## **NM**/ LETTERS TO THE EDITOR

## NUCLEAR MEDICINE TRAINING IN MEDICAL SCHOOLS

At the Washington meeting of the Society of Nuclear Medicine in July 1970 the subcommittee on Medical Student Education in Nuclear Medicine reviewed a questionnaire which had been sent to the heads of medical-school nuclear medicine divisions. It was determined that the teaching time of the schools devoted to nuclear medicine varied widely (Table 1). Some schools utilized block times of lectures and clinical instruction, while others taught through electives and integrated courses. A few schools had no organized teaching in either core curriculum or electives. The committee concluded that with the present trend towards a smaller core curriculum system with more electives, the chiefs of service would achieve optimal results through the development of strong elective programs and the increase of participation in integrated programs.

The committee also discussed and evaluated the advantages of teaching aids such as narrated slide sets, movies, and video tapes. The consensus was that these teaching aids could prove to be very useful

IN MEDICAL SCHOOLS		
Schools reporting	49	
Lectures and electives	25	(50%)
Lectures alone	7	(14%)
Electives alone	11	(22%)

in bringing nuclear medicine to medical students. It was proposed that the schools already experienced in the production of such teaching aids join in a group effort to make a series of slide sets and video tapes. A more detailed report will be presented at the 1971 meeting of the Society.

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## EXPOSURE RATE AT THE SURFACE OF SYRINGES CONTAINING RADIOACTIVE MATERIAL

The article "The question of radiation exposure to the hand from handling  $^{99m}$ Tc" by C. M. Neil in the *Journal of Nuclear Medicine* (1) has called attention

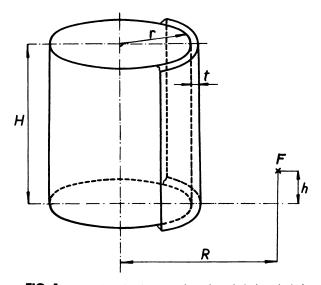


FIG. 1. Illustration showing meaning of symbols in calculation of exposure rate.

to the acute problem of the radiation safety in medical radioisotope laboratories. A knowledge of the exposure at the surface of syringes containing radioactive solutions lets one assess the probable magnitude of dose to the fingers of persons handling the syringes. In addition to the value of the exposure rate at the surface of a hypodermic syringe found by Neil, McEwan (2) determined this parameter experimentally for the .10-ml syringe containing radioactive materials in 3-5-ml volumes of the solution.

The aim of this letter is to show that the surface exposure rate can easily be determined theoretically for any syringe and any radionuclide considered. Of course the calculation based on the assumption of a point source, such as that made by Neil, should be entirely avoided because the result may be quite misleading.

The volume of the syringe in which the radioactive solution is uniformly distributed has the form of a right cylinder (Fig. 1). If the specific activity of the solution is  $A_s$  mCi/cm<sup>3</sup>, the exposure rate at a