

If You Can Explain Radiation, You Can Explain Anything! Lessons Learned from Communicating a Challenging Topic

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BACKGROUND/PROBLEM

Unable to be seen, heard, or smelled, radiation is a hard topic to understand and is feared by many. In a radiation emergency, an overarching feeling of fatalism and professionals' lack of willingness to respond are examples of major problems. The many lessons learned in communicating this topic can be applied to other challenging public health topics.

METHODS

CDC's Radiation Studies Branch (RSB) has conducted extensive research on needs for the public, professionals, and special populations in a radiation emergency. This research has included testing radiation emergency messages, usability, and health effects messaging with the general public.

COMMON THEMES IN RSB'S AUDIENCE RESEARCH

- Radiation concepts, terms, and risks are poorly understood, even among well-educated people and professionals.
 - Affects professionals' willingness to respond to a radiation emergency ; RSB Toolkits had a positive affect – Greene County. "Willingness to Respond (WTR) for Radiologic Incidents: A Hands-On Approach." *Public Health*, 45 (35), 58.
- The public's most persistent concern at each stage of a radiation emergency scenario, even in low-risk situation: **What should I do to protect myself and my family?**
 - "What am I gonna do for myself and my family? I was thinking maybe I need to have some stuff in place already in my house, or already in my care, because you never know."
- People overestimate radiation emergency risks and resist "reassuring" messages.
- Participants do not like vague instructions, nor do they like messages that convey uncertainty by having *may, might, or could* in the message.
- People will be more likely to take protective actions if they understand why.
- A significant number of people do not understand basic terms such as "shelter-in-place".

CONCLUSIONS

Make messages:

Actionable

- Empower people in protecting themselves, their families, others

Clear

- Improve risk perception

Interactive

- Engage user, put terms in context

Memorable

- Make people feel more prepared

Relatable

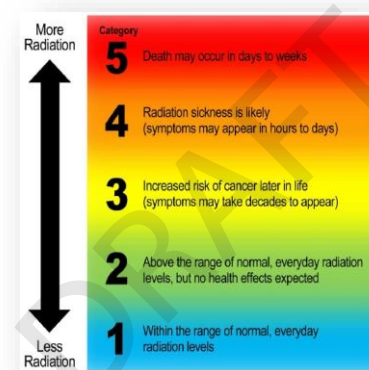
- Enable understanding of why around protective actions

Tangible and tactile

- Convey certainty

INNOVATIVE PRODUCTS TO ADDRESS CHALLENGES

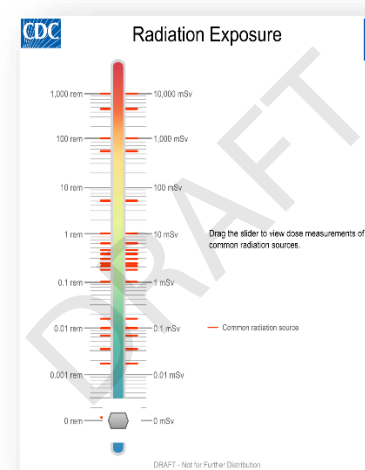
Risk Scale



Radiation Emergencies Website Redesign



Dose Thermometer



Infographics

