

Early Morning Session: Wednesday

**The Ethical and Virtuous
Environmental Epidemiologist:
*A Discussion about Professional Integrity***

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THE NORMAL RANGE OF HUMAN CONDUCT



**POWER CORRUPTS. ABSOLUTE POWER
CORRUPTS ABSOLUTELY!**

(Lord Acton's premise)

NO ONE IS IMMUNE!

Definitions

ETHICS - The rules of conduct/behavior recognized in respect to a particular class of human actions or a particular group or culture.



SELF-REGULATED

MORALS - Principles or habits with respect to right or wrong.



LEGALLY ENFORCED

Core Values & Mission Statements

🏠 **They provide the anchor for our activity and collective motivation**
... maintain, enhance, and promote health in communities worldwide ... work to protect the public health interest above any other interest ...

Why ethics in the professions?

- 📖 **Keep ourselves on track, or keep our own house in order**
- 📖 **Socialize our students**
- 📖 **Professional accountability**
 - According to norms of behavior
 - **IN WHOSE BEST INTERESTS?**
 - **WHO IS TAKING THE RISKS?**
 - **WHO IS DERIVING THE BENEFITS?**

Prescriptive codes

versus

Aspirational codes



THE TEN COMMANDMENTS

- **Thou shalt have no other Gods before me**
- **Thou shalt not bow down before graven images**
- **Thou shalt not take the name of the Lord thy God in vain**
- **Remember the Sabbath Day and keep it holy**
- **Honour thy father and thy mother**
- **Thou shalt not kill**
- **Thou shalt not commit adultery**
- **Thou shalt not steal**
- **Thou shalt not bear false witness against thy neighbour**
- **Thou shalt not covet**

Moses, Mount Sinai

The Buddhist Code of Moral Conduct

by **Vajiranavarorasa**

The First Precept:

Abstaining from taking the lives of living beings

The Second Precept:

Abstaining from taking that which is not given

The Third Precept:

Abstaining from sexual misconduct

The Fourth Precept:

Abstaining from false speech

The Fifth Precept:

Abstaining from distilled and fermented intoxicants which are the occasion for carelessness which also includes drugs

THE GOLDEN RULE - adapted

- **What is hateful unto you, do not do unto your neighbour**

Hillel, Babylonian Talmud, Tractate Shabbat, 31B

- **Treat others as we would want them to treat us or our loved ones**

Luke 6:31 and Matthew 7:12

- **Treat others justly so that no one would be unjust to you**

From the Prophet Mohamed's Last Sermon

-
- **Do our level best**
 - **Assert ourselves if we find someone else who has done ill**

The Scientific Ethic*

A set of norms that define the scientific endeavor → an ethos that evolved gradually and organically.

PROFESSIONAL ETHICS embody some of these norms, but “**The Ethic of Science**” is more like the charter that makes science possible than like a law book that spells out the specific rules.

This ethic defines the **boundaries** that must be respected by those who wish recognition as part of the scientific community.

* Reece, RD & Siegal, HA. Studying People: A primer in the ethics of social research. Mercer 1986, pp. 62-70.

Deontological (i.e. duty-based)

In essence, the scientific ethic expects of scientists the duty to:

1. Use appropriate methods;
2. Be objective;
3. Be honest in reporting;
4. Publish results - POSITIVE as well as NEGATIVE;
5. Prohibit distortion in, for example:
 - Falsification of data
 - Biases inherent to study design
 - Proper analytical procedures
 - Objective interpretation
6. Do one's own work:
 - Plagiarism
 - Acknowledge sources
 - Graduate students not to be exploited

GOOD ETHICS ↔ GOOD SCIENCE

The **FUNDAMENTAL PRINCIPLES** of **BIOETHICS** include:

RESPECT FOR AUTONOMY

- **Requires Respect for Individual Rights and Freedoms** (*voluntary vs. involuntary exposures*)

BENEFICENCE

- **Requires Doing Good - Consider consequences of interventions in people's lives and of findings**

NON-MALEFICENCE

- **Requires Doing No Harm**

JUSTICE

- **Requires the fair and equitable allocation of risks and benefits to all without discrimination**

- *No hierarchy*
- *Constant tension among the four main principles*
- *Aim to maximize each of the four*

Other public health principles

📖 **Protect the most vulnerable in society**

– *Beneficence*

📖 **Involve communities in our research**

– *Respect for autonomy*

📖 **Serve the public health interest above any other interest**

– *Beneficence and Non-maleficence*

📖 **Always act with INTEGRITY**

– *Beneficence & Non-maleficence*

The FUNDAMENTAL PRINCIPLES of BIOETHICS
include (under Justice):

ENVIRONMENTAL JUSTICE

- *Who is taking the risks?*
- *Who is deriving the benefits?*

THE POLLUTER PAYS

- *incentive to internalize costs*

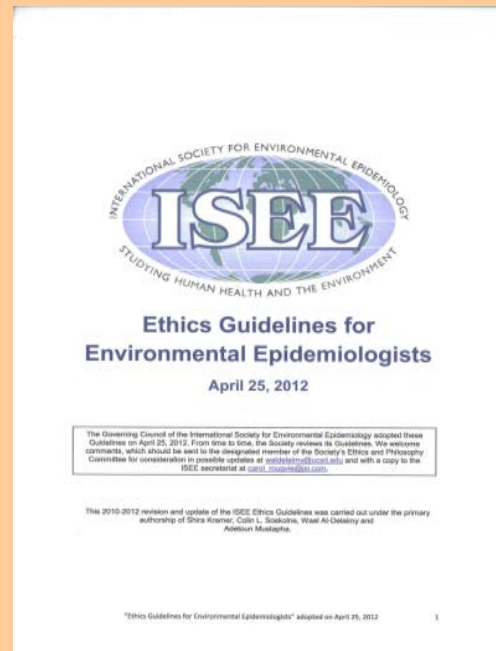
The FUNDAMENTAL PRINCIPLES of BIOETHICS include (under Non-maleficence and Respect for Autonomy)

 **PRECAUTIONARY PRINCIPLE**

- where there is a risk from a certain agent, the presence of uncertainty shall not be used as a reason for postponing cost-effective measures to prevent such exposure

Ethics Guidelines

The International Society for Environmental Epidemiology (ISEE) approved its new edition Ethics Guidelines on April 25, 2012



GUIDELINES versus CODES

- Normative statements that are aspirational versus prescriptive
- A “list” versus a “checklist”
- “List” provides a basis for discussion:
 - *Context*
 - *Recognize tensions*
 - *Not for application as a “checklist”!*



Principles – their utility

- 📖 Normative basis for rational policy
- 📖 Transparency of collective values
- 📖 Accountability for actions taken

Character vs. Actions

Virtues do not replace ethical rules. Rather, an account of professional ethics is more complete if virtuous traits of character are identified, such as:

VIRTUES OF PROFESSIONALS

*Epidemiology and virtue ethics. Weed DL, McKeown RE
Int J Epidemiol. 1998 Jun;27(3):343-8; discussion 348-9.*

- **Humility** – **Respect the input and opinions of others/Self-effacement**
- **Fidelity** – **Honor one's commitments/Promote trust**
- **Justice** – **Act fairly**
- **Patience** – **Take time to hear others' viewpoints**
- **Industry** – **Do your level best/Excel**
- **Veracity** – **Tell the truth/Be honest**
- **Compassion** – **Empathize**
- **Integrity** – **Demonstrate good moral character**
- **Serve** – **Protect the most vulnerable/Serve the public interest**
- **Prudence** – **Err on the side of caution/Demonstrate good judgment**

Influences and pressures

- 📁 **From funding sources to peer review**
- 📁 **From the questions we ask through access to data**
- 📁 **From study design to data analysis and interpretation**
- 📁 **From dissemination to job security**

Be aware of forces at play that influence both science and policy.

... Great vigilance and personal integrity are required to change course

“Industry’s offensive against the regulation of health and safety hazards uses academics to downplay or deny the seriousness of the hazards...”

Clayson and Halpern

J. of Public Health Policy

September, 1983



The Four D's applied to scientists studying that which does not support the *status quo*

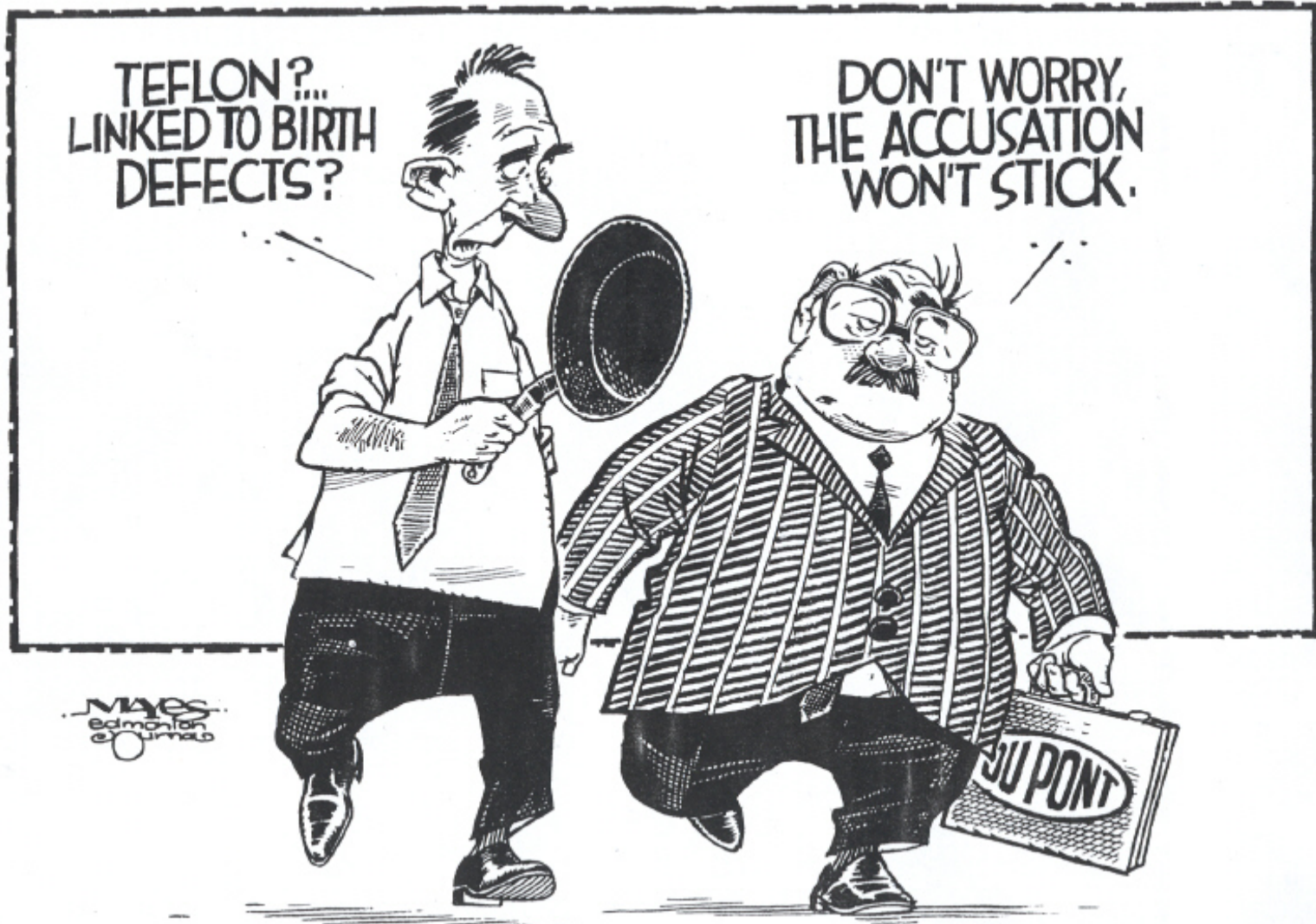
 **Deny**

 **Delay**

 **Divide**

 **Discredit**

— [**Dismiss**]



Judge Miles W. Lord, 1982

On Corporate Ethics and Environmental Pollution:

“Corporations create 80% of our GNP. They, of all entities working, have the most potential for good or evil in our society.”

<http://www.rightoncanada.ca/?p=1396>

In 1988, a well-regarded researcher in Montreal, Canada, stated to the tobacco company that paid him for critiquing a four-page published report as follows: *“I would wish to emphasis (sic) that there must be no publication of any part of this review under our name, and if any part of it should be published no reference should be made to us by name.”*

Would making such a request have been ethical and/or virtuous in 1988? And, in 2012?