



DIAGNOSTIC SERVICES  
MANITOBA

# Careers That Deliver Results



## Province-wide Opportunity

Diagnostic professionals are in high demand in many Manitoba communities.

Train for a career that will give you province-wide opportunity in rural, northern and urban centres.

## Diagnostic Careers

Medical Laboratory Technologist

Medical Laboratory Assistant

Cytogenetic/Molecular Genetic Technologist

Cytotechnologist

Pathologist Assistant

Medical Radiological Technologist/  
X-ray Technologist

CT Technologist

Ultrasound Technologist/  
Sonographer

MRI Technologist

## Medical Laboratory Sciences & Medical Radiological Technology

### A Progressive and Compassionate Field

Do you excel in sciences, have a passion for helping others and have a desire to make a difference? Do you have an interest in data, analysis and technology?

A career in Medical Diagnostics can fulfill your career potential by allowing you to contribute to a dynamic and innovative field and use leading edge technology to deliver essential health services.

Medical Laboratory Technologists and Medical Radiological Technologists play a vital role in patient care by providing a wide range of testing that leads to diagnosis and the appropriate physician-prescribed treatment.

### A Strong Future for Manitoba's Diagnostic Industry

The field of medical diagnostics is constantly changing with advances in technology and automated equipment providing new opportunity for laboratory and diagnostic imaging professionals.

A career in medical diagnostics will offer long-term stability in an innovative environment where you can make a difference.

### DSM Care Team

With a team of more than 1,700 dedicated laboratory and radiological professionals providing diagnostic services in more than 70 facilities, Diagnostic Services Manitoba (DSM) is proud to be the province's largest employer of diagnostic professionals.

## Career Overview

### Medical Laboratory Technologist (MLT)

MLTs perform analysis on tissue, blood and other body fluids to detect disease and monitor treatments.

MLTs work in hospitals, medical clinics, research laboratories, commercial and industrial laboratories, at Canadian Blood Services and provincial and federal laboratories. A career as an MLT can also lead to opportunities in education, management and sales.

### Medical Radiological Technologist (MRT)

MRTs are trained to detect illness and injury using equipment such as X-ray machines and CT scanners to produce images of the body. MRTs interact directly with patients while administering procedures and must be sensitive to their needs and be able to put them at ease during a procedure.

MRTs work in hospitals and clinics. Specialized training allows MRTs to work with CT scanners and Magnetic Resonance Imaging (MRIs). MRTs can also enjoy career growth in education, management and sales.



# Medical Laboratories

As an MLT or MLA you may work in one of the following areas:

**Clinical Biochemistry:** The study and analysis of chemical and hormonal changes in the body, including Toxicology, which deals with detecting foreign substance in the body due to poisoning or overdose

**Diagnostic Cytology:** The study and diagnosis of cells taken from the body to detect cancer

**Clinical Genetics:** The study of chromosomes, DNA and RNA to diagnose genetic diseases

**Hematopathology:** The study of the production, function and diseases of blood cells and bone marrow; provides diagnostic testing for anemias, leukemias, bleeding and clotting disorders

**Immunology:** The study of the body's immune system including its structure, function, and disorders; Testing to detect autoimmune diseases, such as rheumatoid arthritis, acquired diseases, such as AIDS, allergies and blood disorders, such as leukemia and lymphoma

**Microbiology:** The analysis of samples for the purpose of detecting and identifying disease causing microorganisms (bacteria, fungi and parasites); Microbiology testing includes identifying and monitoring hospital acquired infections and antibiotic treatment information as appropriate to the microorganism detected

**Pathology:** the study and analysis of tissues removed from the body, for the purpose of detecting cancer and other major diseases of body organ systems

**Transfusion Medicine:** the production of blood products and determination of blood types and compatibility between donors and recipients



**dsmanitoba.ca**  
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Current DSM job opportunities are posted at:  
**dsmanitoba.ca/careers**

More information on diagnostic careers is available from the following organizations:

Canadian Society of Medical Laboratory Science - [csmls.org](http://csmls.org)

Canadian Association of Medical Radiation Technologists - [camrt.ca](http://camrt.ca)

Red River College - [rrc.mb.ca](http://rrc.mb.ca)

# Diagnostic Imaging

As a Diagnostic Imaging professional you may perform the following procedures:

**Angiography:** Imaging produced for the purpose of examining the heart, blood vessels and blood flow

**Computerized Tomography:** Multiple X-rays produce three-dimensional images detailing body structure

**Fluoroscopy:** Produces real-time images of internal organs using a constant input of X-rays; Images are made visible by contrast media such as barium, iodine and air

**Mammography:** Detects breast cancer in its earliest stages using low-dose X-rays

**Ultrasound/Sonography:** Studies the function of moving structures within the body in real-time using high-frequency sound waves to produce images

**X-ray:** Detects bone and spine fractures as well as fluids in the chest and gastrointestinal ailments using ionizing radiation