Perspectives from NRDC on Communication of Low-

Dose Radiation Risks



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Developing a Long-Term Strategy for Low-Dose Radiation Research in the United Stated

Radiation Risk Communication Challenges

No direct sensorial relationship with radiation

Use of the scientific language to communicate

Images and narratives of Hiroshima-Nagasaki and the Cold War

- Debate among experts on the effects of low levels of radiation, LNT and issues surrounding nuclear energy
- Source: Jacques Lochard "Lessons learned in communication from the Fukushima accident" (2015).

Comments on study objectives

- NRDC believes that recent epidemiologic studies support the continued use of the LNT model for radiation protection. LNT is a protective standard that we need to keep in place.
- In my view, the experiments, modeling and simulation that may be a part of the long-term research agenda recommended by this committee would only reinforce the core principle of LNT that we rely on today.
- But like in many areas of public health policy, we need to expand our understanding of low-dose radiation risk to more vulnerable groups.
- NRDC urges the committee not to quantify monetary and health-related impacts of any hypothetical changes to radiation protection standards; where there's a case for more science to be done, map out that research and once these findings are in hand, assess any implications for low-dose regulations.

Risk Communication

- Traditional notion of "risk communication"
 - Risks of concern have been clearly defined by the scientific community and the problem simply remains in communicating them "rightly" to the population
- Risks cannot be properly defined without understanding the "real" concern of the population.
- Update in risk communication:
 - participatory risk assessment where risks are debated by multiple stakeholders and actors including counter-or independent experts and third parties such as NGOs, and
 - risk assessment defined collectively rather than decided singlehandedly by policymakers – the authorities and their affiliated experts.
- Source: Shirabe, Masashi, Christine Fassert, and Reiko Hasegawa. "From 'Risk Communication' to Participatory Radiation Risk Assessment." (2018).

Communicating the risk of radiation

- Engaging affected people in the characterization of their individual radiological situations
- Listening and understanding concerns expressed by affected people
- Engaging stakeholders in radiation measurements
- Proceeding step by step starting from source to effects through exposure pathways and the exposure conditions
- Using as much as possible common language and narratives
- Building trust
- Source: Jacques Lochard "Lessons learned in communication from the Fukushima accident" (2015).

Conclusion

Act in accordance with the ethics of radiological protection

 Be transparent by openly sharing all information and publishing studies in an open literature

Find effective means of communicating scientific results

 Include all stakeholders in the process, deliberate and decide together

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