

■ Nordion Strike Narrowly Averted

On July 20, union officials for employees of Atomic Energy of Canada, Limited, (AECL), negotiated a wage settlement with management, narrowly averting a strike that had been set to occur at midnight. The strike would have disrupted the world supply of molybdenum-99 and would have forced nuclear medicine departments across the U.S. to suspend most nuclear medical imaging procedures within two weeks.

The strike would have been devastating because AECL supplies Nordion International of Kanata, Ontario, Canada with molybdenum-99, the parent product of technetium-99m: Nordion provides 80% of the world supply of molybdenum-99. If the strike had occurred, Nordion would have been forced to stop shipping molybdenum-99 within five days and the last shipment of molybdenum would have decayed within another three days (molybdenum-99's half-life is 67 hours). Since the vast majority (90%) of nuclear medicine procedures in the United States are done with technetium-99m, the absence of technetium's parent product would have resulted in a severe disruption in the performance of nuclear medicine procedures.

Some procedures would have been performed with other isotopes, such as thallium, while the majority of procedures would have either been postponed indefinitely or performed using other imaging modalities, such as computed tomography (CT) or magnetic resonance imaging (MRI). Trevor D. Craddock, PhD, chair of the division of nuclear medicine, University of Western Ontario, Ontario, Canada, notes that if doctors were forced to use other radioisotopes and other imaging modalities, many of the tests would have had a lower sensitivity than those done with technetium, so that the diagnostic value of the tests would likely have been lower.

The near disruption of the molybdenum supply highlights once again the vulnerability of nuclear medicine in a market with only one supplier.

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The eight-day disruption in the molybdenum supply that occurred in January 1991, when Nordion was unexpectedly forced to shut down its reactor, provided an earlier signal to the nuclear medicine community and the U.S. government that the routine performance of nuclear medicine procedures was at risk. In response to this early warning sign, many members of the nuclear medicine community have urged the Department of Energy (DOE) to expand its newly formed Isotope Production and Distribution Program through further funding to ensure that nuclear medicine clinicians and researchers have a stable supply of needed radioisotopes.

DOE-Supplied Isotopes

On July 21, in response to the averted strike, Representative Mike Synar (D-OK), chair of the Government Operations' Subcommittee on Environment, Energy, and Natural Resources (EENR), released a report prepared by the U.S. Government Accounting Office (GAO) on the financial state of the DOE's Isotope Production and Distribution Program. According to a news release from the EENR Subcommittee, "the GAO found the DOE program on the brink of financial collapse."

The DOE consolidated its isotope

distribution facilities in 1989 into the Isotope Production and Distribution Program. Congress then appropriated initial capital of sixteen million dollars for the isotope program and expected the program to be able to fund itself completely from isotope sales in the future. The GAO report found that the isotope program has been unable to recover its operating costs from isotope sales, has been unable to compete with foreign suppliers, and has had to borrow U.S. Treasury funds to continue operations.

Commenting on the state of the DOE's isotope program, Representative Synar says, "The decision in 1990 to require this vital program to be 100% self-supporting has been a failure and needs to be reassessed in light of its crucial importance to the health and well being of so many Americans." He adds that "nearly 90% of isotopes for medical treatments used in the U.S. are imported and the disruption of these treatments is only as far away as a malfunction or labor strike at a foreign reactor or processing facility."

The threat of a second disruption of the radioisotope pipeline within two years appears to be galvanizing the U.S. legislature to action. Thus, the averted strike may actually prove beneficial to practitioners of nuclear medicine, if it serves as the impetus to speed up the funding and development of a domestic supply of sorely needed medical and research radioisotopes.

Joan Hiam
Managing Editor, *JNMT*

■ Supreme Court Ruling on LLRW Upholds States' Rights

The U.S. Supreme Court ruling that a central provision of the Low-Level Radioactive Waste Policy Amendments Act of 1985 violates the Constitution is not expected to hamper the establishment of regional disposal sites for low-level waste across the country. But producers of radioactive waste remain wary that state governors and other state officials will take advantage of the court decision as a chance to put waste-siting efforts on hold.

An official in at least one state has done just that. Attorney General Richard Blumenthal of Connecticut urged his state's General Assembly to halt efforts to select a waste site while awaiting possible action from Congress. However widespread such sentiments may be, many states and regional compacts continue to move ahead with plans for waste disposal.

The Low-Level Radioactive Waste Policy Amendments Act of 1985 made the states responsible for building waste sites and set a series of deadlines for choosing sites and constructing the waste facilities. Penalties for missing deadlines include the threat of loss of access to existing sites and surcharges to be paid by waste producers. A so-called "take-title" provision would have forced states to assume ownership of wastes and legal liability if they failed to have disposal capacity by 1996.

Reversing both a federal district court and a U.S. Court of Appeals, The Supreme Court ruled in June that the take-title provision violated the Tenth Amendment to the Constitution, which reserves certain powers to the states. "In this provision, Congress crossed the line distinguishing encouragement from coercion," wrote Justice Sandra Day O'Connor in a 6-3 decision. In a dissenting opinion, Justice Byron R. White wrote that "Hard public policy choices sometimes require strong measures" and that the take-title provision "was part of a complex interstate agreement about which New York should not now be permit-

ted to complain."

New York State originally challenged the federal government in court in February 1990 on the constitutionality of the waste law after efforts to find a suitable site for a waste facility for the state ran into political gridlock. New York Governor Mario M. Cuomo said that the Supreme Court's decision puts pressure on power utilities to come up with waste storage plans. In interviews with reporters following the decision, he went so far as to suggest that nuclear power plants might be used indefinitely to store low-level wastes from research and medicine as well as from the power plants themselves.

Waste generators in New York remain optimistic that the Court ruling won't have much effect on waste-siting efforts. "Our siting process is moving at a snail's pace and it will continue to do so," says Bennett S. Greenspan, MD, assistant professor of radiology at the University of Rochester and a member of the New York State Low-Level Waste Group. The New York state assembly is considering various pieces of legislation to provide for low-level radioactive waste disposal. One bill would clear the way for building a waste facility in the town of Ashford, where the town board voted in favor of a waste site.

State Responsibility

On the other side of the continent, California legislators are also poised to dictate the future of waste-siting efforts. "The Supreme Court ruling says the states have two choices: They can be responsible and take care of the problem or be irresponsible and force the waste producers to be stuck with it," says Steve Romano, manager of California operations for U.S. Ecology, the firm selected to build and operate low-level waste sites in California and Nebraska.

Three months ago California agreed to hold adjudicatory hearings, which anti-nuclear groups had sought in an effort to forestall construction of a waste facility at a site called Ward Valley. Frustrated by the decision to

hold further hearings, U.S. Ecology has raised the possibility of going to court to prod the state to solve the waste disposal dilemma.

Cost Hindering Research

Shipping costs for low-level waste will continue to drain the budgets of hospitals, research facilities, and other industries. In states that missed the January 1, 1992 milestone for waste facility licensing, hospitals and labs must pay surcharges totaling \$120 per cubic foot, which brings the cost of waste disposal to about \$170 per cubic foot. The cost prohibits most hospitals from shipping waste so they must store it for decay. Storage of all wastes is not possible at major research centers that generate large volumes of waste and use longer-lived radionuclides.

Yet on January 1, 1993, the three states with existing waste sites, Washington, South Carolina, and Nevada, will either deny access to states outside of their regional compacts or close altogether. The Hanford site in Washington will accept only waste from within the Rocky Mountain Compact beginning in 1993. The Beatty, Nevada site is scheduled for decommissioning in 1993. The South Carolina legislature recently passed an amendment to accept waste at the Barnwell site until 1994, with additional charges on waste from out-of-region. The Barnwell site will close on January 1, 1996.

"Barnwell will be an expensive safety valve," comments Holmes Brown of the Low-Level Waste Forum, an industry group. The Barnwell option could easily disintegrate if officials in South Carolina don't see progress on a new waste facility in neighboring North Carolina, the next host state in the Southeast Compact.

"We're in a very unsettled position," Mr. Brown said at a waste disposal seminar at The Society of Nuclear Medicine Annual Meeting in June. From here on, he said, "Opposition is only going to intensify."

Joe Rojas-Burke
Newsline Editor, *JNM*

■ Attrition Rates in CAHEA-Accredited Programs

The American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA) has released its data on attrition rates in CAHEA-accredited educational programs for the 1989-1990 academic year (1). The data show that the attrition rate for nuclear medicine technologist (NMT) programs (8.5%) was well below the overall attrition rate (15.7%) for the 26 occupations accredited by CAHEA. The highest attrition rate was found in programs for respiratory therapy technicians and surgical technologists (28.7%), while programs for specialists in blood bank technology had the lowest attrition rate (3.7%).

The CAHEA data show that the overall attrition rate for men was 17.4%, compared to 15.2% for women. Within NMT programs, the men's attrition rate was 9.7% and the women's rate was 7.5%; roughly parallel to the overall gender attrition rates.

In addition to gender differences, the CAHEA data showed large differences in attrition rates among different ethnic and racial groups as follows: Blacks (25.4%), Mexicans (18.7%), American Indians or Alaskan Natives (18.5%), Puerto Ricans (16.3%), Other Hispanics (15.7%), Whites (14.4%), and Asians or Pacific Islanders (13.0%). Gupta's (1) analysis of these findings notes that while earlier studies "have asserted that race or origin might be a valid predictor of attrition and retention... researchers are now finding that when academic achievement [preparation] and other background variables are taken into account, the effects of race and ethnicity are not statistically significant."

When attrition rates were broken down by type of institution, rates ranged from a low of 7.1% for academic health centers or medical schools to a high of 24.3% for vocational or technical schools. Veterans Affairs institutions and 4-year colleges or universities also had low attrition rates, 8.4% and 9.6%, respectively.

In her evaluation of the data, Gupta notes that although "trends identified through investigation of CAHEA attrition and retention data by key variables, such as type of institution or race and ethnic origin, can become sociopolitically controversial, . . . attrition data by key variables will guide future studies and will facilitate the development of focused retention programs."

Joan Hiam

Managing Editor, *JNMT*

Reference

1. Gupta GC. Student Attrition: A Challenge for Allied Health Education Programs. *JAMA* 1991;266:963-967.

■ News Briefs

PEPE Committee Swings into Action

The newly formed SNM-TS Public Education and Professional Enhancement (PEPE) Committee has formed four subcommittees to carry out its mission of educating the general public about nuclear medicine and enhancing the professional status of nuclear medicine technologists. The four subcommittees are: public awareness, chaired by Terri Boyce, CNMT; nuclear medicine week, chaired by Debbie Merten, CNMT; recruitment and retention, chaired by Martha Pickett, CNMT; and commercial affairs, chaired by Kevin Brooks, CNMT

The public awareness subcommittee is deliberating on a marketing plan for the new SNM-TS educational video, currently entitled "Lola's Most Excellent Adventure." The 12-minute video, aimed at the general public, follows Lola through a visit to the hospital where she learns about the different types of imaging modalities. SNM-TS President Paul Hanson, CNMT, says that the video will probably be shown at Lions clubs, Rotary clubs, or other interested civic groups.

The PEPE Committee also plans to sponsor an initiative with the National Council to create an annual distinguished service award for a technologist. Paul Hanson has already asked

TECHNOLOGIST SECTION ELECTION RESULTS

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the SNM-TS Awards Committee to draft a set of criteria for the award. Once this is completed, the PEPE Committee will draft a proposal for the National Council requesting implementation of the award.

SNM ELECTION RESULTS

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Technologist Section Awards

The following were recipients of awards presented during the 39th Annual SNM Meeting in Los Angeles, CA.

Scientific Papers

First Place:

"An Improved Method for Reducing Particle Number in a Technetium-99m-Macroaggregated Albumin Injection"

D.M. Bolstad, T.B. Valley, M.E. Wilson, J.C. Hung
Mayo Clinic, Rochester, MN

Second Place:

"The Effect of Milk on Postexercise Hepatic and Cardiac Clearance of Technetium-99m Sestamibi"

M.P. White, V.L. Perez, R.C. Fetterman, J.A. Mattera, B.L. Zaret, F.J.Th. Wackers, A.J. Sinusas
Yale University, New Haven, CT

Third Place:

"Volume and Surface Rendering for Added Diagnostic Information on Technetium-99m-MDP Bone and Iodine-123-SPECTamine Brain Scanning"

J. Ward, R. Taylor, N. Newlin
Herrick Memorial Health Care Center, Tecumseh, MI

Scientific Posters/Exhibits

First Place:

"Effect of Different SPECT Filtering Techniques on Technetium-99m Teboroxime Cardiac Images"

M.K. Hobai, J.M. Joyce, S.J. Grossman, J. Acierno
West Penn Hospital, Pittsburgh, PA

Second Place:

"Myocardial Count Density with Technetium-99m Sestamibi Evaluation of Stress Imaging Times"

S.F. Grant, J.R. Galt, N.P. Alazraki
VA Medical Center and Emory University School of Medicine, Atlanta, GA

Third Place:

"Hepatobiliary Scintigraphy: Impact on Scan Interpretation by a Protocol Change in the Number of Images Provided in the First Hour"

C. Campbell, D. Meier, C. Nagle
William Beaumont Hospital, Troy, MI

Student Scientific Paper Award

"Effects of Prone Versus Supine Positioning on Attenuation in Rest/Stress Technetium-99m-Sestamibi Myocardial Tomography"

C.T. Purvis, M. Aung, T.D. Ruddy
University of Ottawa Heart Institute at the Ottawa Civic Hospital, Ottawa, Ontario, Canada

Cardiovascular Council Awards

First Place:

"Sixty-Four- Versus Thirty-Two-Projection Sestamibi SPECT: Is There a Significant Difference?"

J.A. Mattera, K. Davis, P. Maniawski, A. Sinusas, F.J.Th. Wackers
Yale University, New Haven, CT

Second Place:

"Technetium-99m Sestamibi May Identify Myocardial Infarction at Rest Better than Thallium-201"

L.S. Schmarkey, S.E. Martin, D. Carey, R.L. Eisner, M. Worthy, T.S. Chu, R.E. Patterson
Carlyle Fraser Heart Center, Crawford Long Hospital of Emory University; Depts of Medicine (Cardiology) and Radiology, EUSM, Atlanta, GA

Third Place:

"Experimental Method for Evaluation of Technetium-99m Sestamibi Interpolative Background Subtraction Algorithm"

P. Vitols, R.C. Fetterman, Q.X. Shi, M.T. Salzberg, P. Maniawski, F.J.Th. Wackers, B.L. Zaret, A.J. Sinusas
Yale University, New Haven, CT

U.S. - Canada Free Trade Agreement

In late June, representatives from the U.S. and Canada met to discuss the wording of an amendment to the U.S. - Canada Free Trade Agreement (FTA). The amendment lists the professional occupations within allied health that qualify for FTA status. This status allows professionals in the listed professions to immigrate more freely between the two countries. Both the SNM-TS and the Canadian Association of Medical Radiologic Technologists (CAMRT) have urged the addition of nuclear medicine technologists to the schedule-of-professions amendment.

The Canadian representatives denied the SNM-TS/CAMRT request, citing their belief that the Canadian provinces were concerned about the prospect of losing allied health professionals to the U.S. if immigration of Canadian nuclear medicine technologists was made easier. The U.S. representatives still consider the issue open but the Canadian representatives do not anticipate a change in their position.

New Form for Recording Answers to CE Tests

Readers who wish to take the Continuing Education Tests in each issue of the *Journal of Nuclear Medicine Technology* and to send in their answers for VOICE credits should note that there is no longer a reader service card bound into the Journal. Instead, the form to record answers to the CE Tests can be found on a back page of each issue of the Journal. The Table of Contents for each issue will specify what page the CE Tests Answer Sheet is on. Please photocopy this page (or use the original), record your answers, and return the completed form to: Ritone Ivaska, VOICE Coordinator, The Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016.



The winners of the 1991 Nuclear Medicine Week Media Stars Contest: (left) Julie Corrales, Nuclear Medicine Assistant, San Jose Imaging Center, San Jose, CA; (second from right) Danny Gene Davey, CNMT, St. Mary's Hospital, Leonardtown, MD; (not pictured) Amelia (Amy) Crook, CNMT, Fairfield Community Hospital, Lancaster, OH. The awards were presented by Verne Sharma, General Manager of Nuclear Medicine, GE Medical Systems (third from left and far right).

1991 Nuclear Medicine Week Media Stars Contest Winners Announced

The winners of the 1991 Nuclear Medicine Week Media Stars Contest were announced at The Society of Nuclear Medicine's annual meeting this June in Los Angeles. The contest, sponsored by GE Medical Systems in Milwaukee, recognizes individuals for their outstanding public awareness efforts in support of nuclear medicine.

The three winners of the 1991 Media Stars Contets are Julie E. Corrales, Nuclear Medicine Assistant, San Jose Imaging Center in San Jose, Cali-

fornia; Amelia L. Cook, RT, CNMT, Fairfield Community Hospital in Lancaster, Ohio; and Danny Gene Davey, CNMT, St. Mary's Hospital in Leonardtown, Maryland. They were awarded plaques and cash prizes during a ceremony at the annual meeting.

The purpose of the contest is to support nuclear medicine week, an annual event promulgated by the Society, which designates a time when hospitals inform the public of the facets of nuclear medicine, recruit professionals and students into the field, and dispel the myths surrounding nuclear medicine.

Any nuclear medicine department can enter this contest and winners are determined by the level and quality of efforts toward publicizing nuclear medicine during this week. Examples from winning hospital's programs are: an open house, staff T-shirts and buttons, raffles, scratch pad gifts, lectures at local schools, and radio or television interviews focusing on the week.

As the contest's sponsor, GE donates \$1,000 to the winning nuclear medicine department, a \$250 honorarium to the hospital employee responsible for the winning entry, and a congratulatory plaque.

Hospitals Give Improved Rating to JCAHO Surveys

The Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) has tabulated the results from its third annual Hospital CEO Opinion Survey. The survey was sent to the CEOs of all hospitals surveyed by the JCAHO within the previous year. Respondents were asked to rate the overall change in the JCAHO's performance over the last five years and were asked about its effectiveness in specific areas. In addition, the CEOs were asked to review and rank a list of eleven policy issues and twelve service issues, which the JCAHO intends

to address in 1992. Finally, the CEOs were asked to indicate how long it had taken the JCAHO to return its accreditation report on the hospital at the completion of the JCAHO survey.

Seventy-six percent of the 1991 survey respondents felt that the JCAHO's performance had improved over the last five years, compared with 60% of 1990 respondents and 38% of 1989 respondents who felt this way. The reponse rate for the 1991 survey was 47%. The respondents also verified a major reduction in the turnaround time of hospital accreditation reports by the JCAHO. While only 7% of respond-

ents to the 1989 survey received their accreditation report within 90 days of completion of the JCAHO accreditation survey, this figure rose to 35% in 1990 and 66% in 1991.

CEOs perception of change in JCAHO performance over the past five years.

	1991	1990	1989
Improved	76%	60%	38%
Worsened	5%	9%	26%
Not Changed	11%	24%	26%
Don't know/ No answer	8%	7%	10%
Total respondents	893	1121	923

SPECIAL ANNOUNCEMENT

**Annual Nuclear Medicine Technologist Award to be Presented by
The Education and Research Foundation of The Society of Nuclear Medicine**

CALL FOR MANUSCRIPTS

The Education and Research Foundation has established an award of \$1,000 for an original paper submitted by a technologist as a senior author. The paper must relate to a new technique or an adaptation of an existing technique for a nuclear medicine procedure. The winning manuscript will be highlighted at the Technologist Section Scientific Program during the 40th Annual Meeting in Toronto, Canada, June 8–11, 1993. The paper will also be published in the *Journal of Nuclear Medicine Technology*. Manuscripts should be prepared according to the *JNMT* Author Guidelines and submitted on or before January 6, 1993.

For more information contact:

**The Society of Nuclear Medicine
Att: Education and Research Foundation
Technologist Awards Committee
136 Madison Avenue, New York, NY 10016-6760
Tel: (212)889-0717**

TECHNOLOGIST JOB NETWORK

The New England Chapter—SNM/TS announces “**The Job Hotline**,” a national toll-free, hotline for nuclear medicine. The hotline is designed to provide a quick link for technologists seeking jobs and for hospitals seeking technologists. Institutions seeking technologists should call the hotline number, leave the name of the institution, title of the job opening, and name and number of the contact person; data are then stored for three months in a database for anyone who calls the hotline seeking employment. Technologists seeking employment should call the hotline number, specify state(s) which are of interest, specify type of job desired, and leave name and address. A listing will then be sent out in 48 hours; all inquiries are kept confidential. If an opening has not been filled within three months, the institution should call again to have it listed. The institution should also call if an opening has been filled so that it can be deleted from the database. The hotline numbers are **1-800-562-6387 (1-800-JOB-NETS)** or **1-990-4212 in Maine**. Questions or comments should be directed to: Tom Starno, Manager, Job Hotline, New England Chapter—TS at **(207) 945-7186**. The Mideastern Chapter—SNM/TS will provide a referral network for technologists seeking employment and for hospitals in need of technologists. Interested individuals should call Robert Steinman at **(302) 421-4365**. Please leave your name, address, phone number and a brief description of your request.

EDITOR'S NOTE

SNM chapters are invited to submit job referral service listings for publication. Pertinent information—name and brief description of the service, telephone numbers and/or address, name or number of contact person for inquiries—should be sent to: Leigh Silverman, Section Editor, *JNM/JNMT*, Society of Nuclear Medicine, 136 Madison Avenue, New York, NY 10016-6760.