

Who are Medical Laboratory Professionals?

Medical Laboratory Technologists (MLTs)

Analyze tissue samples, blood and other body fluids. They provide results to physicians for a diagnosis and potential treatment. There are 3 MLT designations: General, Clinical Genetics, and Diagnostic Cytology.

General MLTs specialize in several areas:

- Clinical Chemistry tests blood and body fluid to detect chemicals, hormones, and/or drugs.
Common Test: Glucose and Hemoglobin A1c to detect diabetes
- Clinical Microbiology tests blood, body fluid and/or tissue samples to detect bacteria, fungi, viruses, and/or parasites.
Common Test: Throat swab to detect strep throat.
- Hematology detects diseases disorders of the blood.
Common Test: Hemoglobin to detect anemia.
- Transfusion Science conducts blood typing and compatibility tests.
Common Test: Cross-matching for blood transfusion.
- Histology prepares samples of body tissue to detect disease.
Common Test: Biopsy of a breast lump.

Clinical Genetics MLTs specialize in DNA and chromosomal analysis to detect diseases or abnormalities. Common Test: Cheek swab or saliva test to detect genetic predisposition to certain cancers, like breast or stomach cancer.

Diagnostic Cytology MLTs specialize in microscopic cellular analysis to detect pre-cancerous cells, cancerous cells and other cellular-based diseases. Common Test: PAP test to detect cervical cancer.

Medical Laboratory Assistants (MLAs)

Often collect samples directly from patients. They sort, prepare and sometimes process samples which are analyzed by a Medical Laboratory Technologists.

Common Practice: Blood Collection