Risk communication

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Risk communication

• Effective policies involve communication
  – To improve understanding
  – To facilitate informed decisions about policies
  – To promote public preparedness
  – To maintain trust

• Most case studies lacked detail about communication
  – Risk communication is not in 8 IRGC focus points
  – Risk communication is often not evaluated
  – Those communications that are evaluated often are found to lack effectiveness
Reasons for failing communications

• Using expert terminology
• Focusing on topics relevant to experts
• Repeating the same basic facts
• Not following best practices in communication design
• Leaving no time for communication design
Principles of communication design

1. Involve interdisciplinary experts *including* decision scientists and communication experts to ensure
   - Scientific accuracy and balance of content
   - Focus on decision-relevant information
   - Evidence-based choices in communication design

2. Base communication design on research with members of the intended audience to learn
   - Wording that recipients understand
   - Decision-relevant gaps and misconceptions
   - Topics people want to see addressed
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(3. Evaluate communications
   - Randomized controlled trials)
Risk communication is central

• Integration
• Prioritizing risks
• Ascertaining accountability
• Ensuring flexibility and adaptability
• Creating transparency
• Fostering inclusion
• Providing convincing methods and procedures
• Determining the right timing
Recommendations

• Make risk communication central to all risk management activity

• Make expertise on risk communication available
  – Publish guidelines on communication design
  – Provide training in principles of risk communication
  – Provide access to database of effective communications

• Build the evidence base
  – Facilitate data collection and analysis to evaluate effects of communication efforts
  – Promote research to answer remaining questions about communication design
Relevant references

(http://www.nasonline.org/programs/sackler-colloquia/completed_colloquia/science-communication.html)

(http://www.fda.gov/oc/advisory/OCRCACACACpg.html)

Mental Models Approach

1. **Expert model**: What should people know to make informed decisions?
   - Conduct risk analysis and interdisciplinary literature review
   - Convene expert panel

2. **Lay model**: What do people already know and how do they already make their decisions?
   - Conduct qualitative interviews with small sample to identify relevant beliefs, preferred wording and decision contexts
   - Conduct follow-up surveys with larger sample to examine prevalence of beliefs

3. **Communication design**: What do people still need to know?
   - Compare expert model and lay model
   - Identify and fix knowledge gaps and misconceptions

4. **Evaluation**: Does the communication work?
   - Conduct randomized study to examine effect on understanding and decisions
Example projects

- Sexually transmitted infections
- Emergency contraception
- Pandemic flu
- Dirty bombs
- Smart meters
- Carbon capture and sequestration
- Inflation