The Role of Genetic Testing in the Prevention of Occupational Diseases

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Foreword

This report examines a technology, genetic testing, that may be useful in reducing occupational disease, but that also raises concerns about potential misuse. Genetic testing encompasses two major techniques, one (screening) that may be able to identify individual workers who are genetically at higher risk to disease; and another (monitoring) that may serve as an early warning system that exposure to a hazardous agent in the workplace has occurred. Information from these techniques might be used in various preventive measures, but some people fear it could result in workers being unfairly excluded from jobs.

OTA undertook the study at the request of the House Committee on Science and Technology. The study examines the technology and its social implications. It evaluates the evidence supporting its claimed benefits, the extent of testing, and how the results have been used. Social issues, particularly of a legal and ethical nature, are identified and discussed. Finally, congressional options for both promotion and control are presented.

In preparing this report, OTA consulted with members of the project advisory panel, with contractors and special consultants, and with numerous other experts in industry, academia, labor, medicine, law, economics, and ethics. Drafts of the final report were reviewed by the advisory panel chaired by Arthur Bloom and by approximately 32 other individuals and groups representing a wide range of disciplines and perspectives. We are grateful for their many contributions. As with all OTA reports, however, the content is the responsibility of the Office and does not constitute an endorsement by the advisory panel or the Technology Assessment Board.

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