



# WHAT IS A MEDICAL DOSIMETRIST?



A Medical Dosimetrist is a healthcare professional and an important part of the radiation oncology team.

A Medical Dosimetrist uses specialized computer software to design radiation plans to treat cancerous and benign diseases using both internal and external radiation sources.

Medical Dosimetrists are members of a team that contributes toward cancer survivorship, working closely with physicians, radiation therapists, and medical physicists to ensure high quality treatment and patient care.

In addition to working with new and exciting technology, Medical Dosimetrists may also play a role in cutting edge clinical research dedicated to continually improving how cancer is treated. For this and many other reasons, Medical Dosimetry is both an exciting and rewarding profession.

There are many steps required in creating a patient's treatment path, and Medical Dosimetrists are highly involved throughout the process.

Patient Consult	<ul style="list-style-type: none"> <li>• Physicians</li> <li>• Nurses</li> </ul>
Patient CT Simulation	<ul style="list-style-type: none"> <li>• Radiation Therapists</li> <li>• Nurses</li> <li>• <b>Medical Dosimetrists</b></li> <li>• Physicians</li> </ul>
Tumor Delineation	<ul style="list-style-type: none"> <li>• Physicians</li> </ul>
Contour Organs	<ul style="list-style-type: none"> <li>• Physicians</li> <li>• <b>Medical Dosimetrists</b></li> </ul>
Treatment Design	<ul style="list-style-type: none"> <li>• <b>Medical Dosimetrists</b></li> <li>• Physicians</li> </ul>
Plan Approval	<ul style="list-style-type: none"> <li>• Physicians</li> </ul>
QA	<ul style="list-style-type: none"> <li>• <b>Medical Dosimetrists</b></li> <li>• Medical Physicists</li> </ul>
Patient Treatment	<ul style="list-style-type: none"> <li>• Radiation Therapists</li> </ul>

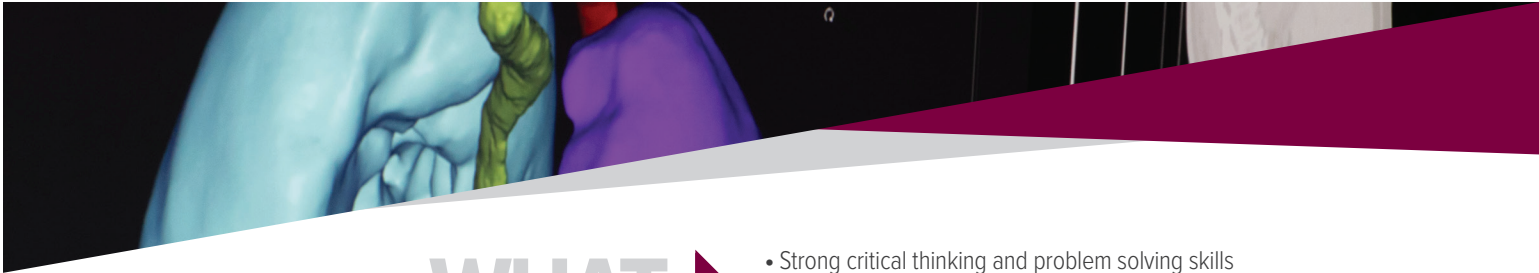
# AN IMPORTANT MEMBER OF THE RADIATION ONCOLOGY TEAM



# WHERE DO MEDICAL DOSIMETRISTS WORK?

Medical Dosimetrists have the capability to be involved in many areas of the clinical and non-clinical environment.

Clinical Service	Administration
Education	Research
Vendor Applications/Sales	Locum



# WHAT SKILLS DOES A MEDICAL DOSIMETRIST NEED?

- Strong critical thinking and problem solving skills
- Aptitude for biology, physics, and math
- Knowledge of radiation safety and regulations
- Organizational skills and ability to multitask
- Ability to communicate with professionals and patients
- Desire for continuous education in a fast-paced, highly technical field
- Adaptability, willingness to embrace change and new technology

## RELEVANT EXPERIENCE, EDUCATION AND CERTIFICATION

**BACKGROUND/EXPERIENCE:** Registered radiation therapist or BS degree in physical sciences, or in some cases just pre-requisite courses. Non-medical backgrounds also accepted.

**EDUCATION:** Pre-requisites: biology, physics, calculus – trigonometry, chemistry, anatomy & physiology, computer science, medical terminology

**CERTIFICATION:** Medical Dosimetrists are certified by the Medical Dosimetrist Certification Board (MDCB). To be eligible for the CMD Exam, candidates must graduate from a JRCERT-accredited Medical Dosimetry program.

## JOB OUTLOOK

The future job market for Medical Dosimetry is strong. Advancements in treatment planning increase the demand for qualified Medical Dosimetrists. Wages are comparable with other healthcare professions but often higher due to the specialized nature and advanced technical skill requirements of the profession. The 2021 AAMD Salary Survey shows the average salary for a Certified Medical Dosimetrist is \$131,374. Given the diverse and ever-changing technology utilized in the job, lifelong career satisfaction is achievable.

# THE FUTURE OF THE MEDICAL DOSIMETRY PROFESSION

# READY TO TAKE THE NEXT STEP?

## HELPFUL RESOURCES

- Find a Medical Dosimetry Program:  
[Joint Review Committee on Education in Radiologic Technology \(JRCERT\)](#)



- Learn about Certification:  
[Medical Dosimetrist Certification Board \(MDCB\)](#)



- Learn about Radiation Oncology:  
[American Society for Radiation Oncology \(ASTRO\)](#)



CHECK OUT OUR WEBSITE FOR MORE INFORMATION:  
[medicaldosimetry.org](http://medicaldosimetry.org)