

# **PROGRAM OF INDIVIDUAL MONITORING OF THE INTERNAL CONTAMINATION AND THEIR IMPLEMENTATION IN THE REPUBLIC THE CUBA**

**Gladys M. López Bejerano, Eduardo Capote Ferrera, Isis M. Fernández Gómez, Nancy Acosta Rodríguez, Jorge A. Carrazana González, Rodolfo Cruz Suárez.**

*Center of Protection and Hygiene of the Radiations  
Calle 20 No. 4143 e/ 41 y 47. Playa. Ciudad de la Habana  
e-mail: gladys@cphr.edu.cu*

## **Abstract**

In different Cuban institutions linked fundamentally to the medical practice of nuclear medicine and the investigations, it is worked with sources open of ionizing radiations, that which makes indispensable the existence of a system of radiological surveillance that includes the control radiological individual of the received doses as a result of the occupational, such exhibition that is guaranteed that the exhibition of the Hard-working Exposed Ocupacionalmente, stay inside the recommended limits, in the International Basic Norms of Protection against the Ionizing radiations and safe-deposit of the Fuentes of Radiation (NBIS) and in turn adopted in the Norma Cuban. From the year 1986 in the Center of Protection and Hygiene of the Radiations is carried out in way centralized this control; but with the inconvenience of not being able to carry out the same one to workers from the domestic interior when not being feasible the transfer of these toward its headquarters, reason why the doses were ignored received in an important number of these. In and of itself the Laboratory of Internal Contamination of this institution in these years has developed managed works to define firstly, for each institution, the program of monitoring of the internal contamination of its workers using for it the methodology recommended by the OIEA where the potential doses are evaluated that for incorporation these they receive and whose results suggested the introduction of a program of individual monitoring as behavior to continue in most of the institutions. In correspondence with it was designed it and it established a program that it included the study of feasibility of the existent equipment in the institutions to carry out the monitoring of the internal contamination using technical of measuring in vivo and in vitro, as it corresponds, their calibration, the establishment of procedures that respond to the requirements of a System of Quality for the Norma ISO/IEC 17025 and methodological guides to carry out the measuring, the personnel's training in charge of the same ones and the later evaluation of the doses. In the work the obtained results are presented with the installation of this program, which has facilitated so much to the hospital institutions as to the organ National Regulator to have a tool for the evaluation of the requirements of Radiological Protection settled down in the country and to have the results of the same one at one time briefer, being favored this way the adoption of having measured should the need arise.

***KEYWORDS: Exposed Ocupacionalmente, Radiological Protection, Internal Contamination.***