	<u>Nuclear Monitoring Technicians</u>	296	O*NET
33	<u>Medical Equipment Repairers</u>	292	O*NET
34	<u>Forensic Science Technicians</u> 🌟	208	O*NET
35	<u>Aviation Inspectors</u>	193	O*NET
36	<u>Food Science Technicians</u>	187	O*NET
37	<u>Biological Technicians</u> 🌟	165	O*NET
38	<u>Orthotists and Prosthetists</u> 🌟	94	SOC4

Rank	Occupation	2016 Estimated Employment	*Related By
39	<u>Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic</u> 🔥	63	O*NET
40	<u>Zoologists and Wildlife Biologists</u> 🌿	38	O*NET
*	<u>Aerospace Engineering and Operations Technicians</u>	Confidential	O*NET
*	<u>Electro-Mechanical Technicians</u> 🌿	Confidential	O*NET
*	<u>Emergency Medical Technicians and Paramedics</u> 🔥	Confidential	SOC4
*	<u>Fire Investigators</u>	Confidential	O*NET
*	<u>Power Distributors and Dispatchers</u> 🌿	Confidential	O*NET

🔥 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

* Rank is suppressed for confidential data.

Source: Occupational Employment Projections

*Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.

SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

Projected Annual Openings

This section shows the long term projected annual openings for Medical and Clinical Laboratory Technologists in Louisiana from 2016 to 2026.

Occupation	Total Annual Average Openings	Annual Average Openings Due to Growth	Annual Average Openings Due to Replacement
Medical and Clinical Laboratory Technologists	N/A	N/A	N/A
Healthcare Practitioners and Technical	N/A	N/A	N/A

Source: Labor Market Statistics, Occupational Employment Projections Program

Projected Annual Openings Area Distribution

This section shows the distribution of the total annual average openings for Medical and Clinical Laboratory Technologists in Louisiana by regional labor market area from 2016 to 2026.

Rank	Area	Total Annual Average Openings	
1	<u>1st Regional Labor Market Area, New Orleans</u>	N/A	There is no total annual average openings data available for Medical and Clinical Laboratory Technologists in Louisiana.
2	<u>2nd Regional Labor Market Area, Baton Rouge</u>	N/A	
3	<u>3rd Regional Labor Market Area, Houma</u>	N/A	
4	<u>4th Regional Labor Market Area, Lafayette</u>	N/A	
5	<u>5th Regional Labor Market Area, Lake Charles</u>	N/A	
6	<u>6th Regional Labor Market Area, Alexandria</u>	N/A	
7	<u>8th Regional Labor Market Area, Monroe</u>	N/A	
*	<u>7th Regional Labor Market Area, Shreveport</u>	Confidential	

* Rank is suppressed for confidential data.

Source: Labor Market Statistics, Occupational Employment Projections Program

Projected Annual Openings in Related Occupations

This section shows the projected total annual average openings in Louisiana for occupations related to Medical and Clinical Laboratory Technologists from 2016 to 2026.

Rank	Occupation	Total Annual Average Openings	*Related By
1	<u>Aviation Inspectors</u>	N/A	O*NET
2	<u>Biological Technicians</u> 🌟	N/A	O*NET
3	<u>Cardiovascular Technologists and Technicians</u> 🌟	N/A	SOC4
4	<u>Chemical Technicians</u> 🌿	N/A	O*NET
5	<u>Chemists</u> 🌿	N/A	O*NET
6	<u>Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic</u> 🌟	N/A	O*NET
7	<u>Coroners</u>	N/A	O*NET
8	<u>Cytogenetic Technologists</u> 🌟	N/A	O*NET
9	<u>Cytotechnologists</u> 🌟	N/A	O*NET
10	<u>Dental Hygienists</u> 🌟	N/A	SOC4
11	<u>Diagnostic Medical Sonographers</u> 🌟	N/A	O*NET
12	<u>Dietetic Technicians</u>	N/A	SOC4
13	<u>Electrical Engineering Technicians</u> 🌿	N/A	O*NET
14	<u>Electronics Engineering Technologists</u> 🌿	N/A	O*NET

Rank	Occupation	Total Annual Average Openings	*Related By
15	<u>Food Science Technicians</u>	N/A	O*NET
16	<u>Forensic Science Technicians</u> 🌟	N/A	O*NET
17	<u>Geological Sample Test Technicians</u> 🌟 🌿	N/A	O*NET
18	<u>Health Technologists and Technicians, All Other</u> 🌟	N/A	SOC4
19	<u>Histotechnologists and Histologic Technicians</u> 🌟	N/A	O*NET
20	<u>Industrial Engineering Technicians</u> 🌿	N/A	O*NET
21	<u>Licensed Practical and Licensed Vocational Nurses</u> 🌟	N/A	SOC4
22	<u>Medical and Clinical Laboratory Technicians</u> 🌟	N/A	O*NET
23	<u>Medical and Clinical Laboratory Technologists</u> 🌟	N/A	SOC4
24	<u>Medical Equipment Repairers</u>	N/A	O*NET
25	<u>Medical Records and Health Information Technicians</u> 🌟	N/A	SOC4
26	<u>Neurodiagnostic Technologists</u> 🌟	N/A	O*NET
27	<u>Nuclear Medicine Technologists</u> 🌟	N/A	O*NET
28	<u>Nuclear Monitoring Technicians</u>	N/A	O*NET
29	<u>Nurse Anesthetists</u> 🌟	N/A	O*NET
30	<u>Opticians, Dispensing</u> 🌟	N/A	SOC4
31	<u>Orthotists and Prosthetists</u> 🌟	N/A	SOC4
32	<u>Pharmacists</u>	N/A	O*NET
33	<u>Pharmacy Technicians</u> 🌟	N/A	SOC4
34	<u>Police Identification and Records Officers</u>	N/A	O*NET
35	<u>Psychiatric Technicians</u> 🌟	N/A	SOC4
36	<u>Radiologic Technologists</u> 🌟	N/A	SOC4
37	<u>Respiratory Therapy Technicians</u>	N/A	O*NET
38	<u>Surgical Technologists</u> 🌟	N/A	SOC4
39	<u>Veterinary Technologists and Technicians</u> 🌟	N/A	O*NET
40	<u>Zoologists and Wildlife Biologists</u> 🌿	N/A	O*NET
*	<u>Aerospace Engineering and Operations Technicians</u>	Confidential	O*NET
*	<u>Electro-Mechanical Technicians</u> 🌿	Confidential	O*NET
*	<u>Emergency Medical Technicians and Paramedics</u> 🌟	Confidential	SOC4
*	<u>Fire Investigators</u>	Confidential	O*NET
*	<u>Power Distributors and Dispatchers</u> 🌿	Confidential	O*NET

🌟 BRIGHT OUTLOOK NATIONALLY | 🌿 GREEN OCCUPATIONS

* Rank is suppressed for confidential data.

Source: Occupational Employment Projections

Industries by Employment

This section shows the industries that employed the highest number of Medical and Clinical Laboratory Technologists in Louisiana in 2016.

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Rank	Industry Title	Estimated Employment	Percent of Total Employment
1	Hospitals	2,100	76.11%
2	Ambulatory Health Care Services	479	17.36%
*	Self-Employed and Unpaid Family Workers, Primary Job	Confidential	Confidential
*	Utilities	Confidential	Confidential
*	Professional, Scientific, and Technical Services	Confidential	Confidential
*	Administrative and Support Services	Confidential	Confidential
*	Educational Services	Confidential	Confidential
*	Nursing and Residential Care Facilities	Confidential	Confidential
*	Social Assistance	Confidential	Confidential

* Rank is suppressed for confidential data.

Source: Louisiana Workforce Commission, Occupational Projections Program

Work Activities

This section shows the most common work activities required by Medical and Clinical Laboratory Technologists in order of importance. Click on a link in the Work Activity column to view more detailed information.

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
Documenting/Recording Information	Entering, transcribing, recording, storing, or maintaining information in written or electronic/magnetic form.	89
Getting Information	Observing, receiving, and otherwise obtaining information from all relevant sources.	86
Interacting With Computers	Using computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information.	84
Evaluating Information to Determine Compliance with Standards	Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.	84
Making Decisions and Solving Problems	Analyzing information and evaluating results to choose the best solution and solve problems.	83
Analyzing Data or Information	Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts.	80
Communicating with Supervisors, Peers, or Subordinates	Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person.	80
Updating and Using Relevant Knowledge	Keeping up-to-date technically and applying new knowledge to your job.	80

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
<u>Processing Information</u>	Compiling, coding, categorizing, calculating, tabulating, auditing, or verifying information or data.	79
<u>Organizing, Planning, and Prioritizing Work</u>	Developing specific goals and plans to prioritize, organize, and accomplish your work.	78
<u>Identifying Objects, Actions, and Events</u>	Identifying information by categorizing, estimating, recognizing differences or similarities, and detecting changes in circumstances or events.	75
<u>Inspecting Equipment, Structures, or Material</u>	Inspecting equipment, structures, or materials to identify the cause of errors or other problems or defects.	72
<u>Controlling Machines and Processes</u>	Using either control mechanisms or direct physical activity to operate machines or processes (not including computers or vehicles).	70
<u>Monitor Processes, Materials, or Surroundings</u>	Monitoring and reviewing information from materials, events, or the environment, to detect or assess problems.	68
<u>Estimating the Quantifiable Characteristics of Products, Events, or Information</u>	Estimating sizes, distances, and quantities; or determining time, costs, resources, or materials needed to perform a work activity.	68
<u>Establishing and Maintaining Interpersonal Relationships</u>	Developing constructive and cooperative working relationships with others, and maintaining them over time.	68
<u>Training and Teaching Others</u>	Identifying the educational needs of others, developing formal educational or training programs or classes, and teaching or instructing others.	68
<u>Assisting and Caring for Others</u>	Providing personal assistance, medical attention, emotional support, or other personal care to others such as coworkers, customers, or patients.	66
<u>Interpreting the Meaning of Information for Others</u>	Translating or explaining what information means and how it can be used.	66
<u>Judging the Qualities of Things, Services, or People</u>	Assessing the value, importance, or quality of things or people.	64
<u>Repairing and Maintaining Mechanical Equipment</u>	Servicing, repairing, adjusting, and testing machines, devices, moving parts, and equipment that operate primarily on the basis of mechanical (not electronic) principles.	64

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
<u>Repairing and Maintaining Electronic Equipment</u>	Servicing, repairing, calibrating, regulating, fine-tuning, or testing machines, devices, and equipment that operate primarily on the basis of electrical or electronic (not mechanical) principles.	62
<u>Handling and Moving Objects</u>	Using hands and arms in handling, installing, positioning, and moving materials, and manipulating things.	60
<u>Coordinating the Work and Activities of Others</u>	Getting members of a group to work together to accomplish tasks.	57
<u>Communicating with Persons Outside Organization</u>	Communicating with people outside the organization, representing the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail.	57
<u>Coaching and Developing Others</u>	Identifying the developmental needs of others and coaching, mentoring, or otherwise helping others to improve their knowledge or skills.	57
<u>Provide Consultation and Advice to Others</u>	Providing guidance and expert advice to management or other groups on technical, systems-, or process-related topics.	56
<u>Developing and Building Teams</u>	Encouraging and building mutual trust, respect, and cooperation among team members.	54
<u>Performing General Physical Activities</u>	Performing physical activities that require considerable use of your arms and legs and moving your whole body, such as climbing, lifting, balancing, walking, stooping, and handling of materials.	51
<u>Resolving Conflicts and Negotiating with Others</u>	Handling complaints, settling disputes, and resolving grievances and conflicts, or otherwise negotiating with others.	47
<u>Developing Objectives and Strategies</u>	Establishing long-range objectives and specifying the strategies and actions to achieve them.	46
<u>Performing for or Working Directly with the Public</u>	Performing for people or dealing directly with the public. This includes serving customers in restaurants and stores, and receiving clients or guests.	45
<u>Thinking Creatively</u>	Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions.	43
<u>Guiding, Directing, and Motivating Subordinates</u>	Providing guidance and direction to subordinates, including setting performance standards and monitoring performance.	42

Work Activity	Work Activity Description	Rank by Importance (Out of 100)
<u>Scheduling Work and Activities</u>	Scheduling events, programs, and activities, as well as the work of others.	41
<u>Monitoring and Controlling Resources</u>	Monitoring and controlling resources and overseeing the spending of money.	41
<u>Performing Administrative Activities</u>	Performing day-to-day administrative tasks such as maintaining information files and processing paperwork.	35
<u>Selling or Influencing Others</u>	Convincing others to buy merchandise/goods or to otherwise change their minds or actions.	26
<u>Staffing Organizational Units</u>	Recruiting, interviewing, selecting, hiring, and promoting employees in an organization.	23
<u>Operating Vehicles, Mechanized Devices, or Equipment</u>	Running, maneuvering, navigating, or driving vehicles or mechanized equipment, such as forklifts, passenger vehicles, aircraft, or water craft.	21
<u>Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment</u>	Providing documentation, detailed instructions, drawings, or specifications to tell others about how devices, parts, equipment, or structures are to be fabricated, constructed, assembled, modified, maintained, or used.	19

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Tasks

This section shows the most common tasks required by Medical and Clinical Laboratory Technologists in order of importance. Click on a link in the Task column to view more detailed information.

Tasks	Task Description	Rank by Importance (Out of 100)
<u>Conduct chemical analysis of body fluids, including blood, urine, or spinal fluid, to determine presence of normal or abnormal components.</u>	Core	98
<u>Analyze laboratory findings to check the accuracy of the results.</u>	Core	98
<u>Operate, calibrate, or maintain equipment used in quantitative or qualitative analysis, such as spectrophotometers, calorimeters, flame photometers, or computer-controlled analyzers.</u>	Core	96
<u>Collect and study blood samples to determine the number of cells, their morphology, or their blood group, blood type, or compatibility for transfusion purposes, using microscopic techniques.</u>	Core	96
<u>Enter data from analysis of medical tests or clinical results into computer for storage.</u>	Core	95

Tasks	Task Description	Rank by Importance (Out of 100)
<u>Establish or monitor quality assurance programs or activities to ensure the accuracy of laboratory results.</u>	Core	94
<u>Analyze samples of biological material for chemical content or reaction.</u>	Core	92
<u>Set up, clean, and maintain laboratory equipment.</u>	Core	90
<u>Provide technical information about test results to physicians, family members, or researchers.</u>	Core	88
<u>Cultivate, isolate, or assist in identifying microbial organisms or perform various tests on these microorganisms.</u>	Core	84
<u>Supervise, train, or direct lab assistants, medical and clinical laboratory technicians or technologists, or other medical laboratory workers engaged in laboratory testing.</u>	Core	75
<u>Develop, standardize, evaluate, or modify procedures, techniques, or tests used in the analysis of specimens or in medical laboratory experiments.</u>	Core	73
<u>Harvest cell cultures at optimum time, based on knowledge of cell cycle differences and culture conditions.</u>	Supplemental	90
<u>Select and prepare specimens and media for cell cultures, using aseptic technique and knowledge of medium components and cell requirements.</u>	Supplemental	89
<u>Obtain, cut, stain, and mount biological material on slides for microscopic study and diagnosis, following standard laboratory procedures.</u>	Supplemental	87
<u>Conduct medical research under direction of microbiologist or biochemist.</u>	Supplemental	56

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

National Working Conditions

Medical and Clinical Laboratory Technologists Medical laboratory technologists operate sophisticated laboratory equipment, such as microscopes and cell counters.

Medical and clinical laboratory technicians held about 164,200 jobs in 2016. The largest employers of medical and clinical laboratory technicians were as follows:

- Hospitals; state, local, and private 43%
- Medical and diagnostic laboratories 18
- Offices of physicians 12
- Colleges, universities, and professional schools; state, local, and private 6
- Outpatient care centers 5

Medical and clinical laboratory technologists held about 171,400 jobs in 2016. The largest employers of medical and clinical laboratory technologists were as follows:

- Hospitals; state, local, and private 57%
- Medical and diagnostic laboratories 17
- Offices of physicians 8
- Colleges, universities, and professional schools; state, local, and private 6

Medical laboratory personnel are trained to work with infectious specimens or with materials that are caustic or produce fumes. When they follow proper methods to control infection and sterilize equipment, the risk decreases. They wear protective masks, gloves, and goggles for their safety.

Technologists and technicians can be on their feet for long periods, and they may need to lift or turn disabled patients to collect samples.

Work Schedules

Most medical laboratory technologists and technicians work full time. Technologists and technicians who work in facilities that operate around the clock, such as hospitals and some independent laboratories, may work evening, weekend, or overnight hours.

Injuries and Illnesses

Medical and clinical laboratory technicians have a higher rate of injuries and illnesses than the national average. They may be subject to repetitive motion injuries since they can perform the same tasks repeatedly.

Source: [U.S. Department of Labor Bureau of Labor Statistics](#)

Typical Work Conditions

This section shows the most common work conditions required by Medical and Clinical Laboratory Technologists in order of importance.

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Indoors, Environmentally Controlled	How often does this job require working indoors in environmentally controlled conditions?	100
Importance of Being Exact or Accurate	How important is being very exact or highly accurate in performing this job?	100
Telephone	How often do you have telephone conversations in this job?	99
Exposed to Disease or Infections	How often does this job require exposure to disease/infections?	96
Frequency of Decision Making	How frequently is the worker required to make decisions that affect other people, the financial resources, and/or the image and reputation of the organization?	96
Time Pressure	How often does this job require the worker to meet strict deadlines?	96
Impact of Decisions on Co-workers or Company Results	What results do your decisions usually have on other people or the image or reputation or financial resources of your employer?	96
Spend Time Using Your Hands to Handle, Control, or Feel Objects, Tools, or Controls	How much does this job require using your hands to handle, control, or feel objects, tools or controls?	95

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Exposed to Contaminants	How often does this job require working exposed to contaminants (such as pollutants, gases, dust or odors)?	91
Electronic Mail	How often do you use electronic mail in this job?	90
Contact With Others	How much does this job require the worker to be in contact with others (face-to-face, by telephone, or otherwise) in order to perform it?	88
Wear Common Protective or Safety Equipment such as Safety Shoes, Glasses, Gloves, Hearing Protection, Hard Hats, or Life Jackets	How much does this job require wearing common protective or safety equipment such as safety shoes, glasses, gloves, hard hats or life jackets?	88
Face-to-Face Discussions	How often do you have to have face-to-face discussions with individuals or teams in this job?	87
Freedom to Make Decisions	How much decision making freedom, without supervision, does the job offer?	87
Work With Work Group or Team	How important is it to work with others in a group or team in this job?	86
Importance of Repeating Same Tasks	How important is repeating the same physical activities (e.g., key entry) or mental activities (e.g., checking entries in a ledger) over and over, without stopping, to performing this job?	85
Structured versus Unstructured Work	To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?	81
Coordinate or Lead Others	How important is it to coordinate or lead others in accomplishing work activities in this job?	79
Exposed to Hazardous Conditions	How often does this job require exposure to hazardous conditions?	79
Pace Determined by Speed of Equipment	How important is it to this job that the pace is determined by the speed of equipment or machinery? (This does not refer to keeping busy at all times on this job.)	76
Deal With External Customers	How important is it to work with external customers or the public in this job?	76
Consequence of Error	How serious would the result usually be if the worker made a mistake that was not readily correctable?	75
Physical Proximity	To what extent does this job require the worker to perform job tasks in close physical proximity to other people?	72

Work Condition	Work Condition Description	Rank by Importance (Out of 100)
Responsible for Others' Health and Safety	How much responsibility is there for the health and safety of others in this job?	70
Responsibility for Outcomes and Results	How responsible is the worker for work outcomes and results of other workers?	68
Degree of Automation	How automated is the job?	67
Deal With Unpleasant or Angry People	How frequently does the worker have to deal with unpleasant, angry, or discourteous individuals as part of the job requirements?	64
Spend Time Standing	How much does this job require standing?	58
Spend Time Making Repetitive Motions	How much does this job require making repetitive motions?	57
Frequency of Conflict Situations	How often are there conflict situations the employee has to face in this job?	50
Spend Time Walking and Running	How much does this job require walking and running?	47
Sounds, Noise Levels Are Distracting or Uncomfortable	How often does this job require working exposed to sounds and noise levels that are distracting or uncomfortable?	46
Spend Time Sitting	How much does this job require sitting?	44
Level of Competition	To what extent does this job require the worker to compete or to be aware of competitive pressures?	44
Letters and Memos	How often does the job require written letters and memos?	42
Exposed to Hazardous Equipment	How often does this job require exposure to hazardous equipment?	40
Cramped Work Space, Awkward Positions	How often does this job require working in cramped work spaces that requires getting into awkward positions?	31
Spend Time Bending or Twisting the Body	How much does this job require bending or twisting your body?	30
Exposed to Minor Burns, Cuts, Bites, or Stings	How often does this job require exposure to minor burns, cuts, bites, or stings?	21

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Work Values and Needs

This section shows the information on the current work values for your selected occupation.

Work Value	Work Value Description	Rank By Extent (Out of 100)
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Work Value	Work Value Description	Rank By Extent (Out of 100)
Support	Occupations that satisfy this work value offer supportive management that stands behind employees. Corresponding needs are Company Policies, Supervision: Human Relations and Supervision: Technical.	78
Independence	Occupations that satisfy this work value allow employees to work on their own and make decisions. Corresponding needs are Creativity, Responsibility and Autonomy.	61
Achievement	Occupations that satisfy this work value are results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment. Corresponding needs are Ability Utilization and Achievement.	56
Relationships	Occupations that satisfy this work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment. Corresponding needs are Co-workers, Moral Values and Social Service.	56
Working Conditions	Occupations that satisfy this work value offer job security and good working conditions. Corresponding needs are Activity, Compensation, Independence, Security, Variety and Working Conditions.	47
Recognition	Occupations that satisfy this work value offer advancement, potential for leadership, and are often considered prestigious. Corresponding needs are Advancement, Authority, Recognition and Social Status.	45

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Tools

This section shows common tools used by Medical and Clinical Laboratory Technologists.

Detailed Tool	Tool Group
Anaerobe jars	Anaerobic jars or accessories
Candle jars	Anaerobic jars or accessories
Analytical balances	Analytical balances
Bench refractometers	Bench refractometers or polarimeters
Centrifuges	Benchtop centrifuges
Compound light microscopes	Binocular light compound microscopes
Agglutination viewers	Blood bank analyzers
Cell washers	Blood bank cell washers
Blood collection needles	Blood collection needle
Needle holders	Blood collection needle holders
Blood collection syringes	Blood collection syringes

Detailed Tool	Tool Group
Butterfly needles	Butterfly needles
Calorimeters	Calorimeters
Capillary sticks	Capillary or hematocrit tubes
Capillary tubes	Capillary or hematocrit tubes
Automated chemistry analyzers	Chemistry analyzers
Automated/semi-automated dipstick analysis systems	Chemistry analyzers
Chemistry analyzers	Chemistry analyzers
Heterologous test systems	Chemistry analyzers
Homologous test systems	Chemistry analyzers
Chromatographs	Chromatographic detectors
Automated coagulation analyzers	Coagulation analyzers
Coagulation analyzers	Coagulation analyzers
Portable coagulation analyzers	Coagulation analyzers
Colorimeters	Colorimeters
Label printers	Compact disc CD or labeling printers
Desktop computers	Desktop computers
Dropping pipettes	Dropping pipettes
Electrolyte analyzers	Electrolyte analyzers
8 and 12 channel pipettes	Electronic multichannel pipetters
Plasma extractors	Extracting equipment for laboratories
Fluorescence microscopes	Fluorescent microscopes
Incubators	Forced air or mechanical convection general purpose incubators
Fume hoods	Fume hoods or cupboards
Gel electrophoresis equipment	Gel documentation systems
Glucose monitoring systems	Glucose monitors or meters
Hemacytometers	Hemacytometer sets
5-part differential automated hematology analyzers	Hematology analyzers
Automated hematology analyzers	Hematology analyzers
Automated platelet analyzers	Hematology analyzers
Differential hematology analyzers with laser technology	Hematology analyzers
Hemaglobinometers	Hematology analyzers
Hematology analyzers	Hematology analyzers
Hematology task-targeted automation TTA systems	Hematology analyzers
Semiautomated hematology analyzers	Hematology analyzers
Tissue cassettes	Histology tissue cassettes
22-gauge needles	Hypodermic needle
Serological kits	Immunology or serology test kits or supplies

Detailed Tool	Tool Group
Balances	Laboratory balances
Blood bank refrigerators	Laboratory chillers
Automatic pipetter diluters	Laboratory diluters
Diluters	Laboratory diluters
Hot air ovens	Laboratory mechanical convection ovens
Electrical mixers	Laboratory mixers
Laboratory vacuum pumps	Laboratory vacuum pumps
Laminar flow cabinets	Laminar flow cabinets or stations
Laminar flow hoods	Laminar flow cabinets or stations
Sterile blood lancets	Lancets
Laser printers	Laser printers
Scintillation counters	Liquid scintillation counters
Manual pipettes	Manual multichannel air displacement pipetters
Cell counters	Manual or electronic hematology differential cell counters
Differential cell counters	Manual or electronic hematology differential cell counters
Single-channel pipettes	Manual single channel air displacement pipetters
Flow cytometers	Microbiology analyzers
Microhematocrits	Microcentrifuges
Micrometers	Micrometers
Enzyme-linked immunosorbent assay ELISA plate readers	Microplate readers
Plate washers	Microplate washers
Glass slides	Microscope slides
Sterile transfer tubes	Multipurpose or general test tubes
Microtiter plates	Multiwell plates
Notebook computers	Notebook computers
Osmometers	Osmometers
Personal computers	Personal computers
Petri dishes	Petri plates or dishes
pH meters	pH meters
Collection tube holders/adapters	Phlebotomy trays or accessories
Unopettes	Phlebotomy trays or accessories
Photomicroscopes	Photo attachments for microscopes
Flame photometers	Photometers
Photometers	Photometers
Safety pipetting devices	Pipetter inserts or accessories
Platelet rockers	Platelet mixers
Automatic pipetters	Robotic or automated liquid handling systems
Blood agar plates	Specialty plates for bacteria

Detailed Tool	Tool Group
Spectrometers	Spectrometers
Spectrophotometers	Spectrophotometers
Autoclaves	Steam autoclaves or sterilizers
Light microscopes	Stereo or dissecting light microscopes
Stylets	Surgical sterile instrument brushes or instrument stylets or instrument wipes
Thermal cyclers	Temperature cycling chambers or thermal cyclers
Antigen-coated test plates	Tissue culture coated plates or dishes or inserts
Sensitivity plates	Tissue culture coated plates or dishes or inserts
Tissue embedding equipment	Tissue embedding stations
Automatic tissue processors	Tissue processors
Tourniquets	Tourniquets
Triple beam balances	Triple beam balances
Serology tube rotators	Tube rotators
Ultracentrifuges	Ultracentrifuges
Automated urinalysis equipment	Urinalysis analyzers
Urinometers	Urinalysis analyzers
Evacuated blood collection tubes	Vacuum blood collection tubes or containers
Plasma thawers	Warming cabinets

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Technology

This section shows common technology used by Medical and Clinical Laboratory Technologists.

Detailed Technology	Technology Group
Database software	Data base user interface and query software
FileMaker Pro	Data base user interface and query software
Email software	Electronic mail software
Commercial plate reader software	Medical software
Electronic medical record EMR software	Medical software
Hematology laboratory workflow management software	Medical software
Laboratory information system LIS	Medical software
Medical digital imaging software	Medical software
Medical procedure coding software	Medical software
Medical software	Medical software
Medical system integration software	Medical software
MEDITECH software	Medical software
Microscopic image capturing software	Medical software

Detailed Technology	Technology Group
Quality control software	Medical software
Reimbursement screening software	Medical software
Specimen tracking software	Medical software
Test result delivery software	Medical software
Test routing software	Medical software
Microsoft Office	Office suite software
Microsoft PowerPoint	Presentation software
Microsoft Project	Project management software
Microsoft Excel	Spreadsheet software
Spreadsheet software	Spreadsheet software
Microsoft Word	Word processing software
Word processing software	Word processing software

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Licensing Information

This section shows licenses that may be required for Medical and Clinical Laboratory Technologists in Louisiana. Click on the link for the occupation you're interested in to view more information on how to attain a license.

Licensed Occupation
Blood Alcohol Analyst for Law Enforcement

Source: Louisiana Workforce Commission, Labor Market Information Program

Typical Knowledge Categories

This section shows the most common knowledge categories required by Medical and Clinical Laboratory Technologists in order of importance. Click on a link in the Knowledge Category column to view more detailed information.

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
Biology.	Knowledge of plant and animal organisms, their tissues, cells, functions, interdependencies, and interactions with each other and the environment.	73
Medicine and Dentistry.	Knowledge of the information and techniques needed to diagnose and treat human injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.	73
Customer and Personal Service	Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.	72

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
<u>Chemistry</u>	Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.	70
<u>English Language</u>	Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.	70
<u>Mechanical</u>	Knowledge of machines and tools, including their designs, uses, repair, and maintenance.	57
<u>Mathematics</u>	Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their applications.	55
<u>Clerical</u>	Knowledge of administrative and clerical procedures and systems such as word processing, managing files and records, stenography and transcription, designing forms, and other office procedures and terminology.	51
<u>Computers and Electronics</u>	Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.	47
<u>Production and Processing</u>	Knowledge of raw materials, production processes, quality control, costs, and other techniques for maximizing the effective manufacture and distribution of goods.	41
<u>Administration and Management</u>	Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.	37
<u>Personnel and Human Resources</u>	Knowledge of principles and procedures for personnel recruitment, selection, training, compensation and benefits, labor relations and negotiation, and personnel information systems.	36
<u>Public Safety and Security</u>	Knowledge of relevant equipment, policies, procedures, and strategies to promote effective local, state, or national security operations for the protection of people, data, property, and institutions.	35
<u>Communications and Media</u>	Knowledge of media production, communication, and dissemination techniques and methods. This includes alternative ways to inform and entertain via written, oral, and visual media.	34

Knowledge Category	Knowledge Category Description	Rank by Importance (Out of 100)
Engineering and Technology	Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.	33
Law and Government	Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process.	32
Psychology	Knowledge of human behavior and performance; individual differences in ability, personality, and interests; learning and motivation; psychological research methods; and the assessment and treatment of behavioral and affective disorders.	27
Telecommunications	Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems.	23
Sociology and Anthropology	Knowledge of group behavior and dynamics, societal trends and influences, human migrations, ethnicity, cultures and their history and origins.	21

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Abilities Required

This section shows the results of a national survey listing the most common work abilities required by Medical and Clinical Laboratory Technologists in order of importance. Click on a link in the Work Ability column to view more detailed information.

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Near Vision	The ability to see details at close range (within a few feet of the observer).	75
Written Comprehension	The ability to read and understand information and ideas presented in writing.	75
Inductive Reasoning	The ability to combine pieces of information to form general rules or conclusions (includes finding a relationship among seemingly unrelated events).	72
Oral Comprehension	The ability to listen to and understand information and ideas presented through spoken words and sentences.	72
Deductive Reasoning	The ability to apply general rules to specific problems to produce answers that make sense.	69
Information Ordering	The ability to arrange things or actions in a certain order or pattern according to a specific rule or set of rules (e.g., patterns of numbers, letters, words, pictures, mathematical operations).	66

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
<u>Problem Sensitivity</u>	The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.	66
<u>Category Flexibility</u>	The ability to generate or use different sets of rules for combining or grouping things in different ways.	63
<u>Oral Expression</u>	The ability to communicate information and ideas in speaking so others will understand.	60
<u>Arm-Hand Steadiness</u>	The ability to keep your hand and arm steady while moving your arm or while holding your arm and hand in one position.	56
<u>Control Precision</u>	The ability to quickly and repeatedly adjust the controls of a machine or a vehicle to exact positions.	56
<u>Flexibility of Closure</u>	The ability to identify or detect a known pattern (a figure, object, word, or sound) that is hidden in other distracting material.	56
<u>Selective Attention</u>	The ability to concentrate on a task over a period of time without being distracted.	56
<u>Speech Clarity</u>	The ability to speak clearly so others can understand you.	56
<u>Speech Recognition</u>	The ability to identify and understand the speech of another person.	56
<u>Visual Color Discrimination</u>	The ability to match or detect differences between colors, including shades of color and brightness.	56
<u>Far Vision</u>	The ability to see details at a distance.	53
<u>Finger Dexterity</u>	The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.	53
<u>Manual Dexterity</u>	The ability to quickly move your hand, your hand together with your arm, or your two hands to grasp, manipulate, or assemble objects.	50
<u>Mathematical Reasoning</u>	The ability to choose the right mathematical methods or formulas to solve a problem.	50
<u>Number Facility</u>	The ability to add, subtract, multiply, or divide quickly and correctly.	50
<u>Perceptual Speed</u>	The ability to quickly and accurately compare similarities and differences among sets of letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object.	50
<u>Speed of Closure</u>	The ability to quickly make sense of, combine, and organize information into meaningful patterns.	50
<u>Visualization</u>	The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged.	50

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
<u>Written Expression</u>	The ability to communicate information and ideas in writing so others will understand.	50
<u>Memorization</u>	The ability to remember information such as words, numbers, pictures, and procedures.	44
<u>Originality</u>	The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem.	44
<u>Fluency of Ideas</u>	The ability to come up with a number of ideas about a topic (the number of ideas is important, not their quality, correctness, or creativity).	41
<u>Hearing Sensitivity</u>	The ability to detect or tell the differences between sounds that vary in pitch and loudness.	38
<u>Time Sharing</u>	The ability to shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources).	38
<u>Depth Perception</u>	The ability to judge which of several objects is closer or farther away from you, or to judge the distance between you and an object.	35
<u>Multilimb Coordination</u>	The ability to coordinate two or more limbs (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the whole body is in motion.	35
<u>Reaction Time</u>	The ability to quickly respond (with the hand, finger, or foot) to a signal (sound, light, picture) when it appears.	35
<u>Auditory Attention</u>	The ability to focus on a single source of sound in the presence of other distracting sounds.	31
<u>Rate Control</u>	The ability to time your movements or the movement of a piece of equipment in anticipation of changes in the speed and/or direction of a moving object or scene.	28
<u>Response Orientation</u>	The ability to choose quickly between two or more movements in response to two or more different signals (lights, sounds, pictures). It includes the speed with which the correct response is started with the hand, foot, or other body part.	28
<u>Speed of Limb Movement</u>	The ability to quickly move the arms and legs.	28
<u>Wrist-Finger Speed</u>	The ability to make fast, simple, repeated movements of the fingers, hands, and wrists.	28
<u>Extent Flexibility</u>	The ability to bend, stretch, twist, or reach with your body, arms, and/or legs.	25
<u>Gross Body Coordination</u>	The ability to coordinate the movement of your arms, legs, and torso together when the whole body is in motion.	25
<u>Gross Body Equilibrium</u>	The ability to keep or regain your body balance or stay upright when in an unstable position.	25

Work Ability	Work Ability Description	Rank by Importance (Out of 100)
Stamina	The ability to exert yourself physically over long periods of time without getting winded or out of breath.	25
Static Strength	The ability to exert maximum muscle force to lift, push, pull, or carry objects.	25
Trunk Strength	The ability to use your abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing.	25
Dynamic Strength	The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue.	22

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Interests

This section shows the results of a national survey listing the most common work interests for Medical and Clinical Laboratory Technologists in order of importance.

Work Interest	Work Interest Description	Rank by Importance (Out of 100)
Investigative	Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.	100
Realistic	Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.	78
Conventional	Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.	61
Enterprising	Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.	28

Source: This information is based on O*NET™ data. O*NET is a trademark registered to the U.S. Department of Labor, Employment and Training Administration.

Typical Work Styles

This section shows the most common work styles required by Medical and Clinical Laboratory Technologists in order of importance. Click on a link in the Work Style column to view more detailed information.

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Work Style	Work Style Description	Rank by Importance (Out of 100)
<u>Attention to Detail</u>	Job requires being careful about detail and thorough in completing work tasks.	97
<u>Dependability</u>	Job requires being reliable, responsible, and dependable, and fulfilling obligations.	92
<u>Integrity</u>	Job requires being honest and ethical.	91
<u>Analytical Thinking</u>	Job requires analyzing information and using logic to address work-related issues and problems.	89
<u>Cooperation</u>	Job requires being pleasant with others on the job and displaying a good-natured, cooperative attitude.	84
<u>Stress Tolerance</u>	Job requires accepting criticism and dealing calmly and effectively with high stress situations.	83
<u>Self Control</u>	Job requires maintaining composure, keeping emotions in check, controlling anger, and avoiding aggressive behavior, even in very difficult situations.	81
<u>Adaptability/Flexibility</u>	Job requires being open to change (positive or negative) and to considerable variety in the workplace.	81
<u>Concern for Others</u>	Job requires being sensitive to others' needs and feelings and being understanding and helpful on the job.	80
<u>Initiative</u>	Job requires a willingness to take on responsibilities and challenges.	76
<u>Persistence</u>	Job requires persistence in the face of obstacles.	74
<u>Independence</u>	Job requires developing one's own ways of doing things, guiding oneself with little or no supervision, and depending on oneself to get things done.	74
<u>Achievement/Effort</u>	Job requires establishing and maintaining personally challenging achievement goals and exerting effort toward mastering tasks.	72
<u>Leadership</u>	Job requires a willingness to lead, take charge, and offer opinions and direction.	66
<u>Social Orientation</u>	Job requires preferring to work with others rather than alone, and being personally connected with others on the job.	65
<u>Innovation</u>	Job requires creativity and alternative thinking to develop new ideas for and answers to work-related problems.	52

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Related Occupations

This section shows a list of occupations related to Medical and Clinical Laboratory Technologists. Click an occupation title to see more information about that occupation.

Rank	Related Occupations	Duties	*Related By
1	Cardiovascular Technologists and Technicians ✦	Conduct tests on pulmonary or cardiovascular systems of patients for diagnostic purposes. May conduct or assist in electrocardiograms, cardiac catheterizations, pulmonary functions, lung capacity, and similar tests. Includes vascular technologists.	SOC4
2	Dental Hygienists ✦	Clean teeth and examine oral areas, head, and neck for signs of oral disease. May educate patients on oral hygiene, take and develop x rays, or apply fluoride or sealants.	SOC4
3	Dietetic Technicians	Assist in the provision of food service and nutritional programs, under the supervision of a dietitian. May plan and produce meals based on established guidelines, teach principles of food and nutrition, or counsel individuals.	SOC4
4	Health Technologists and Technicians, All Other ✦	All health technologists and technicians not listed separately.	SOC4
5	Licensed Practical and Licensed Vocational Nurses ✦	Care for ill, injured, or convalescing patients or persons with disabilities in hospitals, nursing homes, clinics, private homes, group homes, and similar institutions. May work under the supervision of a registered nurse. Licensing required.	SOC4
6	Medical Records and Health Information Technicians ✦	Compile, process, and maintain medical records of hospital and clinic patients in a manner consistent with medical, administrative, ethical, legal, and regulatory requirements of the health care system. Process, maintain, compile, and report patient information for health requirements and standards in a manner consistent with the healthcare industry's numerical coding system.	SOC4
7	Opticians, Dispensing ✦	Design, measure, fit, and adapt lenses and frames for client according to written optical prescription or specification. Assist client with inserting, removing, and caring for contact lenses. Assist client with selecting frames. Measure customer for size of eyeglasses and coordinate frames with facial and eye measurements and optical prescription. Prepare work order for optical laboratory containing instructions for grinding and mounting lenses in frames. Verify exactness of finished lens spectacles. Adjust frame and lens position to fit client. May shape or reshape frames. Includes contact lens opticians.	SOC4
8	Orthotists and Prosthetists ✦	Design, measure, fit, and adapt orthopedic braces, appliances or prostheses, such as limbs or facial parts for patients with disabling conditions.	SOC4
9	Pharmacy Technicians ✦	Prepare medications under the direction of a pharmacist. May measure, mix, count out, label, and record amounts and dosages of medications according to prescription orders.	SOC4

Rank	Related Occupations	Duties	*Related By
10	<u>Psychiatric Technicians</u> ♦	Care for individuals with mental or emotional conditions or disabilities, following the instructions of physicians or other health practitioners. Monitor patients' physical and emotional well-being and report to medical staff. May participate in rehabilitation and treatment programs, help with personal hygiene, and administer oral or injectable medications.	SOC4
11	<u>Radiologic Technologists</u> ♦	Take x rays and CAT scans or administer nonradioactive materials into patient's blood stream for diagnostic purposes. Includes technologists who specialize in other scanning modalities.	SOC4
12	<u>Surgical Technologists</u> ♦	Assist in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. May help set up operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon's assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and instruments.	SOC4
13	<u>Emergency Medical Technicians and Paramedics</u> ♦	Assess injuries, administer emergency medical care, and extricate trapped individuals. Transport injured or sick persons to medical facilities.	SOC4
14	<u>Cytogenetic Technologists</u> ♦	Analyze chromosomes found in biological specimens such as amniotic fluids, bone marrow, and blood to aid in the study, diagnosis, or treatment of genetic diseases.	O*NET
15	<u>Cytotechnologists</u> ♦	Stain, mount, and study cells to detect evidence of cancer, hormonal abnormalities, and other pathological conditions following established standards and practices.	O*NET
16	<u>Diagnostic Medical Sonographers</u> ♦	Produce ultrasonic recordings of internal organs for use by physicians.	O*NET
17	<u>Histotechnologists and Histologic Technicians</u> ♦	Prepare histologic slides from tissue sections for microscopic examination and diagnosis by pathologists. May assist in research studies.	O*NET
18	<u>Medical and Clinical Laboratory Technicians</u> ♦	Perform routine medical laboratory tests for the diagnosis, treatment, and prevention of disease. May work under the supervision of a medical technologist.	O*NET
19	<u>Neurodiagnostic Technologists</u> ♦	Conduct electroneurodiagnostic (END) tests such as electroencephalograms, evoked potentials, polysomnograms, or electronystagmograms. May perform nerve conduction studies.	O*NET
20	<u>Nuclear Medicine Technologists</u> ♦	Prepare, administer, and measure radioactive isotopes in therapeutic, diagnostic, and tracer studies using a variety of radioisotope equipment. Prepare stock solutions of radioactive materials and calculate doses to be administered by radiologists. Subject patients to radiation. Execute blood volume, red cell survival, and fat absorption studies following standard laboratory techniques.	O*NET

Rank	Related Occupations	Duties	*Related By
21	<u>Nurse Anesthetists</u> 🌟	Administer anesthesia, monitor patient's vital signs, and oversee patient recovery from anesthesia. May assist anesthesiologists, surgeons, other physicians, or dentists. Must be registered nurses who have specialized graduate education.	O*NET
22	<u>Pharmacists</u>	Dispense drugs prescribed by physicians and other health practitioners and provide information to patients about medications and their use. May advise physicians and other health practitioners on the selection, dosage, interactions, and side effects of medications.	O*NET
23	<u>Respiratory Therapy Technicians</u>	Provide respiratory care under the direction of respiratory therapists and physicians.	O*NET
24	<u>Veterinary Technologists and Technicians</u> 🌟	Perform medical tests in a laboratory environment for use in the treatment and diagnosis of diseases in animals. Prepare vaccines and serums for prevention of diseases. Prepare tissue samples, take blood samples, and execute laboratory tests, such as urinalysis and blood counts. Clean and sterilize instruments and materials and maintain equipment and machines. May assist a veterinarian during surgery.	O*NET
25	<u>Aerospace Engineering and Operations Technicians</u>	Operate, install, calibrate, and maintain integrated computer/communications systems, consoles, simulators, and other data acquisition, test, and measurement instruments and equipment, which are used to launch, track, position, and evaluate air and space vehicles. May record and interpret test data.	O*NET
26	<u>Aviation Inspectors</u>	Inspect aircraft, maintenance procedures, air navigational aids, air traffic controls, and communications equipment to ensure conformance with Federal safety regulations.	O*NET
27	<u>Biological Technicians</u> 🌟	Assist biological and medical scientists in laboratories. Set up, operate, and maintain laboratory instruments and equipment, monitor experiments, make observations, and calculate and record results. May analyze organic substances, such as blood, food, and drugs.	O*NET
28	<u>Chemical Technicians</u> 🌿	Conduct chemical and physical laboratory tests to assist scientists in making qualitative and quantitative analyses of solids, liquids, and gaseous materials for research and development of new products or processes, quality control, maintenance of environmental standards, and other work involving experimental, theoretical, or practical application of chemistry and related sciences.	O*NET
29	<u>Chemists</u> 🌿	Conduct qualitative and quantitative chemical analyses or experiments in laboratories for quality or process control or to develop new products or knowledge.	O*NET
30	<u>Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic</u> 🌟	Develop programs to control machining or processing of metal or plastic parts by automatic machine tools, equipment, or systems.	O*NET

Rank	Related Occupations	Duties	*Related By
31	<u>Coroners</u>	Direct activities such as autopsies, pathological and toxicological analyses, and inquests relating to the investigation of deaths occurring within a legal jurisdiction to determine cause of death or to fix responsibility for accidental, violent, or unexplained deaths.	O*NET
32	<u>Electrical Engineering Technicians</u> 🌿	Test or modify developmental or operational electrical machinery or electrical control equipment and circuitry in industrial or commercial plants or laboratories. Usually work under direction of engineers or technologists.	O*NET
33	<u>Electro-Mechanical Technicians</u> 🌿	Operate, test, maintain, or calibrate unmanned, automated, servo-mechanical, or electromechanical equipment. May operate unmanned submarines, aircraft, or other equipment at worksites, such as oil rigs, deep ocean exploration, or hazardous waste removal. May assist engineers in testing and designing robotics equipment.	O*NET
34	<u>Electronics Engineering Technologists</u> 🌿	Assist electronics engineers in such activities as electronics systems and instrumentation design or digital signal processing.	O*NET
35	<u>Fire Investigators</u>	Conduct investigations to determine causes of fires and explosions.	O*NET
36	<u>Food Science Technicians</u>	Perform standardized qualitative and quantitative tests to determine physical or chemical properties of food or beverage products.	O*NET
37	<u>Forensic Science Technicians</u> 🌟	Collect, identify, classify, and analyze physical evidence related to criminal investigations. Perform tests on weapons or substances, such as fiber, hair, and tissue to determine significance to investigation. May testify as expert witnesses on evidence or crime laboratory techniques. May serve as specialists in area of expertise, such as ballistics, fingerprinting, handwriting, or biochemistry.	O*NET
38	<u>Geological Sample Test Technicians</u> 🌟 🌿	Test or analyze geological samples, crude oil, or minerals to detect presence of petroleum, gas, or mineral deposits indicating potential for exploration or production or to determine physical or chemical properties to ensure that products meet quality standards.	O*NET
39	<u>Industrial Engineering Technicians</u> 🌿	Apply engineering theory and principles to problems of industrial layout or manufacturing production, usually under the direction of engineering staff. May perform time and motion studies on worker operations in a variety of industries for purposes such as establishing standard production rates or improving efficiency.	O*NET
40	<u>Medical Equipment Repairers</u>	Test, adjust, or repair biomedical or electromedical equipment.	O*NET
41	<u>Nuclear Monitoring Technicians</u>	Collect and test samples to monitor results of nuclear experiments and contamination of humans, facilities, and environment.	O*NET

Rank	Related Occupations	Duties	*Related By
42	<u>Police Identification and Records Officers</u>	Collect evidence at crime scene, classify and identify fingerprints, and photograph evidence for use in criminal and civil cases.	O*NET
43	<u>Power Distributors and Dispatchers</u> 🌱	Coordinate, regulate, or distribute electricity or steam.	O*NET
44	<u>Zoologists and Wildlife Biologists</u> 🌱	Study the origins, behavior, diseases, genetics, and life processes of animals and wildlife. May specialize in wildlife research and management. May collect and analyze biological data to determine the environmental effects of present and potential use of land and water habitats.	O*NET

 BRIGHT OUTLOOK NATIONALLY
 |
  GREEN OCCUPATIONS

Source: **Related By: O*NET™ - The Occupational Information Network. O*NET is a registered trademark of the US Department of Labor/Employment and Training Administration.
 SOC4 - Occupational grouping based on 1st 4 digits of the Standard Occupational Classification system.

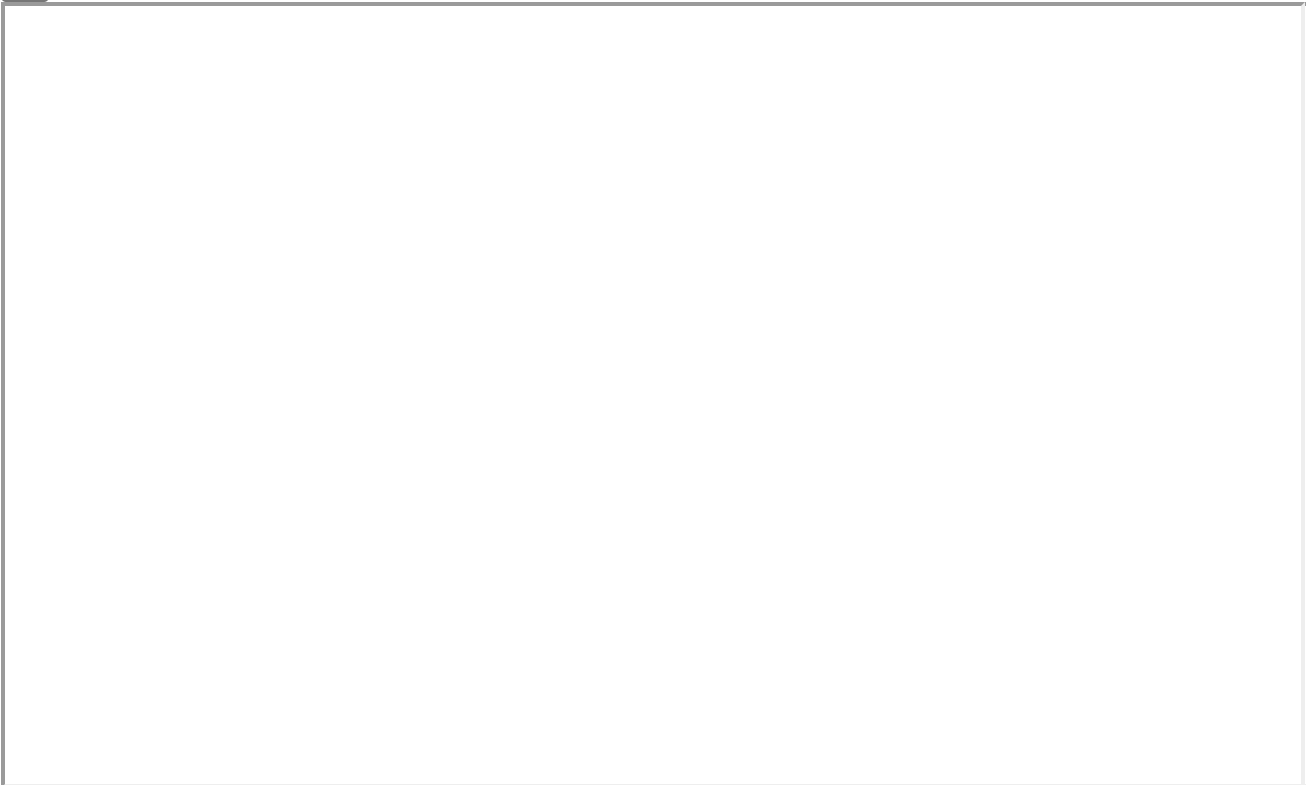
Career Ladder

This section shows the top 10 occupations and the corresponding individuals in the workforce system who were previously Medical and Clinical Laboratory Technologists and have changed their occupation over the last 5 years.

Occupation Title	Number of Individuals that Moved	Percentage of Individuals that Moved
<u>Medical and Clinical Laboratory Technicians</u> 🌱	16	31.37%
<u>Phlebotomists</u> 🌱	6	11.76%
<u>Medical Scientists, Except Epidemiologists</u> 🌱	5	9.80%
<u>Managers, All Other</u>	4	7.84%
<u>Medical and Health Services Managers</u> 🌱	4	7.84%
<u>Health Technologists and Technicians, All Other</u> 🌱	4	7.84%
<u>Medical Assistants</u> 🌱	3	5.88%
<u>Security Guards</u> 🌱	3	5.88%
<u>Combined Food Preparation and Serving Workers, Including Fast Food</u> 🌱	3	5.88%
<u>Cashiers</u> 🌱	3	5.88%

 BRIGHT OUTLOOK NATIONALLY

Source: Individuals with active résumés in the workforce system.



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