■ A Newspaper Article Series on Radionuclide and Radiotherapy Overdoses Criticizes NRC and Draws Response from Congress

A five-part series of articles on radionuclide misadministrations and radiotherapy overdoses published in December 1992 by a Cleveland paper, *The Plain Dealer,* has drawn national press attention. Researchers at the *The Plain Dealer* tracked the number of patients at various hospitals in the U.S. who had died after overdoses of radionuclides or overexposure during radiotherapy. Errors were attributed to technologists, physicians, equipment malfunctions, and in one facility, to a physicist who incorrectly calculated doses to be received by radiotherapy patients. The series of articles contained numerous interviews with patients and families of those who had died, describing their burns or sickness in graphic detail.

The articles' authors talked to officials of the NRC, including Chairman Ivan Selin, and were told that the NRC was not aware of many instances of these misadministrations and was unaware of any of the deaths. *(The Plain Dealer* article claimed there were 20 deaths in just one of the incidents.) According to *The Plain Dealer*'s first article, "Interviews and Freedom of Information Act requests found NRC officials unable to to identify a single fatality. A computer search of the agency's own database located just two." The tone of the articles was highly critical of the NRC and its staff members' statements that they were not aware of many of the incidents reported in the articles. The authors also expressed dismay that a number of the incidents were not known to the NRC because the NRC does not track misadministrations from certain radiologic sources, such as supervoltage linear accelerators. The articles made it clear that the authors blamed the NRC for a purported lack of oversight and enforcement of existing regulations.

In response to the articles, both the Senate and the House have scheduled hearings to examine the NRC's purported negligence in the regulation of radioactive material licensees, especially medicine. The Senate's Government Operations Committee has tentatively scheduled hearings for early February while the House's Government Operations' Subcommittee on Environment, Energy, and Natural Resources plans to hold hearings in March.

The American College of Nuclear Physicians (ACNP) and SNM have written a letter to the NRC commissioners, calling on the NRC to respond swiftly to the articles' allegations and to provide evidence of accurate tracking of misadministration data in order to minimize the expected loss of public faith in both the NRC and in nuclear medicine procedures. Excerpts from the ACNP/SNM letter to the NRC commissioners appear below.

"The American College of Nuclear Physicians and The Society of Nuclear Medicine are deeply concerned about the sensational representations of the Cleveland *Plain Dealer* series of articles 12/13-17/92, concerning radiation oncology and nuclear medicine. Even a newspaper as reputable as *The New York Times,* in reporting the Indiana, PA and Pittsburgh Center incidents on 12/17/92, referred to the Cleveland *Plain Dealer* in stating, 'losing control of a radiation source is unusual, but overdoses from medical treatments may not be.' We are certain that you share our concern regarding these repeated false accusations of lax incompetence and callous indifference to patient safety of both the Nuclear Regulatory Commission and the medical profession using nuclear materials for patient diagnosis and treatment.

"Of much greater importance, however, is the damage to patient care caused by these accusations. Patients requiring diagnosis and treatment with radionuclides may now become fearful for their lives, cancel appointments, and refuse the radiation treatments needed for their prolonged survival or cure.

"It is essential that the public receive a quick response using NRC data gathered for many years regarding the incidence and nature of misadministrations of radioactivity. We believe this can best be done through you. You have kept professionals well informed in the past and we are confident that you can now respond quickly with careful objectivity to public concerns. We would like to assist you in responding to this public outcry in whatever capacity you wish.

"... We are soliciting your immediate cooperation in providing a factual reply to the public. This scientific response would be based upon your own data concerning misadministrations in terms medically meaningful to the lay public.

"... The alternative is a unilateral response from the medical profession that might generate further controversy regarding the NRC and reverse the recent trend of NRC cooperation with the medical profession."

In January, Kenneth Rogers, acting chairman of the NRC, responded to a similar request for a joint SNM/NRC response from an SNM member, addressed to Commissioner Selin, who was out of the country at the time. Mr. Rogers stated that "The Commission as a matter of policy will not participate in a response to the regulatory issues raised in the Cleveland *Plain Dealer* series with a group representing its licensees."

In December, after the series of articles had appeared, Commissioner Selin wrote a letter to Brent Larkin, director of the editorial page of *The Plain Dealer*, in which he responded to the articles. "This reporting, some other recent incidents, and the Commission's prior concerns, have all prompted us to reexamine our medical licensing and enforcement program.

This reexamination is underway... [The] NRC is quite concerned about these incidents. When they occur, the NRC's practice is to learn as much as possible from the incident and to follow up with corrective regulatory actions with the objective of preventing recurrence. We also recognize an obligation in these cases to assure that patients and their physicians have access to radiation information. Your articles have indicated room for improvement in the way that we do both jobs."

Meanwhile, the ACNP/SNM joint government relations office is preparing material to present at the Senate and House hearings on the NRC's regulation of radioactive material licensees.

Joan Hiam
Managing Editor, *JNMT*

■ More States Turn to Licensure for Nuclear Medicine Technologists

TABLE 1. State of the States' Licensure Requirements for Nuclear Medicine Technologists

State	Licensure Required	Licensure Proposed
Alabama		x
Arkansas		x
California	x	
Delaware	x	
Florida	x	
Illinois	x	
Louisiana	x	
Maine	x	
Maryland	x	
Massachusetts	x	
Nebraska	x	
New Hamphsire		x
New Jersey	x	
New Mexico	x	
North Carolina		x
Pennsylvania	x	
Rhode Island		x
South Dakota		x
Texas		
Utah	x	
Vermont	x	
Virginia		x
Wyoming	x	

The table reflects each state's status as of 1992.
Source for data on Rhode Island, South Carolina, Vermont, and Virginia: American Society of Radiologic Technologists (ASRT).
Source for remainder of table data: SNM-TS Legislative Network (a body of the SNM-TS Government Relations Committee).

In the last few years, the topic of licensure has come under a renewed focus by state governments. While in 1990, only 7 states required state licensure for nuclear medicine technologists (*1*), by the end of 1992, 16 states had enacted state licensure requirements and another 7 states were considering licensure proposals (see Table 1). Thus, 46% of the states have licensure laws enacted or pending. If the trend of the last couple of years continues, most states will have state licensure requirements in place by the year 2000.

While the technologist community may be divided over whether the trend toward increased state licensure is a positive or negative trend, Sharon Surrel, CNMT, SNM–TS Government Relations Committee Chairperson pointed out an obvious inconsistency in the the states' approach to licensing up until now. She notes that while many states do not have any licensing requirements for nuclear medicine technologists, all states do have licensing requirements for morticians: Thus, from the states' perspective, you must be licensed to work on a dead body, but not necessarily on a live one.

All of the states with licensure requirements have a state examination, which technically is supposed to be taken by all nuclear medicine technologists practicing in that state. However, most of these states will accept successful completion of one or more substitute examinations (known as reciprocity), usually the NMTCB or the ARRT examination in lieu of taking the state examination.

However, a number of states place restrictions on the use of these examinations, such as California, which will accept the NMTCB or ARRT examinations, but the ARRT examination must have been taken within the last 5 years with a score of 70 or above to be acceptable in lieu of the technical portion of the state examination. In addition, all California applicants must take the radiation principles and state regulations portion of the examination. Other states, such as Hawaii, will allow the ARRT as a substitute only if it was taken prior to 1978 (*2*). Thus, although the states are moving toward greater conformity on professional credentialing requirements, there are still myriad conditions that vary from state to state.

The emerging patchwork quilt of state regulations can create headaches for technologists certified in a state with less stringent requirements who wish to move to a state with stricter licensure requirements. This may make technologists less willing to change jobs across state lines and if such a trend does evolve, there would be decreased technologist mobility among the states. On the other hand, a reluctance to move due to the necessity of taking new exams may be overcome by a steep enough pay differential.

Some technologists have expressed concern that a move toward state licensure will undermine the quality of technologists' training because the

states do not seem concerned about following up initial training with any continuing education. "Licensure often focuses on testing applicants for the initial license and is less concerned about the competence and performance of practitioners after the license is granted, although mandatory continuing education is required by many professions." (3) However, the hospitals themselves, which have always encouraged continuing education, are moving toward requiring continuing education as are the professional certifying organizations. Similarly, most hospitals already require their staff technologists to have passed a certification exam by one of the national professional certifying organizations, providing a counter balance to states with very minimal licensing requirements.

The emergence of more states with licensure requirements has also raised the issue of state versus federal power. While technologists might prefer one unified set of rules, individual states are showing no signs of any willingness to give up their power to regulate practices occurring within their borders. The Council of State Governments, in Lexington, Kentucky notes that the federal government may be making a push of its own to acquire regulatory powers over professions. "While the federal government continues to insist that occupational and professional regulation remains an activity that rightfully belongs to the states, it has passed several laws concerning occupations and professions that mandate states to respond in particular ways and that raise the question of whether regulatory responsibility will continue to be shifted to the federal level." (4)

Another path toward a form of central regulation may emerge as organizations such as the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO) look into the possibility of issuing their own regulations for licensure of medical professionals. Since the JCAHO already is deeply involved with oversight of hospitals, it is not surprising that it may seek to become further involved in setting the training and qualification requirements for medical professionals.

Joan Hiam
Managing Editor, *JNMT*

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2. Enacted licensure exam information: as of November 1991. Albuquerque, NM: American Society of Radiologic Technologists.
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4. *The book of the states 1990-1991.* Lexington, KY: Council of State Governments; 1990:465.

■ News Briefs

Nuclear Medicine Week: More Tales from Europe

Since publishing an account of European reaction to the first International Nuclear Medicine Week (NMW) (see *Technologist News*, December *JNMT*, p. 253), *Technologist News* has received more feedback on the event, this time from Britain. Peter Ell, MD, secretary of the British Nuclear Medicine Society (BNMS) and editor of the *European Journal of Nuclear Medicine*, reports that efforts to publicize NMW in Britain attracted a healthy amount of local press coverage.

All members of the BNMS and the BNMS Technology Group were polled as to which strategies were most successful in publicizng NMW and educating the public and medical personnel about nuclear medicine. Member response indicated that use of a NMW poster was the most effective way to publicize and educate people about nuclear medicine, while the least successful strategy was inviting members of hospitals' medical and nursing staffs to visit the nuclear medicine department.

The BNMS also conducted a survey of 200 commuters at Victoria train station in London to determine the level of public knowledge about nuclear medicine. The participants were asked two questions. The first question was if they had heard of any of the following widely available hospital tests: X-rays, ultrasound scan, CT scan, MRI scan, or nuclear medicine scan. Next, they were asked for their exact understanding of what nuclear medicine is.

In response to the first question, only 21% of the participants had heard of nuclear medicine, while 99% had heard of X-rays, 93% of ultrasound scans, 43% of CT scans, and 21% of MRI scans. There was also a gender knowledge difference; 25% of the women surveyed had heard of nuclear medicine scans, while only 18% of the men had heard of them.

In response to the second question, only 6% of the participants felt that they could explain nuclear medicine reasonably accurately. Dr. Ell noted some of the less enlightened responses to this question, which highlighted the public's ignorance. Respondents said that nuclear medicine is "bombarding viruses with nuclear particles," "research into people who work in the [nuclear power] industry," "treatment for people who are infected with radiation," and "to do with spearheads and plutonium—countries need nuclear deterrents." These "definitions" of nuclear medicine demonstrate that although nuclear medicine societies and nuclear medicine departments in hospitals have come a long way in publicizing the existence of nuclear medicine, there is still a lot more work to be done in educating the public as to both the existence and nature of nuclear medicine.

For those gearing up for this year's NMW, the dates will be October 3-9, 1993. Those desiring suggestions for this year's activities or with questions concerning NMW may contact Debbie Merten, CNMT, chairperson of the NMW Subcommittee, at (214) 879-3964 or Virginia Pappas, CAE at the Society's New York office.

Technologist Section Seeks Members for JRCNMT

The Academic Affairs Committee is seeking applications from Technologist Section members who would like to represent the Section as a member on the Joint Review Committee on

Nuclear Medicine Technology (JRCNMT).

The JRCNMT is composed of technologists and physicians from six professional organizations. It is involved with establishing and maintaining standards of appropriate quality for nuclear medicine technology programs and providing recognition for educational programs that meet or exceed the minimum standards set forth in the *Essentials*.

The Academic Affairs Committee must receive applications by June 1, 1993. The Committee will then recommend applicants they deem most qualified to the Technologist Section's Executive Committee. At the fall 1993 meeting, the Executive Committee will select four applicants from this pool; the president of the Technologist Section will then appoint a representative and an alternate, pending approval of the Executive Committee.

The member's term will begin January 1, 1994. The appointment will be for a four-year term. The member's duties include attending JRCNMT meetings (spring and fall), submitting a written report to the Technologist Section president after each JRCNMT meeting and submitting summaries to the Section's National Council of Delegates.

The member serves without pay but is reimbursed for expenses incurred for attending official JRCNMT meetings.

Applicants should submit a current curriculum vitae using the "Technologist Section Curriculum Vitae Form for Nominees for Elective Office" and a letter which demonstrates knowledge of the philosophy, functions, and duties of the JRCNMT, as well as indicating availability of time, willingness to serve, and availability for necessary travel. Applicants must hold current certification or registration as a nuclear medicine technologist. A statement of any potential conflict of interest must be submitted, but this does not preclude appointment.

Interested applicants should address all submissions to: Martha W. Pickett, CNMT, Nuclear Medicine Technology Department, University of Arkansas for Medical Sciences, 4301 W. Markham—Slot 714, Little Rock, AR 72205.

JNMT Reader Survey
It's Not Too Late to Cast Your Vote

Response to the JNMT 1992 Reader Survey has been good but we'd like to see even higher participation. So if you have not had a chance to respond yet, hunt up your December issue of *JNMT* and send in the survey form, which is bound into the back of the *Journal*. If you can't find your December issue, or the survey form is missing, call the SNM New York office (212) 889-0717, and we'll fax or mail you a copy of the survey form. The postage has been prepaid and the form is preaddressed, so all you need to donate is five minutes of your time and your opinion. JNMT editor Sue Weiss will tabulate the responses and should have results ready in time for the SNM Annual Meeting.

CAHEA to Restructure

Last October, the American Medical Association (AMA) proposed the establishment of a new accrediting agency for allied health education, which would assume the accreditation responsibilities currently undertaken by the AMA's Council on Allied Health Education and Accreditation (CAHEA). The AMA expects the new agency to be operational by late 1993.

According to the AMA's *Allied Health Education Newsletter*, "the proposed new agency would be an independent body in which the AMA would participate as one sponsor among many. It would be the product of deliberate planning by a broadly representative task force that CAHEA would charge with developing a specific proposal for review and comment by the collaborating organizations, the review committees which they sponsor, and the educational institutions which offer accredited programs."

The AMA notes that there has been a substantial growth in professionalism among the allied health professions since CAHEA was founded in 1977, and it feels that a new accrediting agency "should afford a broader base for both participation and leadership of the allied health professions."

To smooth the transition to the new accrediting agency, the AMA has agreed to provide professional staff support, office space, and overhead for the first three years of the new agency's existence.

CAHEA appointed a task force on restructuring last year, which is charged with drafting a proposal for the new agency. Members of the task force were appointed from review committees, the organizations that sponsor them, 2-year and 4-year allied health institutions, academic health centers, the Council on Medical Education, and CAHEA itself. Last November, the task force met for the first time and elected Marilyn Fay, MA, RTR as its chairperson. The task force decided that its charge provides "an opportunity to modify existing CAHEA policies and procedures, ...rather than simply to reorganize CAHEA under a new name and sponsorship."

The task force divided into subcommittees, which prepared reports on organization and structure, function, financing, and transition; these were presented at the task force's second meeting in January 1993. Next, the task force will disseminate its proposals to all the interested organizations and incorporate the organizations' responses into a revised proposal. Hearings on the revised proposal will be held in May at CAHEA's meeting with all of the interested allied health organizations.

Health Care Policy Coordinator Hired to Staff SNM Office

The Society of Nuclear Medicine has hired Sheryl S. Stern as health care policy coordinator, a new staff position created for the Office of Health Care Policy.

The Society established the office last year to represent the specialty of nuclear medicine in government efforts to reform health care delivery. The office will help document the effectiveness of nuclear medicine techniques, coordinate the development of quality standards and clinical practice policies, recommend cost-effective measures for medical care, and work with government and other organizations directing health care policy initiatives.

Ms. Stern will work as a part-time consultant to the Society, coordinating the activities of the Office of Health Care Policy. She was a planning associate with Beth Israel Medical Center in New York City and managed product planning and research for Maxum Health Corporation of Irving, Texas, a company providing diagnostic and therapeutic services to hospitals. Ms. Stern is an economics graduate of Emory University, Atlanta, Georgia. She has also earned a master's degree in business administration and a master's degree in health administration at Georgia State University in Atlanta.

Parting Shot from DOE's Watkins Could Sink FFTF Reactor

Department of Energy (DOE) Secretary James D. Watkins gave orders on January 11 to shut down the Fast Flux Test Facility (FFTF) at the Hanford Reservation in Washington State. The secretary issued the announcement in a letter nine days before leaving office, infuriating members of Congress and leaving the ultimate decision to his replacement in Clinton's administration.

Lawmakers from the state of Washington say the departing secretary's pronouncement is a "direct violation" of the Energy Policy Act of 1992, which includes a congressional mandate to keep the FFTF in operational status during the 1993 fiscal year. The DOE slated the research reactor for decommissioning over two years ago but Congress has intervened to save the facility, most recently with directions that the secretary of the DOE "aggressively pursue" long-term missions for FFTF.

In a letter to the new secretary of the DOE, Hazel R. O'Leary, the Washington lawmakers ask for a reversal of the decision to shut down FFTF, saying that the future of the FFTF "is a matter that should be addressed by the incoming Administration in consultation with the Congress and not the Bush Administration as it departs."

Supporters say the FFTF could serve a variety of important missions, including production of radioisotopes such as rhenium-186, strontium-89, and actinium-227 for nuclear medicine and plutonium-238 to power spacecraft.

Instructions given by Secretary Watkins would put the FFTF in "cold standby" condition, which entails removal of both fuel and coolant. Hanford has kept the reactor idle but operational since April 1992. The lawmakers say that extracting sodium coolant might make it technologically and financially impossible to restart the reactor. Replacing the sodium coolant alone could cost well over $100 million.

Hanford workers are waiting for further orders from Secretary O'Leary.