

Radiological Protection and Public Health: crossbreeding

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Abstract

This paper summarizes the scope of activities, ongoing experience and current results of the Expert Group on the Public Health Perspective in Radiological Protection (EGPH) of the Committee of Radiological Protection and Public Health, OECD Nuclear Energy Agency. While the prime and general task of the EGP group is looking at how the public health and radiation protection can better take an advantage of their respective perspectives, the following four areas have been explored in detail: a) exposure to radon; b) justification of medical exposures; c) public health judgement and decision making based on new scientific evidence; and d) management of individual differences. In most of these areas, a targeted telephone survey on public policies in selected countries was used for collecting information from stakeholders (public, consumers groups, public health and radiation protection regulators, governmental bodies, medical practitioners, patients, scientific communities, NGOs, etc.). The presented paper also highlights key issues of collected information and summarises existing approaches and policies.

The case study on exposure to radon collects national information on approaches to the management of domestic radon risks, focusing on the integration of radiation protection and public health aspects (quality of dwellings, overall quality of indoor air, perception of radon levels, position of radon risk in the pool of other risks...).

In the case of justification of medical exposures, the Group studies the applications of the justification principle in opportunistic screenings (responsibilities, management of the situation, risk assessment...).

The precautionary principle and its impact on policy judgement in the light of significant scientific uncertainties can have a large influence on radiological-protection decision making. The case study on public health judgement and decision making based on new scientific evidence is exploring how these uncertainties and lack of scientific evidence are affecting regulatory and policy judgements.

The case study on management of individual differences is exploring how these differences are taken into account when identifying, assessing and managing public health risks in inherently inhomogeneous populations. It looks at different types of rationale used to manage public health risks (e.g. radiation and chemical risks, approval of new pharmaceuticals, management of various toxic agents) focusing on how individual differences (like genetic susceptibilities, age and gender) are taken into account.

KEYWORDS: *public health, radiological protection, radon, opportunistic screening, precautionary principle, individual radiosensitivity*

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