

ICRP 138 (2018): Ethical Foundations of the System of Radiological Protection

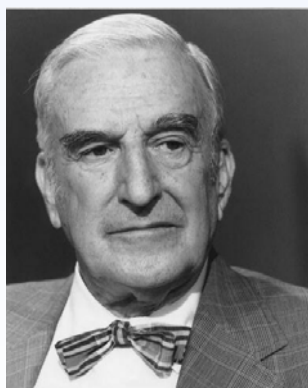
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Science and Ethics in Radiological Protection



“Radiation protection is not only a matter for science. It is a problem of philosophy, and morality, and the utmost wisdom.”

Lauriston S. Taylor (1902-2004)

The Philosophy Underlying Radiation Protection
Am. J. Roentgen, Vol. 77, N° 5, 914-919, 1957
From address on 7 Nov. 1956



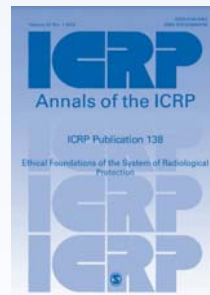
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ICRP Task Group 94 Ethics of Radiological Protection

Established in October 2013 to present
the ethical foundations of the system of
radiological protection

- Consolidate basis of the recommendations
- Improve understanding of the system
- Provide a basis for communication on radiation risk and its perception



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Marie-Claire Cantone	Thierry Schneider	<i>Bernard Le Guen</i>
Sven Ove Hansson	Richard Toohey	<i>Emily Van Deventer</i>
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Nicole Martinez	Friedo Zölzer	<i>(Christopher Clement)</i>

Uncovering Core Ethical Values

The Task Group tried to find

- a **minimum set** of ethical values,
- which **the ICRP had relied on**, either intentionally or implicitly, in developing the system of radiological protection,
- and which **is common** (or at least acceptable) in the widest possible range of cultures.

Evolution of the System of Radiological Protection

In the early days: awareness of deterministic effects

→ do no harm (non-maleficence)

After Hiroshima and Nagasaki: realisation that there is no 'safe' dose

→ weigh positive and negative effects (beneficence and non-maleficence)

→ keep exposures 'as low as reasonably achievable' (prudence)

→ avoid exposing any individual to a higher than 'tolerable' dose (justice)

After Chernobyl: recognition of the diversity of exposure situations

→ involve affected people in the management of protection (dignity)

The Core Ethical Values Underpinning the System of Radiological Protection

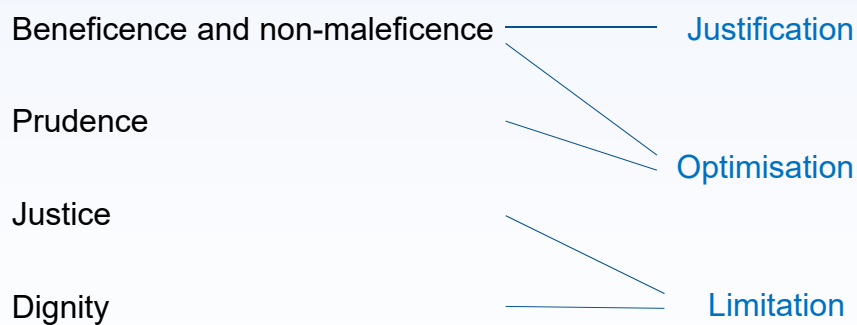
Beneficence and non-maleficence

Prudence

Justice

Dignity

The Core Ethical Values Underpinning the System of Radiological Protection



Procedural Values

Accountability

Transparency

Inclusiveness (Stakeholder participation)

Appendix A. Ethical Theories

Beneficence and non-maleficence

Prudence

Consequentialist ethics (Bentham / Mill):

„Seek the greatest happiness for the greatest number!“

Justice

Dignity

Deontological ethics (Kant)

„Never treat human beings merely as means to an end,
but rather as ends in themselves!“

Appendix B. Biomedical Ethics

Principles of Biomedical Ethics
(Beauchamp and Childress, 1979)

Beneficence and non-maleficence

Respect for autonomy

Prudence

Non-maleficence

Justice

Beneficence

Dignity

Justice

Appendix C. Cross-cultural values

- The rise of global ethics
- A short review of the core values in different cultural contexts
- Confucian theory and Asian perspectives

**Beneficence &
non-maleficence**

Prudence

Justice

Dignity

Beneficence & Non-Maleficence

Beneficence: Do good

Non-Maleficence: Avoid doing harm

Not absolute:

- doing good may necessitate doing a lesser harm
- avoiding one harm may result in another greater harm

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Beneficence & Non-Maleficence: Cross-Cultural Sources

“Do good and do no harm.” (Hippocrates)

“To save one life is tantamount to saving a whole world.” (Talmud)

“If a less substantial instance of harm and an outweighing benefit are
in conflict, the harm is forgiven for the sake of the benefit.”
(Islamic Jurisprudence)

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Prudence

**Ability to make informed and considered choices without the
full knowledge of the scope and consequences of actions**

Related to the precautionary principle: *...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* (Rio 1992)

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Prudence: Cross-Cultural Sources

“The cautious seldom err.” (Confucius)

“Act like a person in fear before the cause of fear actually presents itself.”
(Krishna)

“Tie up your camel first, then put your trust in God.” (Muhammad)

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Justice

Restorative Justice: *fairness* in compensation for losses

Procedural Justice: *fairness* in rules and procedures in the
processes of decision making

**Distributive Justice: *fairness* in the distribution of
advantages and disadvantages among groups of people**

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Justice: Cross-Cultural Sources

“Hurt not others in ways that you yourself would find hurtful.”
(Buddha)

“Never impose on others what you would not choose for yourself.”
(Confucius)

“Therefore whatever you want people to do for you, do the same for them.”
(Jesus Christ)

Beneficence &
non-maleficence

Prudence

Justice

Dignity

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)

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.

Beneficence &
non-maleficence

Prudence

Justice

Dignity

Dignity: Cross-Cultural Sources

“I am the same to all beings. In a Brahma or an outcast,
the wise see the same thing.” (Krishna)

“Do we not have one father? Has not one God created us?”
(Malachi)

“Ye are all the leaves of one tree and the drops of one ocean.” (Bahá‘u’lláh)

How will this process be continued?

Another Task Group has just been appointed jointly by ICRP Committees 3 and 4: Ethics in Radiological Protection for Medical Diagnosis and Treatment (TG109)

„Different scenarios will be considered as examples on how and which reflections on ethical values can be of help in decision making process, with attention to do more good than harm and to personal dignity and respect. Proposed scenarios will include: radiological and nuclear medicine in pregnant patients, pediatrics, elderly patients, end of life scenario and medical screening.“

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9 - 12 SEPTEMBER 2018
IN BUDWEIS, CZECH REPUBLIC

Fourth International Symposium on
Ethics of Environmental Health

For the fourth time after three very successful international symposia on Ethics of Environmental Health in 2011, 2014, and 2016, scientists, regulators and practitioners from all over the world will come together to discuss ethical issues related to radiation and chemical protection, epidemiology, biomonitoring, risk management, emergency preparedness and related areas.

PROGRAMME

Read more programme details

TIMELINE

Go to Timeline

VENUE & FEES

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