

Nuclear Medicine Technologists

SOC: 29-2033 • Career Profile Report

■ Key Facts

\$97,020 Median Salary	20,000 Employment	+3.0% Growth Rate
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■ Requirements & Salary Range

Education: Associate's degree

■ Automation Risk Assessment

Low Risk - 8.0% probability of being automated in the next 10-20 years.
This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

■ Work-Life Balance

8.8/10 - Excellent work-life balance

■ Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	5.4/10	Investigative	8.6/10
Artistic	4.8/10	Social	9.0/10
Enterprising	5.4/10	Conventional	6.2/10

■ Top Skills Required

Ability to use technology, Analytical skills, Compassion, Detail oriented, Interpersonal skills, Physical stamina

✓ Strengths

- High Demand
- Flexible Work
- Continuous Learning

■ Challenges

- Burnout Risk
- Rapid Technological Change

■ What They Do

Nuclear Medicine Technologists are specialized healthcare imaging professionals who use **radioactive materials to create images and evaluate how organs and tissues function**. They play a critical role in diagnosing and treating diseases by producing detailed functional images that cannot be seen with standard X-rays or CT scans. Their work blends advanced technology, patient care, and strict safety practices.

This career is well suited for individuals who are interested in healthcare, advanced imaging technology, and precision-focused clinical work.

What Do Nuclear Medicine Technologists Do?

Nuclear medicine technologists prepare patients, operate imaging equipment, and ensure accurate diagnostic results.

Common responsibilities include:

- Preparing and administering radioactive pharmaceuticals (radiotracers)
- Operating PET, SPECT, and gamma camera imaging equipment
- Monitoring patients during imaging procedures
- Following strict radiation safety and protection protocols
- Processing and analyzing diagnostic images
- Maintaining imaging equipment and quality controls
- Documenting procedures and communicating findings to physicians

Types of Nuclear Medicine Procedures

Technologists may perform a variety of diagnostic and therapeutic studies:

- Diagnostic Imaging: Evaluating organ function such as heart, thyroid, or kidneys.
- PET Imaging: Detecting cancer, neurological disorders, and cardiac conditions.
- Cardiac Nuclear Studies: Assessing blood flow and heart function.
- Therapeutic Procedures: Assisting with targeted radiation treatments.
- Research Imaging: Supporting clinical trials and medical research.

Skills and Abilities Needed

Nuclear medicine technologists combine technical expertise with patient-focused care.

Core Professional Skills

Personal Qualities That Matter

Education and Certification Pathway

Entering this field requires specialized education and credentials:

- Associate or Bachelor's Degree: Nuclear medicine technology or related imaging field
- Clinical Training: Supervised hands-on experience in imaging settings
- Professional Certification: Often required or preferred by employers
- State Licensure (where required): Varies by state
- Continuing Education: Required to maintain certification and stay current

Where Do Nuclear Medicine Technologists Work?

Nuclear medicine technologists work in advanced healthcare environments:

- Hospitals and Medical Centers
- Outpatient Imaging and Diagnostic Clinics
- Cancer Treatment and Oncology Centers

- Cardiology Practices
- Medical Research Facilities

Work schedules may include evenings, weekends, or on-call rotations.

How Much Do Nuclear Medicine Technologists Earn?

Earnings vary by experience, certification, and healthcare setting:

- Entry-Level Technologists: Typically earn strong healthcare imaging salaries
- Experienced or Certified Technologists: Often earn higher pay
- Specialized PET or Cardiac Technologists: May earn additional compensation

Compensation commonly includes healthcare benefits and shift differentials.

Is This Career Difficult?

This career is technically demanding and responsibility-heavy. Technologists must handle radioactive materials safely, operate complex imaging systems, and ensure precise image quality. The challenge lies in maintaining accuracy, safety, and patient comfort in a highly regulated clinical environment.

Who Should Consider Becoming a Nuclear Medicine Technologist?

This career may be a strong fit if you:

- Are interested in advanced medical imaging and technology
- Enjoy patient-facing healthcare roles
- Are detail-oriented and safety-conscious
- Prefer diagnostic work over direct treatment decisions
- Want a specialized and in-demand healthcare career

How to Prepare Early

- Take biology, physics, and math courses
- Learn basic anatomy and medical terminology
- Gain exposure through healthcare shadowing or internships
- Develop comfort with technology and precision work
- Explore accredited nuclear medicine technology programs

Nuclear medicine technologists make the invisible visible—using advanced imaging and radioactive tracers to reveal how the body functions, supporting accurate diagnoses, targeted treatments, and life-saving medical decisions every day.