

Presentation to the
**Committee on Developing a Long-Term
Strategy for Low-Dose Radiation Research in
the United States**
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DISCLAIMER

On July 31, 2021, I retired from the US NRC and from federal service.

The opinions expressed today are mine and do not represent the official NRC position

My presentation is based on the insights from 23 years of low dose risk communication at the NRC and 8 years in private industry

Questions and Answers

- ▶ Why is communication of risks at low doses of radiation challenging?
 - ▶ There isn't a clear message
 - ▶ Perception that we are speaking out of both sides of our mouths at the same time
- ▶ How can risk perception inform risk communication?
 - ▶ Public tends to greatly overestimate the risks; need to adapt risk communications accordingly
- ▶ How should the publics' processing of risk information influence the design of the low dose radiation research program
 - ▶ Low dose research program must be open and transparent
 - ▶ Limitations must be freely and openly acknowledged and discussed

Questions and Answers



- ▶ What advice do you have for the committee on its task?
 - ▶ Keep an open mind
 - ▶ Keep smiling

Questions and Answers

Insights from my time at the NRC

- ▶ Who does the NRC talk to?
 - ▶ Everyone- public, media, licensees, other federal agencies, state and local authorities, local, state, national level politicos, international organizations, standards committees, professional societies, media in all its forms, NGOs, and etc.
- ▶ How do you/your organization engage with these audiences?
 - ▶ Depends upon the audiences; can be open house events or public meetings; can be one-on-one meetings
- ▶ What are some common concerns that these audiences have in relation to low dose radiation and how do these differ ?
 - ▶ Overarching concerns are trust and clarity
- ▶ From your perspective is there a difference on how the scientific community perceives risks compared to members of the public. If yes, how and why?
 - ▶ Scientific community has the tools to better understand risk but like members of the public they can also be agenda driven

Questions and Answers

Insights from my time at the NRC

- ▶ What are your challenges with communicating low-dose risks and what information do you need to better communicate those risks?
 - ▶ Biggest challenge is that the message isn't clear
- ▶ What are some techniques and strategies you use to communicate risks at low doses of radiation with your audiences? In your view what works and what does not work and in what context?
 - ▶ Frame the risk ' it is a hypothetical, very small, stochastic risk of a fatal cancer thirty years from now'

Questions and Answers

Insights from my time at the NRC

- ▶ How do you test the effectiveness of your communication strategies?
 - ▶ Message testing
- ▶ Do you train staff within your organization on risk communication
 - ▶ NRC devotes resources to ensure staff is prepared
- ▶ Do your tabletop exercises include communications?
 - ▶ Yes

Questions and Answers

Insights from my time at the NRC

- ▶ In your view, how can the new low-dose program assist you with better communicating low-dose risks
 - ▶ Clarity of message
- ▶ What are in your view some high-priority research questions the program should try to address?
 - ▶ “Am I safe?”
 - ▶ Adaptive response
 - ▶ Human and societal costs of low dose risk

Questions?



►Thank you for your
attention