



Japan HPS , Sendai, December 2019

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# IRPA Guidance on Public Engagement

## Why Communicate?

Roger Coates  
IRPA President



# Public understanding of radiation and risk

Public understanding has been recognised as a major challenge for the RP profession for many years.

We have talked about it a lot, but what have we DONE?





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Japan has had a special challenge – focused on emergency and recovery



# Fukushima Daiichi Lessons

Who did the public trust??

- TEPCO operator?
- Regulatory Body?
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- Regulatory Body?
- Government?



**It seems none of the above!**

Medical practitioners – but poorly prepared

Japan HPS tried to help fill the gap – Q&A service



# Role of the RP professional

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## RP Societies and professionals can fill a space here:

We are neutral – no advocacy (eg for nuclear)

Our only role is ‘protecting people against the harmful effects of radiation and ensuring that radiation sources are used safely for the benefit of mankind’

It’s a **DUTY** of **RP societies** and **individual RP professionals** to engage in public communication

- many RP Societies have this in their Statutes!



Are **YOU** confident and comfortable in communicating with the 'public' ?

Is JHPS/SRP/KARP/SFRP/CSRP/ARPS?

# The Communication Challenge

Giving people facts on radiation will not solve the problem – there needs to be real dialogue, listening, discussion and engagement. **Perceptions** are all-important.



But as professionals we still need to agree good practice on what basic concepts should be put into the picture, and how they can best be introduced.



What are the key scientific and social messages we believe are important for this dialogue?





## Communication - How can IRPA help?

What have we done so far?

### IRPA TG on Public Understanding of Radiation Risk

**Phase 1:** - *to encourage and support Associate Societies in the development of effective means of enhancing public understanding of radiation risk **through the sharing of good practice, ideas and resource material***

Aim: to provide user friendly information essentially through links to existing documentation.

# Public Understanding of RP and Risk

What do Associate Societies do at the moment? Where are the good ideas? **We should share good practice.**

## Examples:

- Position Papers
- Press releases and media liaison
- Web site information
- 'Talking Heads'
- Schools Events
- Talks service
- Public query service



See the IRPA web site



# Public Understanding of RP and Risk

What more can IRPA and the Associate Societies do?

## Phase 2 – Hiroko as TG Chair

- To enthuse every RP person and RP society to become more active public advocates
- How to make our societies and individual RP practitioners more comfortable, confident and effective in their interactions with 'the public'
- Take key concepts and messages from the developing experience on risk communication and make this available to practitioners in accessible form



# Hence the IRPA Task Group Principal Objective:

To develop the:

## IRPA Practical Guidance for Engagement with the Public on Radiation and Risk



ETHICS

RP CULTURE

CERTIFICATION

LENS OF EYE

STAKEHOLDERS

EC REPORT

STRATEGY

RP SYSTEM  
CONSULTATION



## Why communicate with the public?

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- To help people be less fearful of radiation – and more rational (like us!)?
- To be more accepting of things that are ‘good’ – eg medical X Rays, nuclear power?
- Be less afraid when things go wrong? Emergencies etc
  - Eg avoid ‘radiation stigma’
- Even to come and work in our profession!

And to do this through presenting and promoting a balanced picture of risks and benefits

# Who are 'the public'?

- School children
- Patients
- Local residents
- NGOs
- High radon homes
- Public hearings
- Etc etc
- General Interest groups
- Politicians
- Mothers and families
- Evacuated persons
- Citizen scientists
- Court cases

And journalists (as intermediaries)

**A diverse lot!**





# Three underpinning considerations

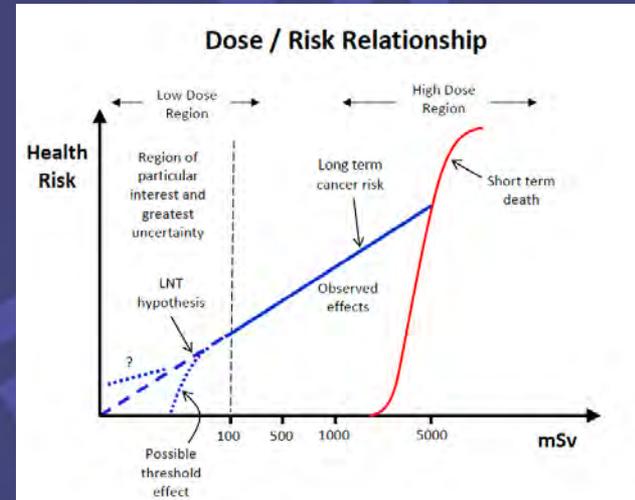
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- Radiation risk science
- Risk perception
- Benefits and risks

# 1. Radiation risk

Radiation protection is based on LNT - but this is an assumption for protection purposes, **not a scientific fact**.

At “a few mSv/y”  
- what do we know??





# Radiation risk

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At “a few mSv/y” what do we know??

At levels of most practical relevance (around a few mSv/y), all we know about radiation risk is that:

**If there is risk, then it is very small.**



## 2. What are public perceptions of radiation?

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- Uniquely dangerous (especially man-made)
- Nuclear bombs
- No safe level
- Deform my babies
- Damage my children

But perhaps a little less fearful for 'good, natural radiation' and medical X Rays???



# What drives perceptions?

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But what drives perception?

What can social science and risk communication experience tell us?



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But what drives perception?

What can social science and risk communication experience tell us?

Public see radiation as much more dangerous than do scientists: ‘Dread Factors’

- Involuntary – imposed risk
- Lack of control
- Cannot see or feel it
- Delayed effects are always lurking
- Perceived as a ‘new’, man made threat



# Risk perception

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**Perceptions** drive attitudes and behaviours

Effective public engagement is based on understanding and recognising these perceptions, concerns, fears and aspirations,

- to openly acknowledge them with **empathy**,
- and to move the dialogue forward on that basis.



## 3. Benefits and risks

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Is there such a thing as 'an acceptable risk'?



# Benefits and risks

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Is there such a thing as ‘an acceptable risk’?

Or – is it a **situation** or **activity** that is acceptable (or not) based on its benefits and risks as seen by the individual??

So we should try and frame our public engagement in the context of benefits and risks



# Guidance for Effective Engagement

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Scientific facts will not change perceptions

It needs two-way dialogue, active listening, showing **empathy** and ultimately developing **trust** and **respect** between the parties.

**“Some things can only be understood via the heart”**



# “Lose the Scientist, Become a Human Being”

## Professor Niwa experience in Japan





# “Lose the Scientist, Become a Human Being”

## Professor Niwa experience in Japan



“People need to know that you care before they care what you know”.

“Every good conversation begins with good listening”



# How do we develop the skills?

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Skills such as empathy, active listening, recognising perceptions

- Acknowledge concerns and issues.
- Acknowledge and validate feelings
- Ask questions rather than giving facts
- Discuss, not tell
- Admit uncertainty, be honest and open.
- When you don't know something, say so.
- Don't speculate, guess, assume, or make promises you can't keep.
- Avoid using humour
- Be aware of your body language

# Is it safe?

This is a key question - highly likely to be asked

‘Safe’ is subjective and perception-based:  
– many organisations avoid the word



What are **you** going to say? Plan in advance



# What situations should we engage in?

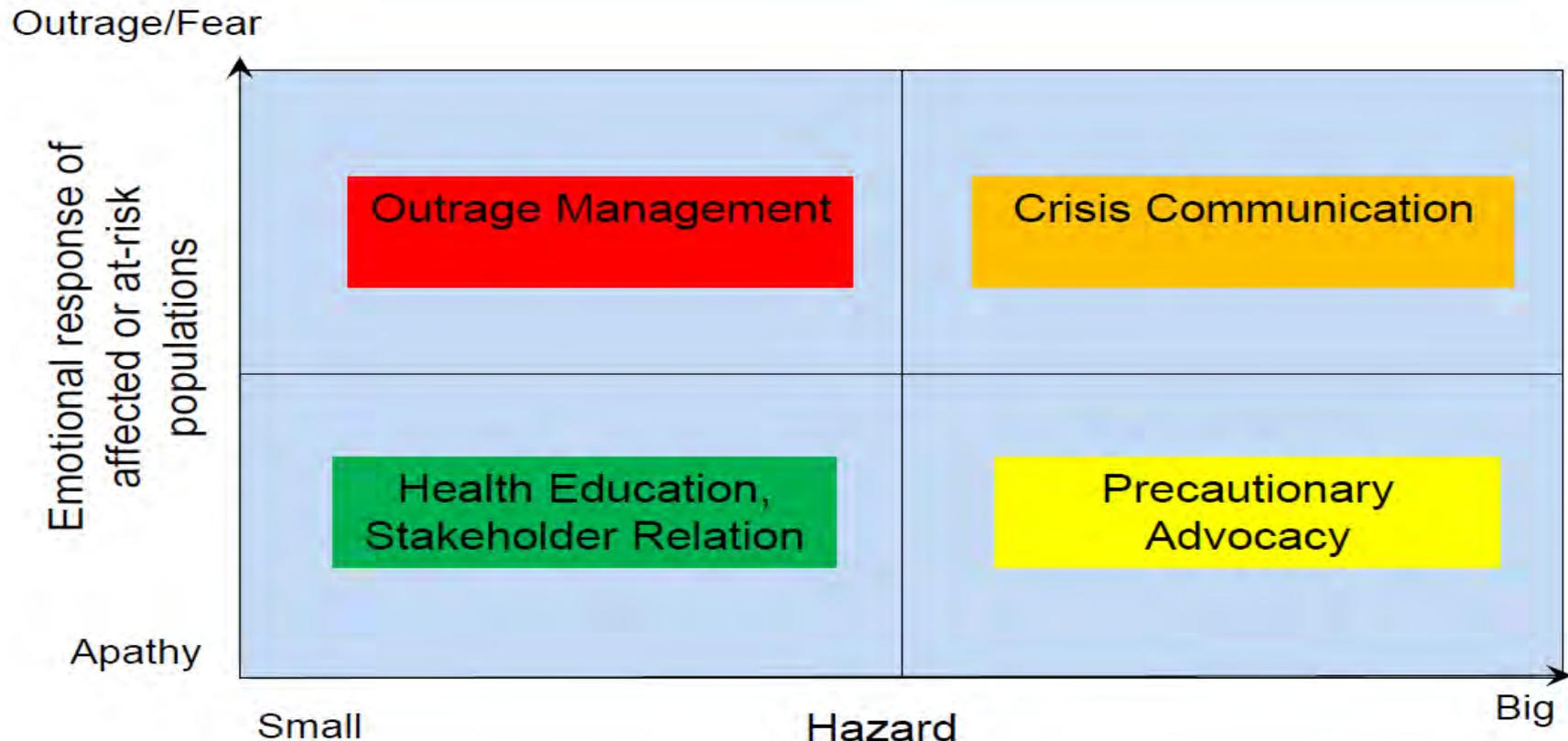
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- Schools education
- Medical exposures
- Radioactive waste management
- Emergencies and incidents
- General public information
- Media interviews/discussions
  - Etc etc
- Encourage STEM careers
- Non-ionising radiation
- Radon
- Long term recovery
- Government liaison
- Science outreach

Each situation has its unique context and challenges



# WHO 'Risk v Perception' Matrix

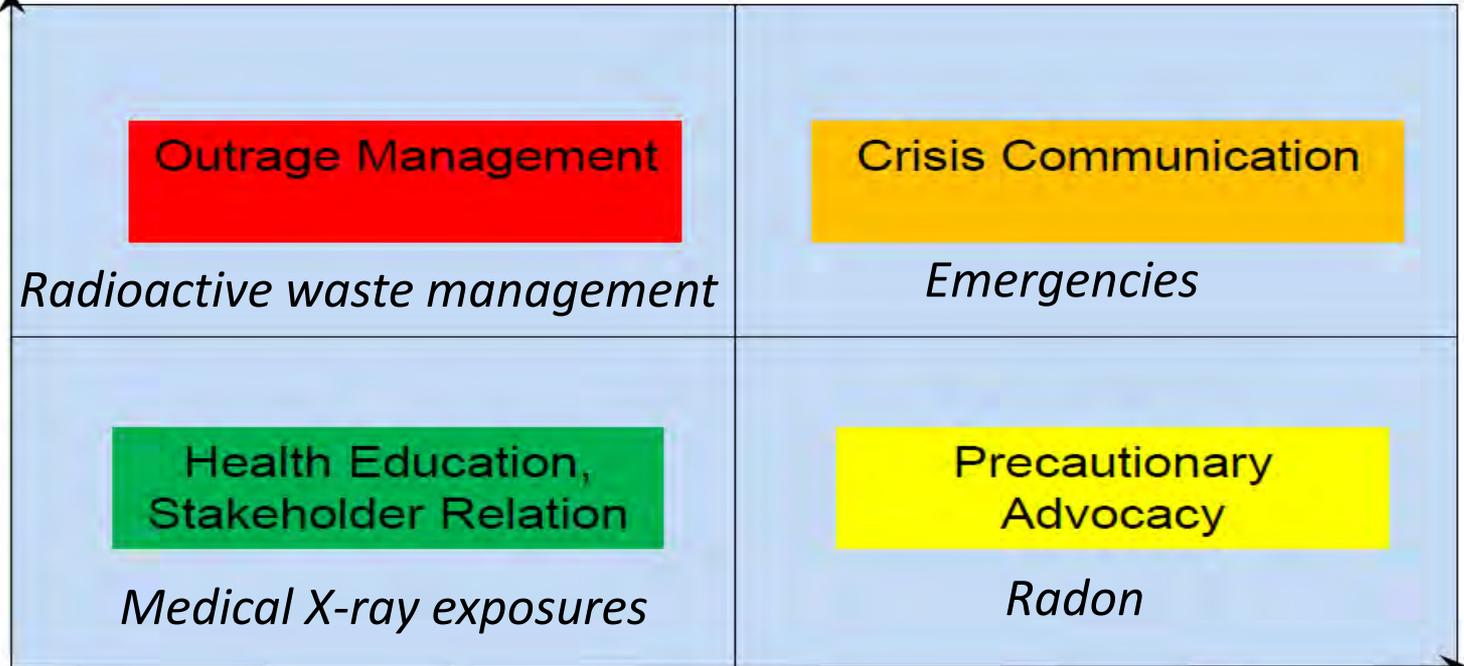




# WHO 'Risk v Perception' Matrix

Outrage/Fear

Emotional response of  
affected or at-risk  
populations



Small

Hazard

Big

Apathy



# What can your RP Society do?

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- What is the Association's role related to public information and communication?
  - Communication in a case of emergency events?
  - To educate and/or to provide advice in public debates related to radiation risks and benefits?
  - To help make your individual members more comfortable and confident in their ability to communicate?
- What are challenges that associations are faced with and what are good practices in communication and stakeholder engagement?



# What can your RP Society do?

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## Suggestions:

- Schools programmes
- Government/political liaison
- The conventional media
- Student and STEM engagement
- General public information
- Science outreach
- Liaison with other professional organisations
- Public engagement on specific topics
- Training radiation protection professionals in public engagement



# Tentative Outline of Guidance

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1. Why engage with the public?
2. Who are 'the public'?
3. Three underpinning considerations
4. Communications and engagement strategy
5. Face to Face engagement
6. Guidance for specific situations
7. Use of different media
8. The role of Radiation Protection Associate Societies
9. The role of individual radiation protection professionals
10. Supporting information and general references



# Summary

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- Its our duty as RP professionals to engage with the public
  - It's the only way to achieve our aim of adequately protecting the public without unduly limiting the safe use of medical, scientific and industrial radiological practices for the benefit of mankind.
- But no-one said it was easy – especially from our science background!
- **Perception, listening, empathy** are the key words



## The Way Forward for the Guidance

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- The draft guidance is open for comment until mid- December
  - Comment via your RP Society
- Publish and launch the guidance at IRPA15 Seoul, May 2020