

History of the American Society of Radiologic Technologists



The American Society of Radiologic Technologists is the world's largest and oldest membership association for medical imaging technologists and radiation therapists. Founded in 1920, the ASRT now has more than 140,000 members. Its business office is located in Albuquerque, N.M.

Radiologic technologists are the medical personnel who perform diagnostic imaging examinations and who deliver radiation therapy treatments. They may specialize in a specific area of radiologic technology, such as computed tomography, mammography, magnetic resonance imaging or nuclear medicine.

The ASRT provides its members with educational opportunities, promotes radiologic technology as a career, and monitors state and federal legislation that affects the profession. It also is responsible for establishing standards of practice for the radiologic science profession and developing educational curricula.

The ASRT is governed by an elected seven-member Board of Directors and a House of Delegates. The ASRT also has affiliate relationships with 54 state or local societies for radiologic technologists. These affiliate societies operate independently of the national organization, but ASRT provides them with assistance and guidance upon request.

Early History

In the century since Wilhelm Conrad Roentgen's discovery of the x-ray in 1895, radiology has transformed itself from a scientific curiosity to a medical necessity. Paralleling radiology's transformation were dramatic changes in the role of those responsible for operating the x-ray equipment itself.

Many of the first to operate x-ray machines had no connection whatsoever to the medical profession. Within six months of Roentgen's discovery, charlatans began to devise commercial uses for the x-ray to exploit the public's interest in the new technology. Because radiography at the time was considered a form of photography, among the first to purchase and operate x-ray equipment were professional photographers. Studios conducting business in "Roentgen photography" sprang up in America and Europe to entertain a public curious to view their bones.¹

Quickly, however, the x-ray was put to use for more serious purposes — to diagnose and treat illness. As the technology gained popularity in the 1900s, most medical x-ray equipment was owned and operated by independent businessmen, including chemists, engineers and electricians. Physicians would send patients to these x-ray operators for diagnostic and therapeutic services.

By the 1910s, however, a number of physicians began to purchase their own x-ray machines to install in their medical offices. A few even began to specialize as radiologists. In the beginning, these physicians operated the x-ray equipment themselves. Advances in equipment and technique, however, quickly outpaced the physician's ability to keep up and they gradually found more and more of their time was being eaten up by the mechanics of the x-ray machine, leaving less time for patient contact and treatment.

It didn't take long for these physicians to realize that to make the most effective use of their x-ray equipment, someone else had to handle the time-consuming tasks of performing x-ray examinations and developing films. The task, most often, fell to their office assistants. Across the country, physicians recruited their receptionists and secretaries to crank the handle of the static machine, pose as subjects and rock the developer pan. These assistants usually had no knowledge of human anatomy or illness; they merely operated the equipment.² Hospitals, clinics and the physicians lucky enough to employ nurses quickly put them to work as x-ray technicians, for they at least had medical training.

These pioneer technicians had a heavy load to bear. The vast majority were women, and they were expected not only to operate the x-ray equipment, but also to perform routine machine maintenance.³ These first technicians also worked in a climate indifferent to radiation protection, and the death toll among them was high. It wasn't until nearly 20 years after Roentgen's discovery that precautions such as lead aprons and film badges came into widespread use.⁴

Because instructional manuals were rare, the first technicians learned positioning and exposure techniques via the "hunch method."⁵ Despite this, many x-ray technicians were able to achieve what were then considered to be

remarkable radiographic images. With no written rules, however, they found it difficult to explain their successes and could not formulate a technique that others could follow.

The plight of the undereducated, overworked x-ray technician was largely ignored until the 1920s, when the persistent work of one man — Eddy C. Jerman — finally brought education, organization and legitimacy to the x-ray technician.

In October 1920, Jerman and 13 technician acquaintances — half of whom were women — met in Chicago to establish the first national technicians society, the American Association of Radiological Technicians. The society was created "for the purpose of affording technicians an opportunity for the interchange of thoughts and ideas concerned with radiologic technique."⁶

The new society offered knowledge-hungry technologists the opportunity to meet and share technical advice. This process was formalized in 1929 with the debut of the society's journal, *The X-Ray Technician*.



By 1932, when the association changed its name to the American Society of X-Ray Technicians, membership had reached nearly 400. Membership figures remained stable through the Depression, but surged following World War II when hundreds of military-trained radiographers returned home from the war to find jobs in civilian hospitals. The rapid increase in membership prompted the society to hire its first full-time staff person, Genevieve Eilert. In 1946, the ASXT established its headquarters in the basement of Mrs. Eilert's home in Fond du Lac, Wis. ASXT membership climbed to 2,500 in 1948 and reached 4,000 in 1952.

In the early 1950s, the ASXT made its first foray into establishing formal educational standards for the profession. Until then, training programs varied greatly in length and in the subjects covered. The ASXT presented its first standardized curriculum in 1952. It described a one-year course in x-ray technology and recommended the number of hours that should be devoted to each subject, ranging from physics and anatomy to positioning and darkroom technique. The 1952 curriculum was the first of many that the society would publish over the years as it consistently pushed for uniform educational standards for radiologic technologists.

In 1964, the association changed its name from the American Society of X-Ray Technicians to the American Society of Radiologic Technologists. The change was spurred because more and more of the society's members were nuclear medicine technologists and radiation therapists, so the term "x-ray technician" no longer accurately reflected the membership. In addition, members believed the shift from "technician" to "technologist" placed a stronger emphasis on professionalism and education. The same year, the society also changed the name of its journal to *Radiologic Technology*.

The ASRT continued to grow, and by 1968 membership had reached 14,000. The organization's leaders realized it was time to move the burgeoning society from Fond du Lac, the ASRT's headquarters for more than two decades. They chose Chicago, home to nearly 100 other health care associations.

Recent History

The late 1960s and early 1970s were a tumultuous time for the profession and for ASRT. The explosion in new technology caused a severe shortage of radiologic technologists nationwide. Once-exotic procedures such as computed tomography, mammography and sonography were becoming commonplace, and demand soared for personnel qualified to operate the equipment. Fearing that the shortage would lead to "diploma mills" that churned out technologists with little formal training, the ASRT began promoting more rigorous educational requirements and minimum national standards for medical imaging and radiation therapy personnel.

In 1968, ASRT asked the federal government to establish standards regulating the licensure of radiologic technologists. At the time, the U.S. Public Health Service estimated that there were more than 100,000 operators of x-ray equipment in the country, but only about 55,000 were certified. The ASRT supported a bill that proposed standards for the licensure of radiologic technologists. Following the issuance of the standards, states would have two years either to adopt them or to enact their own, more stringent, standards. In 1970, only four states licensed radiologic technologists.

The Consumer-Patient Radiation Health and Safety bill, as the proposed legislation was titled, had strong opponents who exerted significant political pressure. The bill was reintroduced year after year in Congress but never made it out

of committee. As the ASRT continued to fight for passage of the federal bill, it also worked with the states to enact licensure laws. By 1979, nine states licensed radiologic technologists.

Finally, in 1981, Congress passed the Consumer-Patient Radiation Health and Safety Act. The Secretary of Health and Human Services was ordered to develop federal standards for the certification of radiologic technologists and the accreditation of educational programs in the radiologic sciences. The Act also required the federal government to provide the states with a model statute for licensure. However, the Act made compliance voluntary and did not impose penalties for states that ignored the standards.

The ASRT regarded enactment of the law a partial victory. In the years following its passage, increasing numbers of states began licensing radiologic technologists. By 1995, 33 states had enacted licensure laws for radiographers, 28 licensed radiation therapists and 21 licensed nuclear medicine technologists.

While ASRT was working for regulatory standards on the governmental level, it also was introducing the profession to the concept of continuing education. In 1975, the ASRT designed a voluntary continuing education program in which technologists could earn CE points by participating in professional meetings, in-service education and self-study programs. Although voluntary, response to the CE program was strong. Within a year of its launch, more than 5,000 radiologic technologists had enrolled – a testament to their eagerness for continuing education.

By the early 1980s, the ASRT was focused on ensuring long-term financial stability for the organization while expanding its range of benefits and services to members. To do so, the organization recognized that it needed to leave Chicago. The ASRT's downtown Chicago office was the organization's single largest expense, leaving no money for investments or for future expansion of the society.

After a nationwide search, the ASRT chose Albuquerque, N.M., as its new home. Estimating that the society would be able to operate for nearly half the cost as in Chicago, it opened its office in Albuquerque in August 1983. Within four years of relocating, the ASRT went from having almost no savings to having more than \$2.5 million in securities and investments.

In 1985, the ASRT was forced into a licensure battle with the federal government after Health and Human Services Secretary Margaret M. Heckler proposed that the 1981 Consumer-Patient Radiation Health and Safety Act be repealed. She claimed that the main danger of radiation overexposure came from faulty machinery, not from equipment operators who had never been educated as radiologic technologists. The Department of Health and Human Services also said it would not issue a model licensure bill to the states, as required by the 1981 Act. In response, the ASRT filed a civil action against Heckler and her department. The move by ASRT drew widespread attention, even garnering praise from consumer advocate Ralph Nader. Under pressure from the public, HHS backed down and agreed to comply with the 1981 Act. In December 1985, the federal agency mailed copies of a model licensure bill to the governors of all 50 states.

Meanwhile, ASRT membership continued to rise, with a growing number of members practicing in fields other than x-ray. To better represent all its members, the ASRT in 1986 created a new legislative and governing body, the House of Delegates. The country was divided into 10 regions and the ASRT membership was divided into four "modalities" – radiography, nuclear medicine, radiation therapy and sonography. Each region sent one delegate representing each modality to the annual meeting of the House. This system ensured that every modality and every region had equal representation on issues affecting the radiologic sciences. The House also included two affiliate delegates elected from each state and city affiliate.

The ASRT further refined the organization of its House of Delegates in 1993 with the adoption of a chapter system. The organization's 20,000 members were asked to enroll in one of 11 chapters – cardiovascular-interventional technology, computed tomography, medical dosimetry, education, magnetic resonance, mammography, management, nuclear medicine technology, radiation therapy, radiography or sonography. Each chapter was represented in the House by a delegate from each of the ASRT's 10 regions, replacing each region's four modality delegates. A military chapter was added in 1995, and chapters for bone densitometry and quality management were added in 1998. The system of representation in the House of Delegates was further refined in 2004, when delegates voted to restructure ASRT's system of governance. Among the changes was the elimination of the region system for election of chapter delegates, allowing chapter delegates to be elected nationally instead of regionally.

In 1995, the [American Registry of Radiologic Technologists](#) (ARRT) made continuing education mandatory as a condition for the annual renewal of technologists' certification. The CE requirement had a broad impact on ASRT and its members. Although the society had offered educational materials through its annual meeting and journals since its inception in 1920, the CE mandate put the society under additional pressure to help R.T.s satisfy the ARRT requirement to earn 24 CE credits every two years. It responded by becoming one of the few organizations approved by the ARRT to perform all four CE responsibilities: developing, sponsoring and evaluating CE activities and recording technologists' accumulated CE credits.

As more and more technologists recognized the benefits of belonging to ASRT, membership soared. It climbed from 28,500 in 1994 to 56,000 in 1996 and 70,000 in 1998. One of the efforts that benefited from ASRT's increasing size and strength was the battle for federal minimum standards. This effort was reinvigorated in 1998, when the ASRT

sought to amend the 1981 Consumer-Patient Radiation Health and Safety Act to make compliance by the states mandatory. The ASRT formed a Government Relations Department, launched an exhaustive grass-roots lobbying effort and built a coalition with other radiologic science organizations to gain support for the issue on Capitol Hill.

The coalition's work led to the introduction of the Consumer Assurance of Radiologic Excellence bill (CARE bill) four times in the House of Representatives - in September 2000 by Rep. Rick Lazio, R-N.Y.; in March 2001 and March 2003 by Rep. Heather Wilson, R-N.M.; and in March 2005 by Rep. Chip Pickering, R-Miss. The bill also was introduced in the Senate in 2003 and 2005 by Sen. Michael Enzi, R-Wyo. It passed the Senate unanimously in December 2006, but the House adjourned before it could take action on the bill. As a result, the bill was reintroduced in both houses of Congress in 2007 with a slightly different name. Although the acronym is still CARE, it now stands for Consistency, Accuracy, Responsibility and Excellence in Medical Imaging and Radiation Therapy.

As the ASRT grew, it placed increasing emphasis on integrating the principles of quality management into all phases of its operations. The Society launched an extensive quality improvement effort in 1998, committing itself to planning, controlling and measuring each of its processes and products. The ASRT's efforts were recognized in 1999 when it received a Piñon Award from [Quality New Mexico](#). The award program criteria evaluate leadership, strategic planning, customer service, information and analysis, human resources, process management and business results. It is based on the [Baldrige National Quality Awards](#) administered by the U.S. Department of Commerce.

The ASRT Today

As the ASRT grew, it continued to develop innovative ways to meet the needs of its diverse membership. The ASRT surpassed the 130,000-member mark in 2008. The ASRT today has a \$16 million annual operating budget and more than 100 employees. Yet its mission remains the same today as when Ed Jerman founded the society in 1920 – to give radiologic technologists the knowledge, resources and support they need to provide quality patient care. The ASRT accomplishes its mission through the following:

- **Meetings.** The ASRT conducts two national meetings annually. Each June, the ASRT Annual Governance and House of Delegates meeting is where delegates set direction for the Society and the profession. Each fall, ASRT conducts a Radiation Therapy Conference in conjunction with the annual meeting of the American Society for Therapeutic Radiology and Oncology. Educational courses at this conference focus on radiation therapy and medical dosimetry.
- **Publications.** The ASRT publishes two peer-reviewed research journals. The award-winning bimonthly journal *Radiologic Technology* keeps readers informed about advances in technology and patient care. It also offers ASRT members the opportunity to earn continuing education credit through its Directed Reading program. *Radiation Therapist*, published twice a year, focuses on technical advances in radiation oncology. It, too, features a Directed Reading program. *ASRT Scanner* is the society's member magazine. Through its in-depth reporting, Scanner helps members stay up-to-date on the issues that affect them and their profession. In addition, the ASRT operates a website, <http://www.asrt.org>, which contains news, information about the profession, educational material for patients and a variety of professional resources for radiologic technologists.
- **Career Resources.** The Society tracks members' CE credits and issues an annual report that can be submitted to a certification agency as proof of continuing education. It conducts regular salary surveys of the profession, providing valuable information about income levels and trends. It also operates an Internet-based employment service, the ASRT JobBank®, through which technologists can conduct nationwide job searches. And the ASRT provides radiologic technologists with top-quality educational materials covering every practice area, from pediatric radiography to cancer pain management.
- **Advocacy and Representation.** The ASRT monitors and responds to all state and federal legislation that affects the profession. It is working with other radiologic science organizations to establish federal minimum standards to ensure that patients receive the best care possible. The ASRT also educates the public about the role of registered radiologic technologists in providing quality patient care, sponsoring National Radiologic Technology Week® each year to raise awareness about the profession.
- **Professional Issues.** The ASRT works with the profession's accreditation and certification agencies to develop and revise educational curricula, implement entry-level standards for the profession and establish practice guidelines. The ASRT also helps recruit students to careers in radiologic technology, works with equipment manufacturers to help implement technological change, and represents the profession in the governmental, educational and research arenas. The Society has been instrumental in the development of the radiologist assistant, a new career level for radiologic technologists. The first educational program for radiologist assistants opened in 2003 and the first graduates were certified as radiologist assistants in 2005.

Historical Highlights

- 1920** American Association of Radiological Technicians formed in Chicago with 14 charter members.
- 1929** Organization begins publishing *The X-Ray Technician*.
- 1932** Organization changes its name to the American Society of X-Ray Technicians; membership reaches 400.
- 1948** Membership climbs to 2,500.
- 1952** ASXT writes its first radiography curriculum; membership at 4,000.
- 1964** Organization changes its name to the American Society of Radiologic Technologists and changes the name of its journal to *Radiologic Technology*.
- 1968** ASRT opens office in Chicago; membership at 14,000.
- 1975** ASRT launches voluntary continuing education program for R.T.s.
- 1981** Congress passes Consumer-Patient Radiation Health and Safety Act.
- 1983** ASRT relocates to Albuquerque, N.M.
- 1986** ASRT House of Delegates formed.
- 1994** Membership reaches 28,500.
- 1995** Continuing education becomes mandatory for technologists registered by the American Registry of Radiologic Technologists.
- 1996** Membership climbs to 56,000.
- 1998** ASRT launches its website, www.asrt.org.
- 1999** ASRT receives Piñon Quality Award.
- 2000** Consumer Assurance of Radiologic Excellence bill introduced in Congress; bill is reintroduced in 2001, 2003 and 2005. When it is reintroduced in 2007, it has a new name: the Consistency, Accuracy, Responsibility and Excellence in Medical Imaging and Radiation Therapy bill.
- 2002** Membership reaches 100,000.
- 2004** ASRT completes a major renovation of its office in Albuquerque, N.M., that more than doubles the size of the facility.
- 2005** Online version of *Radiologic Technology* debuts. Membership reaches 120,000.
- 2008** Membership reaches 130,000. Chief Executive Officer Lynn May retires, and Sal Martino, Ed.D., R.T.(R), FASRT, CAE, is chosen as his successor.
- 2020** Pandemic forces the Centennial celebration, Annual House of Delegates Meeting to be held via Zoom.

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