

Nuclear Medicine Technologist

■ Job Description

Nuclear medicine is the medical specialty that uses the nuclear properties of radioactive and stable nuclides to make diagnostic evaluations of the anatomic or physiologic conditions of the body and to provide therapy with radioactive sources. Nuclear medicine technologists (NMTs) apply their knowledge of radiation physics to perform *in vivo* (in the body) and *in vitro* (in the test tube) diagnostic procedures. The radiation detection devices they use measure the quantity and distribution of radio-nuclides deposited within the patient or in a patient specimen.

NMTs also instruct patients before and during procedures; evaluate the preparation of the patient before a procedure is begun; and recognize emergency patient conditions. They may also participate in procuring supplies and equipment, scheduling, documenting laboratory operations, ensuring quality control, and research.

■ Job Settings

Hospitals, clinics, and research institutions

■ Projected Need

In Illinois, average employment growth is expected for this occupation through 2010. Nationally, the number of jobs for nuclear medicine technologists is expected to grow faster than average. However, it is important to keep in mind this is a very small occupation, where turnover and replacement needs may be low.

Demand for nuclear medicine technologists will grow as the number of older people increases. The elderly have more health problems and are more likely to need radiation treatments. Also, new uses of nuclear medicine are being discovered. For example, nuclear medicine may be used to detect cancer at earlier stages. However, the high cost of these services may limit growth. Some hospitals are combining nuclear medicine and radiologic departments to lower costs. Opportunities should be best for technologists who can perform duties in both areas.

In Illinois, there were about 720 people employed in this very small occupation in 2000.

■ Salaries

Nationally, the median wage for nuclear medicine technologists is \$22.79 per hour. Half of all nuclear medicine technologists earn between \$19.44 and \$26.85 per hour.

In Illinois, entry-level technologists earn \$20.11 per hour. The median wage for this occupation is \$24.41 per hour. Experienced technologists receive an hourly wage of \$27.18.

■ Related Careers

Medical technologist, cytotechnologist, histologic technologist, radiologic technologist, radiation therapy technologist, sonographer, physician, and medical physicist

■ Differences in Training

Nuclear medicine technology programs range in length from one to four years and lead to a certificate, associate's degree, or bachelor's degree. One-year certificate programs are for health care professionals, such as nurses or radiation therapists, who wish to specialize in nuclear medicine. Hospitals usually offer certificate programs.

The following community colleges in Illinois offer nuclear medicine technology programs:

Carl Sandburg College - Galesburg
College of DuPage - Glen Ellyn
Triton College - River Grove

■ Related Educational Programs

The programs of study listed below are the recommended areas of study to pursue for this occupation. Clicking on these will lead to files that show in-state and national schools that offer these programs.

The following link(s) will take you to CIS for more information. CIS requires an ID and password that can be obtained at <http://cis.ilworkinfo.com/loginhelp/> You must log into CIS prior to clicking on the links below.

[Nuclear Medical Technology](#)

■ **Credentials**

Certification or registration is available from the American Registry of Radiologic Technologists and from the Nuclear Medicine Technology Certification Board. Most employers prefer to hire certified or registered technologists.

In Illinois, nuclear medicine technologists must be accredited by the Illinois Department of Nuclear Safety. Accreditation requirements include completion of an approved program and the passing of an exam.

■ **Resources**

Nuclear Medicine Technology Certification Board
2970 Clairmont Road, Suite 935
Atlanta, GA 30329-4421
Phone: 404.315.1739
<http://www.nmtcb.org>

Society of Nuclear Medicine
Technologist Section
1850 Samuel Morse Drive
Reston, VA 20190
Phone: 703.708.9000
E-mail: jjordan@snm.org
<http://www.snm.org>
Click on "About Nuclear Medicine" then select
"Career Information."

The society awards 24 \$1,000 scholarships each year to students of nuclear medicine technology at a two- or four-year institution. Scholarships are awarded based on need and academic achievement.

American Society of Radiologic Technologists
15000 Central Avenue, SE
Albuquerque, NM 87123-3917
Phone: 800.444.2778
E-mail: communication@asrt.org
<http://www.asrt.org>
Select "Patients & the Public" then "Who Are RTs?"

American Registry of Radiologic Technologists
1255 Northland Drive
St. Paul, MN 55120-1155
Phone: 651.687.0048
<http://www.arrrt.org>