

SCIENCE AND THE PRECAUTIONARY PRINCIPLE

LESSONS FOR PREVENTING HARM

IN APRIL 2012 THE EUROPEAN ENVIRONMENT AGENCY WILL PUBLISH A NEW REPORT *LATE LESSONS FROM EARLY WARNINGS: SCIENCE, PRECAUTION, INNOVATION* — REGISTER YOUR INTEREST NOW

In the context of scientific uncertainty and ignorance, the decision-makers responsible for incentivising and regulating innovation face a significant challenge in balancing opportunities against risks. The precautionary principle can help to better manage such choices. It requires actions to prevent potentially serious harm before the likelihood or severity of an innovation's impacts become all too clear.

European Environment Agency



Science and the precautionary principle – lessons for preventing harm

Societies may be considerably more successful at maximising the net benefits from innovation if they take more account – scientifically, politically and economically – of the rich body of information available from diverse sources. The 'Late Lessons Project' illustrates how damaging and costly the misuse or neglect of the precautionary principle can be, using case studies and a synthesis of the lessons to be learned.

Lessons from a history of hazards

The EEA published *Late lessons from early warnings: the precautionary principle 1896–2000* in 2001.

There have been many beneficial innovations. Others have been disastrous. In today's globalised world, ill-conceived innovations can have a huge impact on health and environment.

'Late Lessons' asked whether we could become better at assessing the pros and cons of innovations, and taking action early enough to prevent harm.

Twelve key lessons for better decision-making were drawn from cases where public policy was formulated against a background of scientific uncertainty and 'surprises' – and where clear evidence of hazards to people and the environment was often ignored.

The case studies addressed:

- Fish stocks;
- Medical radiation;
- Benzene;
- Asbestos;
- PCBs;
- Halocarbons and the ozone 'hole';
- DES pregnancy pills;
- Antibiotics as animal growth promoters;
- Sulphur dioxide and acid rain;
- MBTE in petrol;
- Contamination of the Great Lakes;
- TBT marine antifoulants and sex change in sea snails;
- Hormones as growth promoters;
- Mad cow disease.

Better science and decisions for the future?

The EEA will publish volume 2 of *Late lessons from early warnings: science, precaution, innovation* in April 2012. It will assess the use of scientific evidence and the precautionary principle across a wide range of human health and ecosystem case studies. Unlike volume 1, the new report will also cover current and emerging issues, such as pharmaceuticals, nanotechnology and GMOs.

Chapters will address:

- Lead in petrol;
- Mercury pollution of Minamata Bay and beyond;
- DBCP pesticide and male infertility;
- The pill and feminised fish;
- Bisphenol A and harm to children;
- DDT;
- Booster biocides: an alternative to TBT;
- Climate change;
- Floods;
- Ecosystems and resilience;
- Perchlorethylene and drinking water;
- Beryllium exposure in the nuclear industry;
- Environmental tobacco smoke;
- Nicotinoid pesticides and the French bee decline;
- Nanotechnology;
- Genetically modified organisms;
- Mobile phones-head cancer link
- Nuclear power;
- Invasive alien species;
- Economic costs of inaction;
- False positives;
- Governance of innovation and risks;
- The role of progressive business;
- Towards better victim compensation and protection of early warning scientists.

More information

Volume 1:

Late lessons from early warnings: the precautionary principle 1896–2000 can be downloaded at <http://reports.eea.europa.eu/>.

Order a free printed copy from the EU Bookshop online:
<http://bookshop.europa.eu>.

Volume 2:

To receive a notification of when it is possible to order free copies of volume 2 *Late lessons from early warnings: science, precaution, innovation*, please send an email to:
Marisa.Turanzas@eea.europa.eu.

European Environment Agency
Kongens Nytorv 6
1050 Copenhagen K
Denmark

Tel.: +45 33 36 71 00
Fax: +45 33 36 71 99

Web: eea.europa.eu
Enquiries: eea.europa.eu/enquiries

Sign up to receive notifications on other new EEA reports and products at eea.europa.eu

European Environment Agency

