Strategies to improve the data collection for UNSCEAR surveys

A report from UNSCEAR’s ad hoc working group on sources and exposure

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Background

The Committee has collected and analysed data relating to the levels and trends of exposure of the public, workers and patients.

The quality and credibility of the Committee’s evaluations depend to a large degree on the coverage, representativeness and quality of the data collected.

At its 57th session in 2010, the Committee approved a strategy paper on “Improving data collection, analysis and dissemination”.

At its 66th session in 2019, the Committee established an ad hoc working group to support the work on improving data collection.

Key findings and recommendations of the ad hoc working group are summarised here.
Feedback survey among UNSCEAR NCPs (medical and occupational exposure)

- Following the experience and challenges in collecting data on medical and occupational exposure, the ad hoc working group sought feedback from NCPs to understand the difficulties or challenges in data collection and submission for UNSCEAR surveys.

- Responses were received from 51 countries representing a return rate of 58%.

- Many UNSCEAR NCPs wish to have
  - regular meetings or webinars to better understand the data collection and evaluation process, and to share experiences between NCPs;
  - annual online training for new NCPs or refresher for existing NCPs.
Feedback survey among UNSCEAR NCPs (medical and occupational exposure)

- Comments from NCPs on data submission process:
  - Data categories used were different to those collected in their country;
  - Ensuring adequate definitions of the categories used;
  - Data requested were too detailed and not flexible enough.

- For the challenges of countries not collecting the data:
  - A lack of available resources to obtain the required data including difficulties due to different jurisdictions for the range of data.

- For suggestions to improve participation in the surveys:
  - Provide a document setting out the purposes and the benefits of the survey to them not just to UNSCEAR to help secure the resources required for completion.
Recommendations

- Clarifying project scope and road map early in the process through development of a clear project plan for each survey
- Identification of required data and analysis methods in advance
- Establishing clear quality criteria and detailed procedures and responsibilities for data quality control
- Building on the existing robust procedure for literature review and encouraging increased solicitation and review of non-English language reports and publications
- Optimizing the UNSCEAR online platform and survey questionnaires to maximize participation from United Nations Member States of different capacity and availability for data collection
Recommendations

- Maintaining frequent and regular outreach to and coordination with NCPs, promoting more direct interaction with UNSCEAR NCPs to resolve issues on data collection, verification/checking, interpretation and extrapolation.

- Improving the geographic coverage of data by conducting pre-surveys of data availability in the top five most populous countries in each region.

- Continuing to develop and strengthen formal and long-term collaboration between the Committee and international and intergovernmental agencies on data collection to reduce duplication.

- UNSCEAR’s outreach strategy should highlight the importance of the surveys in providing a scientific up-to-date basis and supporting the radiation protection system worldwide.
Special recommendations for public exposure

- Improve questionnaire on natural radiation exposure, prepare a manual to emphasize the essential data with consideration on uncertainties
- Collaborate with IAEA to collect data on discharges via DIRATA
- Encourage data submission on other fuel cycle facilities and facilities other than NFC
- Specific data for contaminated nuclear test sites and/or consumer products
- Consider and accept official reports in addition to publications in scientific literature
- Target specific countries significant for exposure evaluation.
We wish to hear more from all UNSCEAR NCPs.