

*Genetic Monitoring and Screening in the
Workplace*

October 1990

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GENETIC
MONITORING
and
SCREENING
in the
WORKPLACE



CONGRESS OF THE UNITED STATES
OFFICE OF TECHNOLOGY ASSESSMENT

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Foreword

Genetic monitoring and screening have the potential to significantly change the workplace by detecting both occupational and nonoccupational diseases. These tests can identify genetic abnormalities that maybe associated with inherited diseases, susceptibilities, and traits in otherwise healthy, asymptomatic individuals. The ability to diagnose latent conditions (both occupational and nonoccupational) through genetic monitoring and screening raises policy questions about the proper use of such technologies. This report describes the issues associated with genetic monitoring and screening in the workplace. It examines the technologies used, analyzes the legal framework for the use of such tests, assesses the ethical issues inherent in the use of these tools in the workplace setting, describes how genetic information is conveyed by a genetic counselor, and, based on an OTA survey of 1,500 U.S. companies and the largest unions, evaluates the current and future use of genetic monitoring and screening in the workplace.

Genetic Monitoring and Screening in the Workplace was requested by the Senate Committee on Commerce, Science, and Transportation; House Committee on Energy and Commerce; and the House Committee on Science, Space, and Technology. It was also endorsed by the Senate Committee on Labor and Human Resources. It illustrates a range of options for action by the U.S. Congress on two central issues:

- . the appropriate role of the Federal Government in the regulation, oversight, or promotion of genetic monitoring and screening; and
- . the adequacy of federally sponsored research on the relationships between genes and the environment.

OTA was assisted in preparing this study by a panel of advisors and reviewers selected for their expertise and diverse points of view on the issues covered in the assessment. Advisory panelists and reviewers were drawn from industry, academia, labor organizations, legal experts, scientific and professional organizations, research organizations, and Federal agencies.

OTA gratefully acknowledges the contribution of each of these individuals. As with all OTA assessments, 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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