

International Programme on Chemical Safety

**GLOBAL ASSESSMENT OF THE STATE-OF-THE-SCIENCE
OF ENDOCRINE DISRUPTORS**

*An assessment prepared by an expert group on behalf of the World Health Organization,
the International Labour Organisation, and the United Nations Environment Programme*

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The International Programme on Chemical Safety (IPCS), established in 1980, is a joint venture of the United Nations Environment Programme (UNEP), the International Labour Organisation (ILO), and the World Health Organization (WHO). The overall objectives of the IPCS are to establish the scientific basis for assessing the risk to human health and the environment from exposure to chemicals, through international peer-review processes, as a prerequisite for the promotion of chemical safety, and to provide technical assistance in strengthening national capacities for the sound management of chemicals.

The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) was established in 1995 by UNEP, ILO, the Food and Agriculture Organization of the United Nations, WHO, the United Nations Industrial Development Organization, the United Nations Institute for Training and Research, and the Organisation for Economic Co-operation and Development (Participating Organizations), following recommendations made by the 1992 United Nations Conference on Environment and Development to strengthen cooperation and increase coordination in the field of chemical safety. The purpose of the IOMC is to promote coordination of the policies and activities pursued by the Participating Organizations, jointly or separately, to achieve the sound management of chemicals in relation to human health and the environment.

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Global concerns have been raised in recent years over the potential adverse effects that may result from exposure to chemicals that have the potential to interfere with the endocrine system. Wildlife and human health effects of EDCs were first proclaimed by Rachel Carson in 1962, and based on a growing body of knowledge, those concerns have increased. This concern regarding EDCs is directed at both humans and wildlife. In response to these concerns, the Second Session (February 1997) of the Intergovernmental Forum on Chemical Safety made a number of recommendations to the Member Organizations of the IOMC, notably, IPCS and OECD, concerning approaches and means for coordinating and/or supporting efforts to address the issues internationally, including the development of an international inventory of research and coordinated testing and assessment strategies. This endorsed earlier recommendations from an international workshop at the Smithsonian (January 1997) and was followed by the 1997 Declaration of the Environmental Leaders of the Eight on Children's Environmental Health, which specifically addressed the issue of EDCs in their declaration. The environment leaders encouraged continuing efforts to compile an international inventory of research activities, develop an international assessment of the state of the science, identify and prioritize research needs and data gaps, and develop a mechanism for coordinating and cooperating on filing of the research needs. The 50th World Health Assembly adopted resolution WHO 50.13 in 1997, which called upon the Director-General of WHO to "take the necessary steps to reinforce WHO leadership in undertaking risk assessment as a basis for tackling high priority problems as they emerge, and in promoting and coordinating related research, for example, on potential endocrine-related health effects of exposure to chemicals."

List of Abbreviations

EDCs	Endocrine-disrupting chemicals
ILO	International Labour Organization
IOMC	Inter-Organization Programme for the Sound Management of Chemicals
IPCS	International Programme on Chemical Safety
OECD	Organisation for Economic Co-operation and Development
UNEP	United Nations Environment Programme
USA	United States of America
US EPA	United States Environmental Protection Agency
WHO	World Health Organization

In response to these recommendations, the International Programme on Chemical Safety (PCS) of the WHO/UNEP/ILO assumed responsibility for developing this global assessment of the current state of scientific knowledge relative to environmental endocrine disruption. Concurrently, the IPCS assisted in the development of a Global Endocrine Disruptor Research Inventory (see <http://endocrine.ei.jrc.it>), which serves as a tool to foster complementary research efforts and identify strengths and weaknesses of current global research efforts.

The IPCS (in collaboration with the OECD) convened an informal consultation in 1997 and a Scoping Meeting in 1998 to outline the objectives, scope, and development process for the assessment document. The IPCS established a Steering Group of the following scientific experts to provide oversight, expertise, and guidance for the project and to evaluate the accuracy, significance, and relevance of the information in the document.

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