

STATE OF SOUTH DAKOTA CLASS SPECIFICATION

Class Title: Medical Technologist

Class Code: 40671

Pay Grade: GH

A. Purpose:

Performs chemical, biological, hematological, microscopic and bacteriological laboratory tests to isolate and identify a variety of diseases and their characteristics for diagnostic purposes.

B. Distinguishing Feature:

The Medical Technologist performs a variety of clinical laboratory tests in one or more specialized areas depending on the size and scope of laboratory activity.

The Medical Laboratory Technician must demonstrate competency and would perform moderately complex testing as defined by the American Society for Clinical Laboratory Science (ASCLS) as tests demanding some degree of independent judgment and interpretation under the direct supervisor of a Medical Technologist.

The Medical Laboratory Supervisor supervises the operations of a medical laboratory, which includes preparing the operating budget, developing and maintaining quality control and assurance programs, writing and updating policy and procedure manuals, and supervising Medical Technologists.

C. Functions:

(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)

1. Performs hematology, serological, chemistry, therapeutic drug monitoring, and drug abuse tests to determine general health status.
 - a. Follows established procedures.
 - b. Performs statistical calculations.
 - c. Determines quality assurance controls.
 - d. Runs tests and reviews data produced by the tests.
 - e. Determines the reliability of test results and whether to repeat a test on a sample.
 - f. Submits test results to medical records to be charted.
2. Tests urine for chemical components and performs microscopic examinations to detect disease.
 - a. Performs stick tests on samples.
 - b. Places specimens in a laboratory instrument to be read for chemical changes and normal or abnormal ranges.
 - c. Examines specimens under a microscope to count cells, look for bacteria, blood, or crystals.
 - d. Records and reports results.
3. Performs microbiology tests to determine the presence of infections.
 - a. Accepts specimens according to established criteria.
 - b. Selects the appropriate media for the culture.
 - c. Completes test on laboratory equipment.
 - d. Completes worksheets.
 - e. Inoculates media for growth and isolation of microorganisms.
 - f. Prepares test slides and incubates cultures.

- g. Isolates cell colonies to identify and classify bacteria.
 - h. Reads cultures for growth and performs antibiotic susceptibility testing.
 - i. Records testing and quality control procedures and prepares final reports.
4. Accepts specimens into the laboratory to complete required tests.
 - a. Checks requisitions for proper information.
 - b. Determines if specimens are suitable for requested test.
 - c. Informs submitter if specimens are unsuitable or information is missing.
 - d. Prepares specimens for testing.
 - e. Labels and transfers specimens to test vials.
 - f. May prepare specimens to be mailed to other laboratories.
 5. Performs venipuncture to obtain blood samples from patients to complete tests ordered by physicians or physician assistants.
 - a. Draws blood from patients in ward areas, laboratory, and clinic.
 - b. Chooses appropriate specimen vials.
 - c. Fills out requisition forms.
 - d. Labels sample vials.
 - e. Ensures nursing staff has followed proper pre-test protocols with the patients.
 6. Performs miscellaneous laboratory duties to ensure necessary functions are performed.
 - a. Maintains laboratory equipment.
 - b. Tabulates daily reports and does monthly laboratory reports.
 - c. Plots controls on graphs to see that controls are within an acceptable range.
 - d. Maintains an inventory of reagents.
 - e. Prepares reference sheets for laboratory testing.
 - f. Handles and disposes of bio-hazardous materials.
 7. Performs other work as assigned.

D. Reporting Relationships:

Reports to a Medical Laboratory Supervisor. Typically does not supervise but may act as a lead worker over Laboratory Technicians, Laboratory Aides, and other laboratory support staff.

E. Challenges and Problems:

Challenges include interpretation of microbiology cultures. This involves extensive experience and a strong microbiology background. A challenge facing the incumbent is the production of test data to assist the physician in diagnosis and monitoring of quality control data to assure accuracy of reported test results.

Typical problems include poor specimen quality, maintaining old equipment, proper identification of abnormalities in laboratory results, failed experiments, controls that do not function within acceptable ranges, dealing with patients who may be uncooperative or violent, and determining what has adversely affected a test and correcting it.

F. Decision-making Authority:

Decisions include determining whether to draw blood if a protocol for a particular test has not

been followed, when to call for assistance when drawing blood from an uncooperative or unruly patient, what bacteriology tests to perform to identify an organism from culture, whether or not a specimen is suitable for testing; if results of a test are accurate and reasonable, which tests need to be repeated and what corrections to make, recommending the purchase of new products, the identity of bacteria, and daily work load.

Decisions referred include determining when specimens should be sent to another laboratory for testing, if an unfamiliar element is found in a smear, positive gonorrhea smears, instrument malfunctions that cannot be safely resolved, and requests for continuing education.

G. Contact with Others:

Daily contact with nursing staff to answer questions regarding the type of protocol a patient must follow prior to a particular laboratory test, with patients while performing a variety of tests or procedures, and with professors or administrative staff to give or receive information.

H. Working Conditions:

Work involves handling toxic chemicals, coming in contact with infectious body fluids, and contact with patients whose behavior may be uncooperative or assaultive.

I. Knowledge, Skills and Abilities:

Knowledge of:

- principles, practices, and current developments in medical technology;
- safe laboratory procedures.

Ability to:

- effectively organize and plan work to meet work objectives;
- establish and maintain good working relationships with patients;
- exercise good judgement in appraising situations and in making decisions;
- present data with clarity and accuracy;
- understand and interpret complex oral and written directions, formulas, and charts;
- identify organisms by color, size, and shape.

J. Licenses and Certification:

Must be qualified to perform high complexity testing under the Clinical Laboratory Improvement Act.