

## MEDICAL LABORATORY TECHNOLOGIST I

This is professional work in the performance of a variety of bench procedures in a medical technology science, or the performance of a variety of procedures in several work areas that aid in the diagnosis of disease and treatment of patients and animals. These positions are located throughout state agencies and universities. Work is differentiated from the Medical Laboratory Technician II level by the variety and/or complexity of procedures: application of medical laboratory theoretical knowledge; the independence and judgment exercised in performing and interpreting tests, and determining the significance of test results; and making recommendations for further laboratory studies. Employees are expected to independently apply general knowledges, skills, and abilities of the work area and the basic pathophysiological processes being monitored on an on-going basis to provide clinical interface. Work may include other related duties as determined by management. Work is supervised by a facility administrator and/or higher level medical laboratory personnel.

### I. DIFFICULTY OF WORK:

Variety and Scope - Employees perform a variety of routine and less standardized test procedures and may be required to operate very sophisticated instrumentation. Depending upon the work setting, employees may be required to perform test procedures in a variety of technological areas or concentrate in one area with more complex, in-depth procedures. Work assignments also include training medical technology students, new staff, physicians, and other health professionals in the performance of laboratory procedures. Employees serve as a technical resource to other staff and clinicians; participate in evaluating new methods, kits, procedures, and equipment; and participate in establishing and monitoring procedure and equipment, quality control, and proficiency testing. Work may also include laboratory supervisory duties such as those found in local public health laboratories.

Intricacy - Employees receive specimens from a variety of resources. Depending upon the area of assignment, procedural intricacy may vary from the instrumentation in clinical chemistry to the interpretation of microbiology. Employees examine specimen processing for acceptability, perform the procedure based upon accepted protocol, resolve or attempt to resolve procedure and/or instrumentation problems, and relay this information to requesting clinicians. Employees are, on request, required to explain test results as it relates to the basic pathophysiological process. In providing instruction to others, employees are required to provide information on theoretical aspects and procedure mechanics.

Subject Matter Complexity - Work requires a complete understanding of the theoretical application of procedures performed and instrumentation utilized in the work area. This theoretical understanding enhances the clinical interface in explaining test results as it relates to basic pathophysiological processes.

Guidelines - Test procedures and instrumentation guides are available in the laboratory procedure manual. Employees are expected to utilize appropriate textbooks, manuals, and resource personnel to resolve routine problems.

### II. RESPONSIBILITY:

Nature of Instructions - Work assignments are typically made on a daily basis. Work objectives, assignments and deadlines are understood following an orientation to the work area. In larger laboratories, employees rotate through a variety of workbench areas. When new procedures are incorporated into the laboratory, employees may receive on-the-job training on procedure mechanics from higher-level laboratory personnel. Administrative direction is usually provided by a laboratory supervisor or facility administrator.

Nature of Review - Technical review is provided by higher-level laboratory personnel through the review of abnormal or unusual test results, or when needed to troubleshoot procedure, quality control, or test results. In smaller laboratories, all test results may be reviewed by a higher level supervisor. Employees receive administrative supervision from a laboratory supervisor or facility administrator.

Scope of Decisions - Employees perform laboratory tests on hospital patients, local health department clients, students, or animals. The technologists' performance and accurate interpretation of results directly affect these individuals.

Consequence of Decisions - Inaccurate test results could result in an inappropriate, or lack of, treatment for the patient. The test results can either confirm the clinician's diagnosis or provide information to alter the treatment prescribed by the clinician. The impact is increased at this level due to the clinical interface and discussions surrounding basic pathophysiological processes.

### III. INTERPERSONAL COMMUNICATIONS:

Scope of Contacts - Employees discuss laboratory protocol and procedures with other laboratory staff, nurses, students, and clinicians. Employees also have contact with physicians and nurses to resolve any clinically related issues.

Nature and Purpose - Interactions with laboratory personnel are to receive, convey, and resolve work assignments and problems. Interactions with clinicians are to discuss test results and their significance, and may be to recommend further laboratory studies

### IV. OTHER WORK DEMANDS:

Work Conditions - Work is performed in a medical laboratory where conditions are generally agreeable.

Hazards - Employees may be exposed to infectious organisms, dangerous chemicals, high voltage electrical equipment, fumes, and odors.

### V. RECRUITMENT STANDARDS:

Knowledges, Skills, and Abilities - General theoretical knowledge of the variety of laboratory procedures applicable to the area(s) of work. General knowledge of laboratory equipment, instrumentation, and terminology. General knowledge of the basic pathophysiological processes being monitored and how the medical laboratory science is applied. Skill in the use of laboratory equipment and in the performance of procedures. Ability to make accurate observations and written reports of test results. Ability to understand and follow oral and written instructions. Ability to instruct medical technology students and other health professionals in laboratory procedures and instrumentation.

Minimum Education and Experience - Bachelor's degree in medical technology, chemistry, or a biological science from an appropriately accredited institution; or Associate's degree in medical technology from an appropriately accredited institution and one year of medical laboratory experience; or completion of a certified Laboratory Assistant course in medical technology or a comparable course and two years of medical laboratory experience; or high school or General Educational Development diploma and four years of applicable medical laboratory experience; or an equivalent combination of education and experience.