

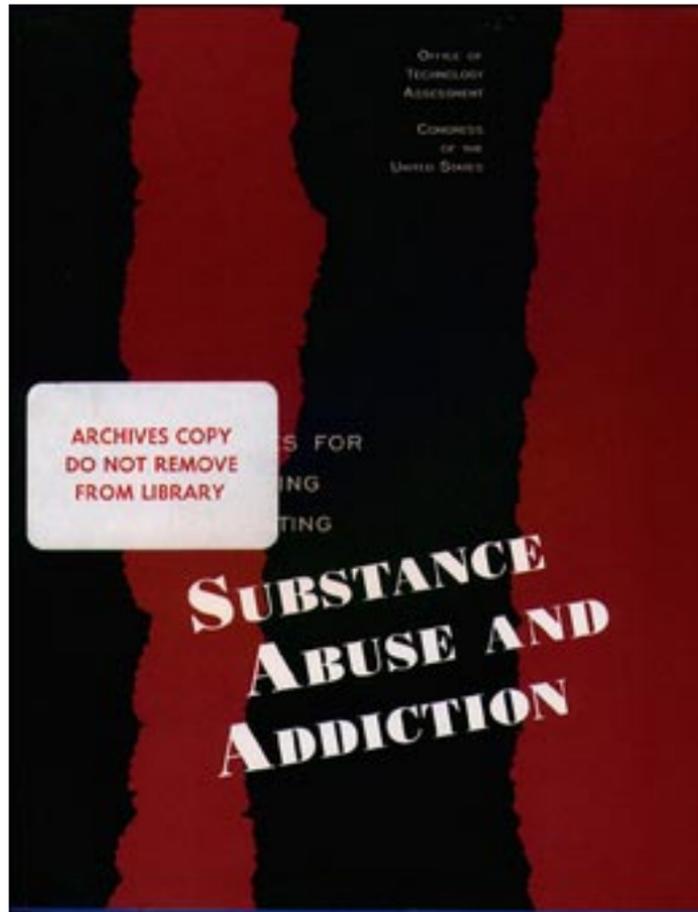
*Technologies for Understanding and
Preventing Substance Abuse and Addiction*

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Foreword

Substance abuse and addiction are major problems in the United States, resulting in lost human potential, increased health costs, violent behavior, crime, lost productivity, and premature deaths. Substance abuse and addiction are not confined to one, or even a few, subpopulations. The complex interactions of biochemical, physiological, psychological, and sociological factors leading to substance abuse and addiction are incompletely understood, and reports of success in reducing illegal drug abuse and addiction are often contradicted by reports of failure.

This report has four parts. The first part, *Necessary Preconditions*, focuses on several factors that are necessary for substance abuse and addiction to occur, including an examination of the biological research regarding the phenomenon of addiction to a variety of substances. The second part, *Individual Factors*, describes individual risk and protective factors that contribute to the abuse of, and addiction to, alcohol and drugs. The third part, *Community Contexts*, looks at how risk and protective factors play out in subcultures and in major activity settings (home, school, workplace, and recreation), and assesses the effectiveness of various substance abuse prevention initiatives. The fourth section, *Policy Options*, addresses a range of legislative issues and options for Congress arising from an understanding of the factors leading to substance abuse and addiction.

The request for this report came from the House Committee on Government Operations, the Senate Committee on Labor and Human Resources, and the Senate Committee on Governmental Affairs. Numerous individuals, including an advisory panel chaired by Patricia Evans, assisted the Office of Technology Assessment (OTA) in the development of this report. OTA gratefully acknowledges the contribution of each of these individuals. OTA also acknowledges and thanks the Strong Museum in Rochester, New York, for providing OTA with access and reproduction rights to graphics from their exhibit entitled *Altered States: Alcohol and Other Drugs in America*. As with all OTA reports, the final responsibility for the content of the report rests with OTA.



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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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