An individual's decision to use alcohol and the frequency, quantity, and situation of such use are the result of a combination of biological and social factors. Drinking is not only a personal choice, but also a matter of custom and social behavior, and is influenced by access and economic factors, including levels of disposable income and cost of alcoholic beverages.

Until prevention efforts cease to focus narrowly on the individual and begin to adopt broader community perspectives on alcohol problems and strategies to reduce them, these efforts will fail. The author challenges the current implicit models used in alcohol problem prevention and demonstrates an ecological perspective of the community as a complex adaptive system composed of interacting subsystems, an appreciation and understanding of which offers a new approach to the prevention of alcohol dependence and alcohol-related problems.
ALCOHOL AND THE COMMUNITY:
A SYSTEMS APPROACH TO PREVENTION
INTERNATIONAL RESEARCH MONOGRAPHS IN THE ADDICTIONS (IRMA)

Series Editor
Professor Griffith Edwards
National Addiction Centre
Institute of Psychiatry, London

A series of volumes presenting important research from major centers around the world on the basic sciences, both biological and behavioral, that have a bearing on the addictions, and also addressing the clinical and public health applications of such research. The series will cover alcohol, illicit drugs, psychotropics and tobacco, and is an important resource for clinicians, researchers and policy-makers.

Also in this series:

Cannabis and Cognitive Functioning
Nadia Solowij
ALCOHOL AND THE COMMUNITY: A SYSTEMS APPROACH TO PREVENTION

HAROLD D. HOLDER

Director and Senior Scientist, Prevention Research Center, Berkeley, California, USA
This book is dedicated to my father, Benjamin Solomon Holder, whose earliest teaching to his young son was about the naturalness of the world. I learned the language and concepts of complex adaptive systems later in life but my appreciation of such systems is rooted in my father's perspective.
Contents

Series editor’s preface xi
Acknowledgements xiii

1 The community system of alcohol use and alcohol problems 1
2 Consumption System 29
3 Retail Sales Subsystem: alcohol availability and promotion 54
4 Formal Regulation and Control Subsystem: rules, administration, and enforcement 64
5 Social Norms Subsystem: community values and social influences that affect drinking 74
6 Legal Sanctions Subsystem: prohibited uses of alcohol 97
7 Social, Economic, and Health Consequences Subsystem: community identification of and responses to alcohol problems 113
8 Community-level alcohol problem prevention 134

References 158
Index 174

ix
Series editor’s preface

Alcohol issues are a cause today for intense public health concern in most countries of the world. That assertion is valid for rich nations whose encounters with drink have long histories, and poorer regions where the adverse consequences of alcohol may begin to threaten national development.

Within the modern Public Health perspective, alcohol, the commodity itself, is an issue of concern as well as the problems which drinking generates. The reason for taking this position is the overwhelming strength of the research evidence showing that the more an individual drinks, the greater the risk of that person sustaining alcohol-related harm. Similarly, the higher the national per capita alcohol consumption, the greater will be the alcohol-related burden of costs and damage for that society.

The Public Health perspective is also illuminated by studies which demonstrate the immense variety in types and degree of the problems which can be caused by drinking. The concerns must be with the sum of small problems as well as with large problems, with harm done to the family or bystander as well as the direct consequences for the drinker themselves, with acute mishaps as well as chronic illness, and with the problems which occur in the social as well as the medical domain. These matters cannot be tidied away by directing our responses solely at ‘the alcoholic’.

Dr Harold Holder’s analysis brilliantly exemplifies this perspective. While not discounting the background importance of national alcohol policy responses, he offers an analysis at the level of local community. His essential argument is that to deal effectively with control over access to alcohol and to the multifarious problems engendered by alcohol, multiple actions will be needed by many types of community actor. He offers an incisive view on how that essentially ecological perspective is to be systemised.
This is a book which advances theory and sets research agendas, but at the same time it speaks practically to front-line alcohol issues within our communities, how to prevent the related suffering and costs, and how to save lives. Its author is American, but its messages are of wide international applicability.

Harold Holder enjoys great esteem as a distinguished researcher in this field. In this innovative text he demonstrates his capacity to make scientific analysis relevant at the street corner, both actual and metaphorical.

Griffith Edwards
National Addiction Centre
London, February 1997
Acknowledgements

Many have contributed to this book. I wish to acknowledge the hard work and dedication of Janet Jester in preparing multiple versions of this manuscript and its many drawings and tables. My co-workers with SimCom over the years were my worthy tutors in developing operational computer models. Special appreciation must be given to Jim Blose who worked alongside me for over ten years through various versions of SimCom. In recent years, the interest and energy of Barry Kibel and Will Miner expanded the model with further complexity, as well as enhanced user support and careful documentation. Robert Reynolds whose vision about science-based technology to aid alcohol prevention was an inspiration for computer modeling and for this book. Thanks to all of you and to others who contributed but were not named here.

I want to express appreciation to the Santa Fe Institute (SFI), Santa Fe, New Mexico (USA), for the intellectual support and stimulation concerning complex adaptive systems and for providing lodging during two extended visits during which time I wrote this book. SFI is fulfilling a critical nexus for cross-discipline exchange concerning chaos theory and adaptive systems.

Harold D. Holder