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Strengthening Radiation Protection of Workers –Twenty Years of Progress
and the Way Forward**

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Participation of Latin American Nuclear Medicine Centres in a strategy to support individual on-site monitoring of internal exposure to I-131

The Internal Dosimetry Group of REPROLAM (Latin American and Caribbean Network for the Optimization of Occupational Radiation Protection), framed in the RLA 9085 IAEA project for the 2020-2022 period, devised a strategy for the on-site control of internal exposure to I-131 in nuclear medicine Centres (NMCs) to be implemented by end users, with the objective of bringing awareness to the participants about the need to implement a surveillance program of the internal exposition associated to NCMs workers who handle volatile solutions of I-131 on a routinely basis. The basis of that objective is the fact significant amounts of I-131 are handled in NMCs and its occupational intake is not properly monitored most of the times. This strategy included a virtual training and an interactive guide. Participants were provided with a set of instructions to allow the responsible physician, nuclear medicine technician, medical physicist or other suitable professional, to apply the available detection systems in their centre in order to investigate if the potential intake of I-131 will result in an effective committed dose ≥ 1 mSv / year for workers. This set of instructions was presented as a guidance. It was also proposed to the NMCs the possibility to participate in a pilot plan in order to apply the guidance and to know the magnitude order of the dose for internal exposure to I-131 of occupationally exposed workers. This support plan was developed by a committee of the Internal Dosimetry Group and it includes: advisory for the calibration of gamma cameras and I-131 detector probes, assistance for the implementation of the routine monitoring by the NMCs staff and a follow-up tool to assess the routine monitoring results. Great interest was proven from the NMCs to participate on this pilot plan, and currently, there are around 80 NMCs enrolled from Argentina, Bolivia, Brazil, Chili, Colombia, Costa Rica, Cuba, Ecuador, Honduras, Mexico, Nicaragua, Paraguay, Peru, Uruguay, Venezuela and Spain. Finally, this paper presents the perspectives and progress of the proposed strategy, applied within a regional scope.

KEYWORDS: RLA 9085 IAEA project, individual monitoring, internal exposure, I-131.

References:

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