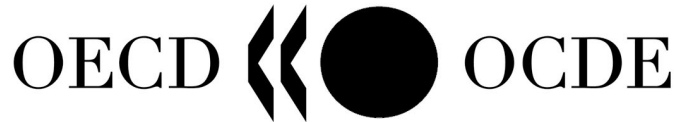


# Workshop on the Valuation of Environmental Health Risks for Children

*Organised by the National Policies Division  
Environment Directorate  
OECD, Paris*

September 11 - 12, 2003

**WORKSHOP AGENDA**



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

## BACKGROUND

Concern for the impacts of the degradation of the environment on children's health has been reflected in a number of international actions presently being undertaken by international organisations, such as the OECD or the WHO, and Environment and Health Ministers. As an example, the Fourth Ministerial Conference on Environment and Health will focus on *A Sustainable Future for Our Children*, at a meeting to be held in Budapest in 2004.

The effects of the environment on the health of children and adolescents have received relatively little attention from health services researchers, environmental policymakers, as well as health and environmental economists. This shortcoming has been recognised, and interest and support for research on the links between the environment degradation/pollution and children's health is increasing. Reliable estimates of environmental impacts on a child's health are important for cost-benefit analyses, in order to help policymakers to examine the economic efficiency of policies aimed at reducing children's health impacts. Such measures can be used for three purposes:

- Measuring the effectiveness of environmental policy and social programmes;
- Prioritising environmental policies and target groups; and,
- Setting optimal targets to improve environmental policy design.

Further work in valuing children's environment-related health risks is thus important. Very few economic studies have considered the valuation of children's health. The scarcity of empirical studies specific to children can be explained mainly by conceptual and practical problems associated with such an exercise. Therefore, in order to provide estimates of environmental impacts on children's health, analysts often have to transfer the results from studies valuing health impacts for adults to children. Alternatively, they also use analytic frameworks or valuation techniques that are not based on economic or monetary considerations. However, given possible disparities between adults' and children's health valuation, this solution is unsatisfactory. Children-specific economic values are required.

Efforts to value the health impacts for children also have important implications with respect to the applicability of the underlying assumptions of the methodologies used. While several valuation techniques can be used to estimate the health benefits from a risk reduction, these are often based on economic considerations (i.e. stated preferences, cost of illness) which are methodologically problematic for children (see ENV/EPOC/WPNEP(2002)31). In addition, there may be problems of data availability even for some non-economic considerations (i.e. physical measure of health improvements). Thus, it is not clear which is the best methodology to adopt in this particular context.

A research project, undertaken by the OECD, concerning the valuation of environmental health risks to children has been developed in order to help policymakers identify health and safety risks that largely affect children, and to develop guidelines for the valuation of children's health environmental risk. To this end, an international workshop on children's environmental health valuation is being organised at the OECD, to share information amongst experts and policymakers who work on economic valuation, environment and health economics, and other disciplinary fields related to the valuation of environmental health risks to children.

## **OBJECTIVES**

This workshop on the valuation of children's health environmental risk will review the state of knowledge, assess the different approaches, and the needs for further research and action. International representation is required to share information on the current practices for the valuation of health risks more generally in different countries. The discussion will draw upon practices currently being used by a number of OECD countries and the experiences of analysts in these countries.

It is hoped that this sharing of information will allow for an improved understanding of the relative merits of alternative approaches to the valuation of environmental health effects, and more specifically for children. Findings from the workshop will help to define common practical recommendations for the valuation of children's environmental health risks.

## **THE WORKSHOP**

At the workshop to be held in Paris on 11-12 September 2003, invited participants – national policymakers, representatives of other international organisations, academics and others – would be expected to comment on topics that are thought to be of particular importance when considering the valuation of environmental health risks for children.

The reports will cover the following elements:

- A) Overview of the risk differences between adults and children.
- B) Overview of the differences in the valuation of environmental health risks between adults and children.
- C) Description of four conceptual difficulties implied by this particular context - i.e. formulation and revelation of children preferences; use of transfer values obtained for adults to children; discounting children's health; and, economic uncertainties related to the valuation of children's health.
- D) Comparison of the different valuation methodologies - i.e. comparison between different economic as well as non-economic valuation methodologies.

Finally, there will be a roundtable discussion in which participating government officials will be requested to give their views on the necessity for, and the uses of, children-specific health values in environmental and health policy design, implementation and reform. The need for further research and action will also be discussed.

**Day 1 - September 11****9:30 Welcome Address by the Secretariat****9:30 Background, purpose and objectives of the workshop - a policy perspective****10:00 Session 1 - Overview of the valuation of environmental health risks to children****10:00 Overview of the risks differences between adults and children**

Giorgio Tamburlini (WHO, Italy) will present an overview of the main types of risk differences that may exist between adults and children. Particular attention will be paid to exposure differences and dose-responses differences, to the description of the different steps necessary to conduct risk-assessment practice, as well as the uncertainties in risk assessment for children.

**10:30 Overview of the differences in the valuation of environmental health risks**

Pascale Scapecchi (OECD, France) will present a review of the empirical literature related to the valuation of environmental health risks to children, the most commonly used methodologies and to present the empirical results. The purpose will be to explore what is the right way to approach analysis for children's health value. Economic and non-economic valuation methodologies will be considered. A short overview of the different valuation methodologies will be provided.

11:00 Coffee break

**11:30 Session 2 - Valuation differences: conceptual and practical difficulties**

This session will be devoted to the presentation of the conceptual and practical difficulties induced by the valuation differences that exist between adults and children. Four main difficulties that appear of high relevance and importance will be discussed: the formulation and revelation of children's preferences; the use of transfer values obtained for adults to children; the practice of discounting children's health; and, the economic uncertainties related to the valuation of children's health.

**11:30 Formulation and revelation of children's preferences**

Mark Dickie (University of Central Florida, USA) will provide comments on the formulation and expression of children's preferences, the foundations for the use of third-party elicitation, and the difficulties related to third-party elicitation, such as motivation, opportunity sets, altruism and other important parameters. Particular attention will be paid to show how these problems have been (or can be) treated empirically.

Discussant: Anna Alberini (University of Maryland, USA and FEEM, Italy).

12:30 Lunch Time

#### **14:00 Transferring values for adults**

Mark Agee (Pennsylvania State University, USA) will provide comments on the methods and difficulties associated with transferring values for adults' health to children. The report will describe the background on the use of transfer values, the different steps required for transfer practice, and will explain the reasons why this practice may not be satisfactory when valuing children's health. Particular attention will be paid to show how this difficulty has been (and can be) treated empirically.

Discussant: Bengt Kriström (Swedish University of Agricultural Science, Sweden).

#### **15:00 Discounting children's health**

John Cairns (University of Aberdeen, UK) will provide comments on the difficulties for discounting health, and more particularly in the context of valuation of children's health. The links between the discounting problems and the aforementioned difficulties will be explored, that is use of transfer values, formulation and expression of children's preferences, and uncertainties. Particular attention will be paid to show how these difficulties have been (or can be) treated empirically.

Discussant: Per-Olov Johansson (Stockholm School of Economics, Sweden).

#### **16:00 Economic uncertainties**

Sandra Hoffmann (Resources for the Future, USA) will present the difficulties induced by the economic uncertainties related to health valuation, and more particularly in the context of children's health valuation. Possible examples could be uncertainties related to expected life-span, future earnings, etc., in which uncertainties for children are measurably greater than for adults.

In addition, the links with the topics already addressed more generally in the previous sessions (transfer uncertainty, uncertainties related to the formulation and expression of children's preferences) will be explored. The report will also show how this problem has been (or can be) treated empirically.

Discussant: Brigitte Desaignes (University Paris I, France).

### **Day 2 - September 12**

#### **9:30 Session 3 - Comparisons of methodologies**

The main objective of this workshop is to establish practical recommendations for the valuation of environmental health risks for children. Therefore, the comparison of empirical studies involving different valuation techniques is important and will provide useful information. As a complement to the sessions which have involved more general discussions on conceptual problems, the objectives of this session are threefold:

- Address the advantages and disadvantages of the different methodologies;
- When and where it is appropriate to use alternative techniques; and,

- What the different methods contribute.

Comparisons between the different methodologies used to value the environmental impacts on children's health are needed in order to state their relevance. Separate reports will provide discussions on the alternative valuation methodologies, relying on empirical results, in the context of health valuation more generally, and, if possible in the particular context of children's health.

Michael Hanemann (University of California, Berkeley, USA) will present a comparison of revealed- and stated-preferences techniques in the valuation of children's environmental health.

James Hammitt (Harvard University, USA) will present a comparison of the willingness-to-pay and the quality-adjusted life years measures when valuing environmental risks to children's health.

Erik Nord (National Institute of Public Health, Norway) will present a comparison of methodologies used to derive QALYs in the context of the valuation of children's health.

11:00 Coffee break

#### **11:30 Session 4 – Policy perspectives**

In this session, invited policymakers responsible for the assessment and evaluation of environment and/or health policies from a small number of OECD countries and international organisations will present reports on the use of children-specific values in environmental and/or health policy design, as well as on the needs for further research and actions. The participants are the following:

- Jenny Pronczuk (World Health Organisation)
- Stephen White (European Commission)
- Nathalie B. Simon (US EPA - National Center for Environmental Economics)
- Robert Thaler (Austrian Federal Ministry of Agriculture, Forestry, Environment and Watermanagement)
- Paul DeCivita (Health Canada)

#### **13:00 Session 5 - Future directions**

Plenary conclusions will be made by the Secretariat.