

Each patient received a comprehensive physical examination, gamma-ray and radon breath measurements of body radioactivity, a measurement of bone mineral mass for evidence of accelerated bone resorption, and an examination of chromosomes from peripheral blood leukocytes. The case load was increased during this period from two persons per week to six per week. During this year an additional 83 cases were examined at the satellite laboratory at MIT.

The effort to locate and maintain contact with potential new radium cases was assigned to an entirely new group within the CHR, the medical assistants. Headed by B.R. Patten, this group had the responsibility of finding previously unmeasured subjects and encouraging them to come to Argonne for radium measurements. Besides paying all patient expenses, a complete report of each examination, with an analysis of the risk associated with the measured radium content, was sent to the subject's designated private physician, and each individual was advised that Argonne would pay for a visit to that physician so that he or she could transmit the results to the subject. In addition, a participation allowance was provided, and reimbursement for lost pay was available. Further, for those who wished, the expenses of a traveling companion were paid.

Visiting patients were housed in a local motel, where they were met by one of the medical assistants to ensure that they were comfortable. All procedures at Argonne were explained to the patients in advance, and they were always escorted to the various locations where the examinations and measurements were performed. A booklet about the CHR, with photographs and descriptions of the various procedures, was mailed to the participants before they visited Argonne.

The medical assistants maintained contact with each patient through telephone calls and holiday greetings to reflect the Argonne staff's concern for each subject's well-being and to learn about any change in health status or mailing address. Schedules were subsequently developed to determine when each patient would be invited to return to Argonne for additional measurements. The schedule for these reexaminations depended on the subjects' measured body contents; those with the highest radium levels were brought back with the greatest frequency.

Many individuals exposed to radium had to be convinced of the value of a trip to Argonne. They were increasing in age, with the usual infirmities associated with aging, and most had experienced no effects from their radium exposures and thus saw no need to participate in the study. In many such cases the medical assistants performed above and beyond expectations, as they convinced the subjects that learning as much as possible about the effects (or