

Researching Health Risks

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Foreword

In everyday life, we evaluate the risks associated with various activities and make choices, considering such things as benefits, costs, convenience, and past experience. As a society, we must make similar choices. The process of health risk assessment can help guide the decisions necessary for living in a world full of chemicals, radiation, and fibers, both natural and manufactured.

Risk assessment illuminates the hazards that result from exposure to a substance and the magnitude of the risk associated with different levels of exposure. Results of health risk assessments are used as one of the inputs in formulating regulatory decisions. Those decisions affect expenditures for regulatory compliance or treating exposure-related diseases that can total billions of dollars.

Because of the public health and economic implications of risk assessments, Congress has grown increasingly interested in the accuracy and scientific underpinning of risk assessment. An indication of this interest was the request by the House Energy and Commerce Committee and the House Science, Space, and Technology Committee to the Office of Technology Assessment (OTA) to analyze the nature, organization, and management of federally supported research on health risk assessment. This focus is important because such research provides the scientific foundation for health risk assessments.

In this report, OTA describes the Federal Government's research activities that are intended to improve health risk assessments. One of the findings of this Report is that the attention and resources allotted to health risk assessment research are not commensurate with its national impact. A particular problem is that research is fragmented within and across the Federal agencies, greatly complicating setting research priorities. Consequently, the agencies are not focusing on areas of research likely to have the most far-reaching effect on policy+ specially risk assessment methodology-and they are unable to harness fully the rapid advances in the basic biological and biomedical sciences.

Many individuals and institutions contributed their time and expertise to this project. Experts from government, industry and academia served on the project's advisory panel and workshop on research structure and organization and reviewed drafts of chapters and the full report. OTA gratefully acknowledges their contributions and assistance. As with all OTA analysis, however, responsibility for the content is OTA's alone.



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*NOTE: OTA appreciates **and is grateful** for the valuable assistance **and thoughtful critiques** provided by the advisory panel members. **The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.***

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