



# Breakout Questions

## 2<sup>nd</sup> North American Workshop on the Ethical Dimensions of the System of Radiological Protection

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# The Objective



**Clearer ethical framework for the  
system of radiological protection**



- (1) Professionals and public better understand what the system is designed to achieve and why (how is more a matter for professionals)
- (2) Solid basis, together with science and experience, for evolution of the system

# Values: A Pragmatic Way Forward

## Seek a set of values:

- Relevant to the system of radiological protection
- Common (or at least acceptable) to the widest possible range of cultures today
  - International recommendations must be broadly applicable
- That stand the test of being applied to current and foreseeable problems, with sensible results

# Towards a Set of Common and Relevant Values

## **Beneficence & Non-maleficence**

*Do good & do no harm*

## **Prudence**

*Wisdom, avoidance of unnecessary risk*

## **Justice**

*Fairness, people get what they deserve*

## **Dignity**

*Treat people with respect*

# BENEFICENCE & NON-MALEFICENCE

Central to medical ethics, where implications of balancing beneficence and non-maleficence are well studied

**Beneficence: Do good**

**Non-Maleficence: Do no harm**

Not absolute:

- doing good may do lesser harm
- avoiding harm may result in a greater harm

# PRUDENCE

- Long ethical tradition: Aristotle, Buddhism, Confucianism, ancient peoples of Oceania and America
- In early use: The **wisdom** to see what is virtuous
- OED: “The ability to recognize and follow the most suitable or sensible course of action ... caution”
- MW: “The ability to govern and discipline oneself by the use of reason ... good judgment ... caution ... as to danger or risk”

# Prudence & Precaution

- Prudence can be seen as reluctance to accept unnecessary risks
- Rio 1992: “the precautionary approach ... where there are threats of serious or irreversible damage, lack of full scientific certainty shall be not used as a reason for postponing cost-effective measures to prevent environmental degradation”

# JUSTICE

- Justice: the perpetual and constant will of rendering to each one his right
- Linked to fairness, entitlement and equality
- In natural law: justice means individuals or groups get what they deserve, merit, or are entitled to
- In radiological protection: fair sharing of benefits and detriments



# Justice Broadly Defined

Look beyond humans today as the only moral entities:

- + Descendants → protection of future generations
- + Environment → protection of the environment for its intrinsic value not just its instrumental value
- + Animals → questions of animal welfare ?

# DIGNITY

***“All human beings are born free and equal in dignity and rights”***

(Article 1 of The universal declaration of human rights adopted by the UN General Assembly on 10 December 1948)

- Something is due to every person because she/he is human. Every individual deserves unconditional respect regardless of age, sex, health, social condition, ethnicity, religion, etc.
- Dignity requires that individuals are treated as subjects, not objects
- *“Act in such a way that you treat humanity, whether in your own person or in the person of any other, never merely as a means to an end, but always at the same time as an end.”* (Immanuel Kant, Grounding for the Metaphysics of Morals, 1785)

# Dignity & Autonomy

- Related to dignity, autonomy is about having control over one's life:
  - freedom, i.e., the absence of constraint
  - the capacity to deliberate, decide and act

*Possible conflict: decision makers with a duty of beneficence which may conflict with the autonomy of those effected (paternalism vs. individualism)*

# Values in Radiological Protection (1/2)

## Beneficence / Non-maleficence

- *Avoid unduly limiting beneficial uses of radiation*
- *Justification: positive net benefit*
- *Protection of vulnerable groups*
- *Prevent harmful tissue reactions (equivalent dose limits)*

## Prudence

- *Reduce risks of stochastic effects to the extent reasonably achievable (optimisation)*
- *Assume there may be risks even at very low doses*

# Values in Radiological Protection (2/2)

## Justice

- *Protection of people and the environment from radiation balanced with beneficial uses of radiation*
- *Ensure no individual carries an unfair share of risk/harm (effective dose limits)*
- *Reduce inequities in dose distribution (optimisation with constraints and reference levels)*
- *Protection of future generations*

## Dignity/Autonomy

- *Right to know*
- *Stakeholder involvement*
- *Self-help protection*

# Values: Next Steps

Using a “draft” set of values:

- **Describe** each (and interactions between) in reference to the system of radiological protection
- **Examine** the broad acceptability of the set
- **Test** and **refine** the set through application to current and foreseeable problems (Rawls’ reflective equilibrium or Habermas’ discourse?)

# QUESTION #1

What are the key elements of the principles of **beneficence/non-maleficence, justice, dignity, and prudence** as they relate to the ethical basis of the system of radiological protection?

*(Bonus)*

*Draft practical definitions of each for this context.*

# QUESTION #2

Are these four principles a sufficient ethical basis for the system of radiological protection?

If not, what is missing?



# Logistics

- Chair and rapporteur
- Both groups address the same two questions
- Breakout sessions
  - Wednesday 13:30-17:00
  - Thursday 09:00-10:30
- Thursday 11:00, 15 min report from each group, followed by general discussion and summary

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