IRPA Task Group on the Impact of the Implementation of the Eye Dose Limits

Questionnaire

April 2015

This questionnaire is distributed to all the IRPA ASs with the objective to collect and report the evaluation of the IRPA community about: the best applied methods for monitoring dose to the lens of the eye; the methods of protection and the ongoing path toward the implementation, at the legislative level, in the different countries. At the same time this is an opportunity to have the view of the professionals of the IRPA ASs about wider issues, including the issue of tissue reactions. In the compilation of the answers, please state specifically the scope to which you refer: medical applications (including radiology, interventional radiology and cardiology, nuclear medicine, etc.); nuclear applications and industrial applications in general.

Topic 1 Implications for Dosimetry:
This topic concerns the implications for monitoring and assessing dose to the lens of the eye and the interpretation of the results.

Q1. Since there is already a requirement to assess doses to the eye, what is/are the current best method(s) in use for the measurement of Hp(3)? Consider and specify in terms of the location, the types of dosimeters and the use of correction factors.

Q2. What systems under consideration or further development are you aware of or are you using for improved measurement of Hp(3)? Please consider and specify the different dosimetry methods: from the use of double dosimetry (over-apron at neck and under-apron at chest) to the use of a single collar dosimeter, outside apron, to obtain an indication of both eye lens and body doses, to the use of a supplementary dosimeter placed in a position adjacent to the eye. Consider both passive and active dosimeters. Provide cost implications where possible.

Q3. Are these measurement methods dependent (or likely to be dependent) on the level of the dose being measured on the type of work or on any other conditions?
Q4. What methods will be used to assess potential doses to the eye lens and to identify staff members who are likely to require monitoring for eye dose?

Q5. Are you aware of any pilot study in progress or already finished? Please specify details or references and highlight the changes since the last 2 years.

Q6. Are there any implications for dose recording, including possible considerations for itinerant workers ("outside workers" - i.e. people who work at more than one location)?

Q7. Are there any problems foreseen in achieving compliance by wearing eye dosimeters and if so, is there any information about strategies that might be used to overcome these problems?

Q8. Are there experiences in the evaluation of dose to the lens of the eye, in relation to possible contamination?

Topic 2 Implications for Methods of Protection:
This topic concerns the implications for methods (e.g., procedures or the design phase of equipment, facilities, and protective equipment) used to reduce dose to the eye, in the context of optimization of protection.

Q9. What procedures and currently available protective equipment are used for reduction of the dose to the eye? Indicate also any problem experienced and provide cost implications if possible.
Q10. What procedures and equipment might be used in the future for reduction of the dose to the eye? Are you aware of any study in progress to evaluate the effectiveness of the protection?

Q11. What methods are used to ensure that the use of protective equipment is optimized?

Q12. What specific training needs are already implemented or are foreseen in the near future related to the new limits and what are the direct implications?

Topic 3 Wider Implications of Implementing the Revised Limit:
This topic aims to identify any direct or indirect impacts on current practice, which would result from the implementation of the revised dose limit.

Q13. Are there any short-term implications before the satisfactory implementation of revised dosimetry and methods of protection (as in those topics described above)?

Q14. Are there any potential long term issues which may have an impact on working activities on a more permanent basis?

Q15. Are there any implemented or foreseen changes in the Health surveillance of the workers? Specify costs estimates, if possible.
Q16. Are there any circumstances in which you foresee that the introduction of new limits for the workers might lead to more claims for compensation?

Q17. What is the issue to be considered on the exposures for the lens of the eye for the patients in medicine and for the public?

Q18. Are there any additional matters regarding the change of dose limit that you wish to bring to the attention of the Task Group?

Topic 4 Legislative and other general aspects.

Q19. Are there in your country, guidelines or documents under preparation, addressing eye lens monitoring related to the new dose limit for workers?

Q20. Does your Association have an involvement with governmental or regulatory advisory bodies regarding consultation for a legislation, at national level, about radiation protection?

Q21. What is the progress on the ongoing path of the legislative process with regard to the new limits for the lens of the eye in your country?
Q22. Are you analyzing and taking into consideration the wider issue of tissue reactions and in particular the case of circulatory disease because of recent evidence of higher incidences of injury occurring at lower doses than previously reported?

These views of the ........................................... (Associated Society)

have been compiled by .................................................. (Name)

................................................................. (Role within the Society)

and represent the collective views of the Society

Dated .............................................................