

Individual monitoring of exposed workers - Performance indicators

P. Askounis, G. Kyranos, C. Kyrgiakou, A. Kyriakidou, E. Papadomarkaki, and E. Carinou.

Greek Atomic Energy Commission (EEAE), P.O. Box 60092, Agia Paraskevi, Athens, Greece

Introduction

The Personal Dosimetry Department of Greek Atomic Energy Commission (EEAE) coordinates the individual monitoring of exposed workers in Greece since 1991 and maintains the National Dose Registry (NDR) containing data since 1964.

Over the last twenty years, the increasing use of ionizing radiation in medical practices has led to a rapid increase in the number of exposed workers in the medical sector.

Additionally, during the past two decades, professionals have made significant efforts in the field of optimization for occupational radiation protection, including the application of safe practices and work methods, training of the exposed workers, use of radiation protection means, and finally the strengthening and promotion of all aspects of safety culture.

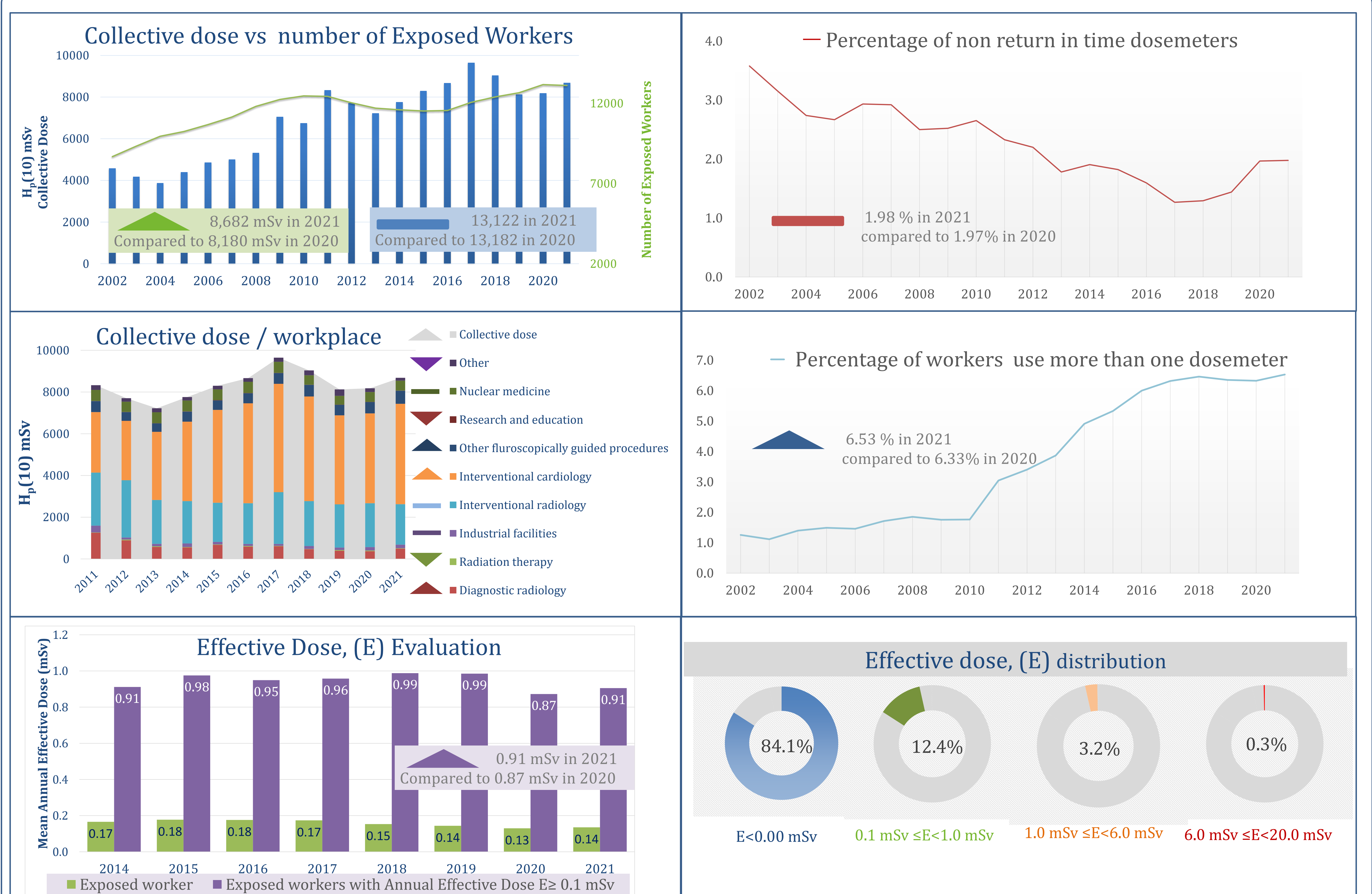
Materials and Methods

A big challenge in this framework is the evaluation of the performance of the occupational radiation protection system by using specific, measurable and quantitative values. Within a national project for raising awareness related with the use of ionizing radiation, EEAE established a set of such performance indicators making use of the data registered in NDR.

Specific parts of the NDR database were properly combined and used to allow the calculation of measurable indicators over the years. These indicators include, among others: Collective dose, mean average dose, percentage of non-returned dosimeters, number of exposed workers with doses above specific values, number of workers who use more than one dosimeter.

Moreover, a dashboard displays key performance indicators in interactive charts and graphs, allowing for quick, organized review and analysis.

Performance Indicators Dashboard



Conclusion

The trends of these indicators were analyzed for the various professional and work categories as well as the conclusions that can be drawn by the EEAE on the effectiveness of the regulatory work and the areas for improvement.

Key performance indicators may be used to measure and improve performance of a protection system, and track the progress in fulfilling regulatory organisation vision and achieving its long-term goals.