Policies to Reduce Underage Drinking
A Review of the Recent Literature

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1. Introduction

Drinking behavior is influenced by many factors in the social and policy environment, such as messages in media programming, advertising, community norms, public laws, policies and practices of public and private institutions, and economic factors (Wagenaar & Perry, 1994). Even the best-designed and most effective programs to change knowledge, attitudes, perceptions, expectancies, intentions to drink, and to teach refusal skills typically have modest or temporary effects because people continue to be exposed to a multi-dimensional environment that encourages risky alcohol use (Holder & Edwards, 1995). Changing the environment through public and institutional policies is an important approach to achieving permanent reductions in underage drinking. Our working definition of "policy" is: standards for behavior or practices that are formalized to some degree (i.e., written), and embodied in rules, regulations, or operating procedures.

In this paper, we review the scientific literature on numerous alcohol control policies that may affect underage drinking and related problems. For each policy, we first summarize all published studies on the effectiveness of that particular policy in reducing drinking and drinking-related problems among the general population. We then provide a more detailed review of published studies that specifically address the effectiveness of the policy on reducing underage drinking and drinking-related problems (Table 1). We group policies...
into four categories based on the number of published studies available: extensive research (more than 100 studies); moderate research (10 to 30 studies); minimal research (fewer than 10 studies); or no research (no studies to date). We do not cover here all alcohol control measures, but rather limit this review to policies that are most likely to directly affect youth drinking and drinking-related outcomes.

2. Policies with Extensive Research

Minimum Legal Drinking Age. The most well-studied policy aimed at reducing underage drinking is the minimum legal drinking age (MLDA). Since 1988, all 50 U.S. states legally prohibit individuals under the age of 21 from consuming, purchasing, or possessing alcohol, and prohibit adults from selling or giving alcohol to those under age 21 (exact legal language varies from state to state). During the 1970s, many states lowered the MLDA from 21 to either 18 or 19, and then increased the MLDA back to 21 in the late 1970s and early 1980s. These shifts in the MLDA led many researchers to study the effects of the changes. We previously conducted a comprehensive review of research on the MLDA, where we identified and examined 132 published studies from 1965 through 2000 (Wagenaar & Toomey, 2002). We also evaluated the methods used in each study, and identified studies with higher-quality designs and statistical methods. The review showed strong evidence that the age-21 MLDA is associated with reductions in drinking and traffic crashes among 18- to 20-year-olds. We also found some evidence that the age-21 MLDA reduces other alcohol-related problems, such as suicide and vandalism, among young people.

For this paper, we identified ten studies, with twelve separate analyses, evaluating the MLDA that were published since our comprehensive review (Table 1). Six studies examined effects of changes in the MLDA on alcohol consumption, and five of these were high-quality, using multivariate analyses of census or nationally representative samples across several years. All but one of the high-quality studies showed a statistically significant inverse relationship between the MLDA and alcohol consumption. Recent analyses of data from Monitoring the Future, a national annual survey of high school seniors in the U.S., showed increases in the MLDA from 1980 to 1989 were associated with slight reductions in the prevalence of alcohol consumption (DiNardo & Lemieux, 2001), and from 1977 to 1992, increases in the MLDA were associated with lower probabilities of both moderate (10 or more drinks in past month) and heavy (five or more drinks in a row in past two weeks) drinking (Dee & Evans, 2003). Two studies used overall sales figures as measures of alcohol consumption, so outcomes reflect consumption across the general population, rather than among youth specifically. Among 45 states from 1982 to 1997, a higher MLDA was associated with lower beverage-specific and total alcohol