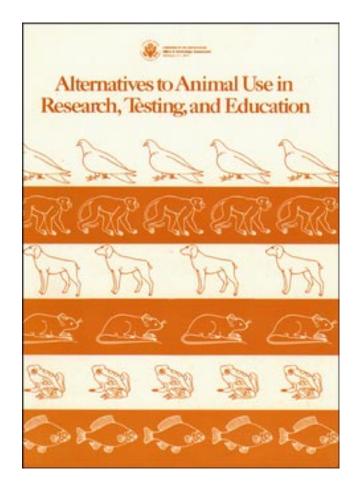
Alternatives to Animal Use in Research, Testing, and Education

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Foreword

With an estimated 17 million to 22 million animals used in laboratories annually in the United States, public interest in animal welfare has sparked an often emotional debate over such uses of animals. Concerns focus on balancing societal needs for continued progress in biomedical and behavioral research, for toxicity testing to safeguard the public, and for education in the life sciences with desires to replace, reduce, and refine the use of laboratory animals. In *1985*, Congress enacted three laws that dealt with laboratory animals, including amendments to the Animal Welfare Act.

In this assessment, OTA analyzes the scientific, regulatory, economic, legal, and ethical considerations involved in alternative technologies in biomedical and behavioral research, toxicity testing, and education. Included is a detailed examination of Federal, State, and institutional regulation of animal use, and a review of recent developments in 10 other countries. The report was requested by Sen. Orrin Hatch, Chairman of the Senate Committee on Labor and Human Resources.

The report illustrates a range of options for congressional action in seven principal areas of public policy regarding animals: using existing alternatives, developing new alternatives, disseminating research and testing information, restricting animal use, counting the numbers and kinds of animals used, establishing a uniform policy for animal use within Federal agencies, and amending the Animal Welfare Act.

OTA was assisted in preparing this study by an advisory panel of individuals 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 animal welfare groups, industrial testing laboratories, medical and veterinary schools, Federal regulatory agencies, scientific societies, academia, and the citizenry at large—in short, from representatives of all parties interested in laboratory-animal use and its alternatives. Written comments were received from 144 reviewers on the penultimate draft of the assessment. In addition, at the study's inception, OTA solicited information and opinions from more than 600 interested groups and individuals.

OTA gratefully acknowledges the contribution of each of these individuals. As with all OTA reports, responsibility for the content of the assessment is OTA's alone. The assessment does not necessarily constitute the consensus or endorsement of the advisory panel or the Technology Assessment Board.

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OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the Advisory Panel members. The views expressed in this OTA report, however, are the sole responsibility of the Office of Technology Assessment.

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