

Human Resource Survey of Nuclear Medicine Technologists—1984

Prepared by
THE HUMAN RESOURCE
TASK FORCE
of the Technologist Section,
The Society of Nuclear Medicine

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The Technologist Section of The Society of Nuclear Medicine (SNM) recognized the need for accurate human resource data in nuclear medicine technology, not only to support legislative activities, but to provide current information in such important areas as staffing patterns, salaries, education, certification, and the types and numbers of procedures performed.

Knowledge about the nuclear medicine technologist community in the United States has been inadequate to formulate current and future needs. The educational levels, for example, of practicing technologists have been impossible to assess (i.e., formal education versus on-the-job training) because of a lack of an existing substantial data base. The government has relied primarily on limited data derived from three principal sources: (a) unpublished survey data provided by the American Hospital Association; (b) *Survey of Nuclear Medicine Equipment Manufacturers Performance and Services*, which was prepared by the American College of Nuclear Physicians in 1981; and (c) three nuclear medicine technology credentialing organizations (NMTCB, ARRT, and ASCP). A definitive study of the nuclear medicine technologist universe was needed to provide a comprehensive resource.

With the passage of the Consumer-Patient Radiation Health and Safety Act of 1981 (Randolph bill), which had been aimed at licensing health care workers utilizing ionizing radiation, the SNM Technologist Section decided in 1982 to undertake the Human Resource Survey. During the planning stages, the USPHS Bureau of Health Professions, which had been responsible for implementing the Randolph bill, approached the Technologist Section for similar data. To support the Section's effort, the Bureau contributed approximately one-third toward the projected expenses. This seed money was to be used for the purpose of developing a mailing list of all U.S. nuclear medicine facilities, which would serve as a basis for the survey. In February 1982, the Human Resource Survey was launched by a specially appointed task force. It was decided that two separate surveys would be prepared, one geared to individuals and the other to institutions, in order to generate the necessary demographics about nuclear medicine technologists and the facilities in which they work.

The project was organized into three phases. Phase 1 entailed compiling a mailing list of all facilities licensed to perform nuclear medicine procedures from the Nuclear Regulatory Commission and its agreement states. The facilities included hospitals, outpatient clinics, mobile units, and medical laboratories. A mailing was sent to the nuclear medicine departments or services in these facilities to identify the appropriate con-

tact people who should receive the institutional mailing—either the chief technologist, administrative technologist, or physician director. The supervisory personnel were in turn asked to identify the technologists in their departments to whom they should distribute the individual surveys.

Phase 2 involved the actual design and implementation of the survey questionnaires. After completing the questionnaires, a test mailing was sent to a random sample of 5% of the total list (222 sites). The final, revised questionnaires were mailed to 4,425 facilities in October 1984, with a second mailing to nonrespondents in January 1985. A total response rate of 61% had been achieved.

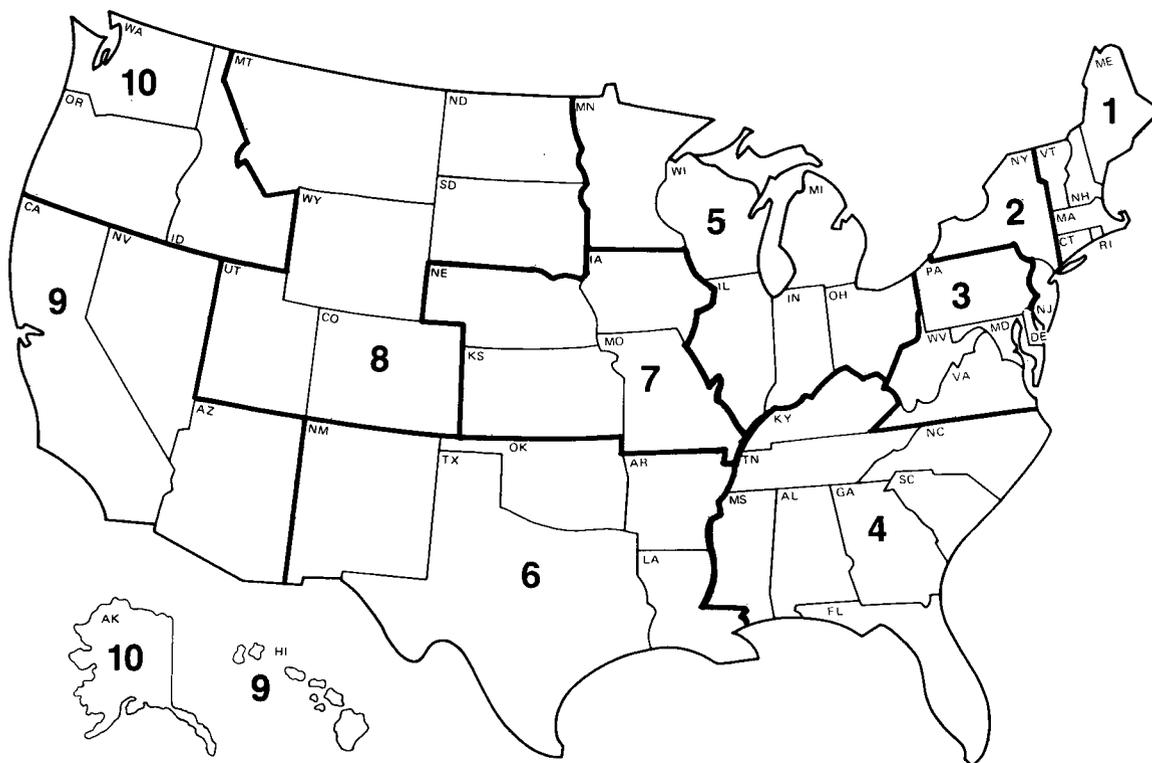
Phase 3 of the project entailed processing the results to the questionnaires, utilizing standard analysis techniques. Each survey was edited and coded, and the individual surveys were cross-tabulated with those from the institutions for verification of accuracy. The final document, which follows this introduction, was completed in July 1985. A more detailed perspective, including state-by-state data, will be published as a

separate document in late 1985.

The survey process developed by the task force is one that can be duplicated in future years to obtain updated information on new trends. This initial survey explored the current status of nuclear medicine technology manpower. Forthcoming surveys will address issues that will affect the practice of the specialty, such as the prospective payment system. It is hoped that these surveys will serve as a comprehensive resource to all parties who are interested in the current and future direction of nuclear medicine technology.

I express my sincere appreciation to some of the individuals who provided their invaluable assistance in developing this study: Mr. B. Jerald McClendon, who served as a consultant during preparation of the questionnaires and data analysis; Ms. Virginia Pappas and Lori Carlin of the Society staff, who worked long hours to complete the study; and Mr. Ray Exten, the task force member who was responsible for the computer programming and data analysis.

—Michael L. Cianci
Chairman



Regional boundaries used for the tables in the Human Resource Survey.
(Source: U.S. Department of Health and Human Services.)

Section 1

Profile of Nuclear Medicine Technologists—1984

According to survey results, there are approximately 11,500 nuclear medicine technologists who are actively practicing in the United States. This figure accounts for those individuals in the work force and not for those who may have left the field or retired. Highlights of the results are listed below, with the more extensive data illustrated on subsequent pages.

- 89.5% are white with an average age of 35
- 57.5% are female
- 73.4% work full time in nuclear medicine only
- 19.1% work full time in nuclear medicine and other modalities
- 6.5% work part time in nuclear medicine only
- 56.3% have a formal nuclear medicine education
- 42.7% have on-the-job training
- 76.2% are certified or licensed

The average technologist has:

- 8 years' total nuclear medicine experience
- 2 employers during this 8-year period
- 6 years with the current employer
- 2 years with the previous employer

TABLE 1. Profile of Nuclear Medicine Technologists by Region

Region	% Female	Average Age	% White	% Employed Full Time in Nuclear Medicine	No. Yrs. in Nuclear Medicine	% OJT* in Nuclear Medicine	% Certified or Licensed
U.S.	57.5	34.7	89.5	73.4	8.2	42.7	76.2
1	65.9	33.7	97.3	75.1	8.1	52.7	79.5
2	54.0	34.7	79.4	82.5	7.9	40.1	77.7
3	66.0	33.2	93.3	80.4	8.1	42.4	76.5
4	57.1	34.5	90.3	69.4	8.0	44.5	72.3
5	58.8	34.5	92.4	72.8	8.0	41.2	83.8
6	55.9	34.5	95.7	67.8	7.9	33.4	80.2
7	50.3	35.5	84.7	64.6	8.1	45.0	68.6
8	59.3	35.8	98.3	62.4	8.3	43.7	81.0
9	50.0	36.3	94.0	79.6	7.9	52.5	75.3
10	48.0	37.5	77.1	72.1	9.5	41.6	82.9

* OJT = on-the-job training.