

# Working Group on Interventional Cardiology (WGIC)



Cardiac Catheterization Lab, San Carlos Hospital, Madrid

## Mandate of the WGIC

- To draw an overview picture of the situation concerning occupational exposures and radiation protection of staff in Interventional Cardiology (cardiologists, electro physiologists, paediatric cardiologists and other staff members) all over the world.
- To identify both good practices and shortcomings and define actions to be implemented for assisting regulatory bodies, medical physicists, medical staff, technician and nurses, dosimetry service providers and X ray machine providers, in improving occupational radiation protection.
- To propose recommendations for harmonising monitoring procedures.
- To set up a system for regularly collecting occupational doses for these individuals and for dissemination of this information.



## **ISEMIR Working Group on Interventional Cardiology (WGIC)**

Ariel Duran, Abraham Mundiyanickal, Madan Rehani, Donald Miller, Eliseo Vañó, Renato Padovani, Christian Lefaire, John Le Heron, Sim Kui Hian

### **ISEMIR-IC: An international database**

ISEMIR-IC is an international database that is intended as a tool for interventional cardiology (IC) facilities to use in their implementation of optimization of occupational radiation protection. It has been developed through the activities of WGIC (see WGIC Surveys below). The ISEMIR-IC database is being developed in stages, as resources permit:

- Stage 1. Data entry on doses, workload, radiation protection training and radiation protection practice for IC personnel in an IC facility;
- Stage 2. Statistical analysis, benchmarking and reporting tools, and improved data entry.

IC facilities from all around the world need to contribute their data to the database to provide the basis for the analysis and benchmarking tools.

Stage 1 is now functional and **IC facilities are invited to participate in the ISEMIR-IC database.**

Link to access ISEMIR-IC: <http://nucleus.iaea.org/isemir>

Link to [ISEMIR-IC User's Guide](#):

### **Recommendations on occupational radiation protection in interventional cardiology**

The WGIC has produced a summary and an extended set of recommendations on occupational radiation protection in interventional cardiology. These have been endorsed by the Asian Pacific Society of Interventional Cardiology (APSIC), the European Association of Percutaneous Cardiovascular Interventions (EAPCI), the Latin American Society of Interventional Cardiology (SOLACI), and the Society for Cardiovascular Angiography and Interventions (SCAI). The recommendations have been published by the Journal of Catheterization and Cardiovascular Interventions, 81:562–567 (2013) for the summary recommendations, and 82:29–42 (2013) for the extended recommendations.

[2012 Recommendations with respect to occupational doses to the lens of the eye in Interventional Cardiology](#)

### **WGIC Surveys:**

#### **1. 2009 Survey on Occupational Exposure in Interventional Cardiology**

In 2009 the WGIC performed a survey to gain insight into occupational radiation protection in IC around the world, including gathering information on occupational exposures in IC. A summary of the report survey is available below for download.

[A summary of the 2009 survey on occupational exposure in interventional cardiology](#) [PDF for download]

## **2. 2010-2011 Pilot Survey on Obtaining Occupational Exposure Data in Interventional Cardiology**

One of the conclusions from the 2009 survey was that the most likely way to obtain useful worldwide data on occupational exposures in IC was to obtain the information directly from the IC facilities, as this would allow the identification of occupations and functions within IC, workloads, and personal doses.

The WGIC conducted a pilot survey over the period 2010 – 2011 to test the feasibility of obtaining occupational dose data directly from IC facilities with a view to using this approach to develop an international database for improving the implementation of optimization of occupational radiation protection. The survey concluded cautiously that such an approach was viable and as a result the development of the ISEMIR IC database commenced in 2012 (see above).

[A summary of the Pilot survey on obtaining occupational exposure data in interventional cardiology](#) [PDF for download]

[Full report of the Pilot survey on obtaining occupational exposure data in interventional cardiology](#) [PDF for download]