Approaches to alcohol control policy
The World Health Organization is a specialized agency of the United Nations with primary responsibility for international health matters and public health. Through this Organization, which was created in 1948, the health professions of over 180 countries exchange their knowledge and experience with the aim of making possible the attainment by all citizens of the world of a level of health that will permit them to lead a socially and economically productive life. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health problems of the countries it serves. The European Region embraces some 870 million people living in an area stretching from Greenland in the north and the Mediterranean in the south to the Pacific shores of Russia. The European programme of WHO therefore concentrates both on the problems associated with industrial and post-industrial society and on those faced by the emerging democracies of central and eastern Europe and the former Soviet Union. In its strategy for attaining the goal of health for all the Regional Office is arranging its activities in three main areas: lifestyles conducive to health, a healthy environment, and appropriate services for prevention, treatment and care. The European Region is characterized by the large number of languages spoken by its peoples, and the resulting difficulties in disseminating information to all who may need it. Applications for rights of translation of Regional Office books are therefore most welcome.
Approaches to alcohol control policy

by

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Introduction

The publication series of the European Alcohol Action Plan covers all the main strategies of health promotion concerning alcohol. The purpose of this booklet is to describe the different alcohol control measures that have been used for public health purposes, and to review research undertaken on the effectiveness, consequences and conditions of these measures. Emphasis is placed on legislative and fiscal policy measures used in alcohol control policy. Health education about alcohol use and the treatment of those with alcohol-related problems are sometimes included under the concept of an alcohol control policy but are not, however, reviewed here.

The introductory chapter gives the background to a comprehensive public health alcohol policy. There follows a short description of the different alcohol control alternatives and how they relate to different cultural and historical contexts and to different economic, public health and other interests. The following chapters describe the different alcohol control measures, and summarize research into their effectiveness and consequences. The report ends with a short discussion on the future needs and options for alcohol control in socially, economically, culturally and politically diverse European countries.

ALCOHOL IS A SPECIAL COMMODITY

From the public health perspective, alcoholic beverages are special commodities. In most countries, the supply and use of alcohol are regulated at least by some special measures. One of the most important reasons for such regulation is the fact that very many health and social problems are related to alcohol use.
Data from a number of European Member States of WHO (1) indicate that:

- alcohol use causes a substantial proportion of total morbidity and mortality, with an estimated 6% of deaths among people under 75 years of age and one fifth of all acute hospital admissions related to alcohol use;

- significant health problems associated with alcohol use include raised blood pressure, cerebrovascular disease, cancer (particularly of the upper airways and digestive tract), cirrhosis of the liver, and harm to mental health, including dependence and other behavioural problems;

- alcohol use is associated with more than one in three road traffic accidents and deaths, and is an important factor in domestic, recreational and work-related accidents;

- alcohol use is implicated in a considerable amount of family disruption, domestic violence and child abuse as well as public order problems, work accidents and absenteeism from work, and causes considerable expense for society through lost productivity and costs to the health, social welfare, transport and criminal justice systems (the economic burden has been estimated at 2–3% of gross national product).

Previously, it was generally believed that the health problems in society related to alcohol use were mainly limited to people dependent on alcohol. More recently, however, research has shown that such health problems also occur among more moderate drinkers. Also, those whose own drinking does not cause problems can suffer the consequences of other people’s drinking, for example through family disruption and domestic violence or alcohol-related accidents in traffic or at work. Public health alcohol policy should therefore address the overall level of alcohol consumption and problems caused to people other than the drinker, as well as problems related to heavy or excessive alcohol use.

Target 17 of the WHO European health for all policy as revised in 1991 (2) states:
By the year 2000, the health-damaging consumption of dependence-producing substances such as alcohol, tobacco and psychoactive drugs should have been significantly reduced in all Member States.

The text continues by stating that this target can be achieved if well balanced policies and programmes in regard to the consumption and production of these substances are implemented at all levels and in different sectors. For alcohol the specific target is to "reduce alcohol consumption by 25%, with particular attention to reducing harmful use".

Target 17 includes two strategies to reduce alcohol-related health problems. One is a population-based strategy to reduce the overall level of alcohol consumption. The other is a high-risk strategy to reduce the consumption of heavy drinkers or people who often drink alcohol in especially risky situations, such as before driving a motor vehicle. The European Alcohol Action Plan emphasizes the significance of the population-based approach because:

- an overall reduction results in fewer problems at all levels of drinking;
- heavy drinking and its problems are sensitive to the measures used in this approach;
- influencing perceptions of reduced levels and patterns of drinking has important long-term cultural consequences: an environment in which light drinking is the norm would exert pressure on heavy drinkers to reduce their consumption, thereby strengthening the effect of any high-risk measures being undertaken.

The high-risk approach is primarily concerned with identifying and helping individuals with special problems related to their use of alcohol.

A COMPREHENSIVE PUBLIC HEALTH STRATEGY

Experience from all over the world has shown that alcohol use and related problems cannot be significantly reduced by any single and limited measure such as education, treatment or restriction of supply. A public health alcohol policy should use, in a balanced way, all five
health promotion strategies indicated in the Ottawa Charter for Health Promotion (3):

- building healthy public policy
- creating supportive environments
- strengthening community action
- developing personal skills
- reorienting health services.

The European Alcohol Action Plan (1), endorsed as a positive set of guidelines by representatives of the WHO European Member States in September 1992, is based on the principles of the Ottawa Charter.

*Building healthy public policy* means that health is put on the agenda of policy-makers in all sectors and at all levels where alcohol is dealt with. It should thus be taken into consideration when deciding on such issues as: agricultural policies related to wine and beer production; regulating the production of and trade in alcoholic beverages; alcohol taxation; the on-premises and off-premises sale of wine, beer and spirits; preventing traffic, workplace and domestic accidents; and social welfare and criminal justice systems related to alcohol problems.

*Creating supportive environments* means – among other things – that schools, workplaces, public and private institutions, families, places of recreation, and many other settings could develop action in support of alternatives to alcohol drinking, as well as encourage less drinking and help people with alcohol problems.

*Strengthening community action* is a strategy that could activate communities, citizen groups, local institutions and professionals, municipal administrations and other local bodies to use their resources to create supportive environments, to enforce formal and informal controls on alcohol supply and use, and to strengthen public participation in alcohol action.

*Developing personal skills* is a strategy of providing information and education on alcohol and alcohol problems. It could be facilitated at school, at home, in the workplace, during recreation and in other settings. Educational, professional, commercial and voluntary
channels can be used, and different self-help and social support groups can play a significant role.

*Reorienting health services* includes developing the catalytic, advocacy and mediating role of primary health care in alcohol action, as well as practices of identifying people at risk and helping them to reduce their alcohol consumption. Also, those working in the more specialized health services need to develop skills in identifying alcohol problems and in dealing with them.

**A PUBLIC HEALTH ALCOHOL CONTROL POLICY**

Many sectors of public administration and public policy-making deal with issues related to the production, trade and consumption of alcohol and the consequences of its consumption. A study in the United Kingdom (4) identified 16 different government departments with some interest in alcohol issues (Table 1). In many departments more than one unit dealt with alcohol issues. In most sectors not only national but also regional and local public authorities have responsibilities with regard to alcohol.

Interventions by the state authorities in the production, trade and purchase of alcoholic beverages are called *alcohol controls* and the policies related to them *alcohol control policies* (5). The objectives of the different authorities in alcohol control are not always to do with public health. It is the responsibility of public health policy-makers to approach other sectors and encourage coordination among them, aiming at the most effective use of different alcohol control measures for the promotion of healthy lifestyles in relation to alcohol. Inter-ministerial committees or other methods of coordinating the activities of different sectors of the administration may be needed.
Table 1. Responsibilities of British government departments concerning alcohol

<table>
<thead>
<tr>
<th>Department</th>
<th>Responsibilities concerning alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customs and Excise</td>
<td>Tax</td>
</tr>
<tr>
<td>Treasury (Finance)</td>
<td>Tax, trade, health consequences</td>
</tr>
<tr>
<td>Ministry of Agriculture</td>
<td>Information and education, trade</td>
</tr>
<tr>
<td>Department of Transport</td>
<td>Information and education, transport</td>
</tr>
<tr>
<td>Home Office (Ministry of the Interior)</td>
<td>Advertising and sponsorship, availability controls, crime and public order, transport, health consequences</td>
</tr>
<tr>
<td>Department of Health and Social Security</td>
<td>Information and education, health consequences</td>
</tr>
<tr>
<td>Department of Employment</td>
<td>Health consequences, trade</td>
</tr>
<tr>
<td>Department of Trade and Industry</td>
<td>Advertising and sponsorship, trade</td>
</tr>
<tr>
<td>Cabinet Office</td>
<td>Health consequences</td>
</tr>
<tr>
<td>Ministry of Defence</td>
<td>Information and education, availability controls, crime and public order, transport, health consequences</td>
</tr>
<tr>
<td>Lord Chancellor's Department</td>
<td>Availability controls</td>
</tr>
<tr>
<td>Department of the Environment</td>
<td>Advertising and sponsorship, crime and public order</td>
</tr>
<tr>
<td>Department of Education and Science</td>
<td>Information and education</td>
</tr>
<tr>
<td>Scottish Office</td>
<td>Information and education, availability controls, crime and public order, transport, health consequences, trade</td>
</tr>
<tr>
<td>Welsh Office</td>
<td>Information and education, health consequences</td>
</tr>
<tr>
<td>Northern Ireland Office</td>
<td>Information and education, advertising and sponsorship, availability control, crime and public order, transport, health consequences, trade</td>
</tr>
</tbody>
</table>

Source: Harrison & Tether (4)
Alcohol Control in Different Contexts

ALCOHOL CONTROL SYSTEMS

The forms and range of alcohol control by the international, national, regional and local state authorities vary greatly from country to country and also from one period of time to another. At one end of the scale may be seen the system of total prohibition in some Islamic countries. At the other end is perhaps the provision of lighter alcoholic beverages in those countries where wine and beer are perceived as ordinary foodstuffs without many special control measures. In many countries there is almost a continuous political debate on dismantling or establishing different control measures.

The measures used in at least some countries include regulating the purchase and consumption, pricing, marketing, wholesale and retail sale, import and export, and production of alcohol, and the production of the raw materials for making alcohol. The means for exercising these regulations vary from country to country and include:

- special responsibilities of producers, sellers and servers of alcohol to prevent alcohol-related harm;
- restrictions on serving or selling alcohol to intoxicated persons or to various other categories of people;
- age limits on buying and/or consuming alcohol;
- restrictions on the hours, places and ways of selling or consuming alcohol;
- taxation on alcohol;
Approaches to alcohol control policy

- subsidizing or giving tax reductions to raw material production, industry, trade or certain privileged groups of people such as diplomats;
- licensing the production of and/or trade in alcohol;
- a state monopoly on various components of production or trade; and
- total or partial prohibition.

There are hundreds of possible combinations of these measures. The number of possibilities is increased further by the fact that most control measures can be exercised at different levels (international, national, regional or local) and in many different ways, and because in most countries different measures are exercised for different beverages.

INTERESTS IN ALCOHOL CONTROL

There can be many reasons for state intervention in the alcohol market. One major purpose is to prevent alcohol-related health problems. Others include protecting national producers from international competitors, ensuring state revenue from alcohol tax, ensuring demand for farmers who produce the raw materials, supporting the alcohol and hospitality industries, and defending public order, religious or cultural traditions, and consumer interests.

In some countries the most powerful reason for state intervention in the alcohol market is support to growers of wine grapes. This has been the case, for instance, in the decision-making of the European Union, which gives significant subsidies within the framework of its agricultural policy. In some countries, alcohol tax has provided more than 10% of total national revenue and has thus exercised a powerful financial influence. In many countries such measures as state monopolies, tax differentials and banning or subsidizing advertising have been used to support national alcohol producers on the international market. The impact of religious interest can most clearly be seen in the prohibitive legislation in many Islamic countries.
ALCOHOL CULTURES

The cultural differences among countries in patterns of alcohol use, perception of alcohol problems and acceptance of alcohol policies are significant. In some countries the favourite drink is wine, in others beer or spirits. Some nations perceive the daily use of alcohol with meals as quite normal (6), while in others alcohol is consumed mostly at weekends or only on special occasions (Fig. 1). In some countries, alcohol is perceived as a main contributing factor in many public order and public health problems, while in others “alcoholism” is the only perceived problem related to alcohol use.

There is, however, no need to overemphasize these differences. For instance, although the daily use of alcohol is much more prevalent in the Mediterranean than in the Nordic countries, only a minority of adult people in the Mediterranean area drink daily.

Fig. 1. Percentage of the population over 18 years of age in 17 western European countries drinking alcohol daily or nearly every day, 1990

* Prior to the accession of the former German Democratic Republic.

Source: Reader’s Digest (6).
RECENT DEVELOPMENTS IN ALCOHOL CONTROL POLICY

In many countries, the second half of this century has seen the abandonment of measures introduced during industrialization and urbanization to control public order and to promote public health and state finances (5). Most of the countries of central and eastern Europe relinquished alcohol control during the political, economic and social changes of the early 1990s (Moskalewicz, J., unpublished data, 1992). The process of western European economic and political integration also decreases the legitimacy of those alcohol control policies that are claimed to protect the national alcohol business from international competition (7). These processes, often called the liberalization of alcohol control policies (1), emphasize the need to strengthen public health action to balance the influence of the strong international agricultural and alcohol industries.

THE NEED FOR AN INTERNATIONAL POLICY

The largest companies in the alcohol industry are multinational. They use the international mass media for marketing and try to influence both national and international decision-making. Their impact on the development of alcohol policy in the countries of central and eastern Europe, and particularly in Africa, Asia and Latin America, has led to growing concern (8).

Drinking habits are also influenced by increased tourism and contact with other cultures. Often, new drinking styles learnt abroad add to alcohol consumption because traditional drinking habits continue alongside the new habits.

Up to now, policy in the international trade in alcohol has placed emphasis on opening new markets for national producers and on protecting them from international competition. This has led to subsidizing alcohol production and to neglecting concern about the public health impact of increased alcohol exports to the importing countries (8).
People often ask which alcohol policy measures are the most effective and for which it is easiest to find popular support. Because control policies are often opposed, at least by the alcohol and hospitality industries, the temptation is to build alcohol policies on strategies that are not opposed by any powerful interest group outside the health sector, such as health education, treatment and voluntary action.

In the real world, it is very difficult to separate the effect of one measure from that of other measures and developments. Many researchers have also pointed out that any single measure can be effective only if it is part of a comprehensive policy combining different measures and strategies. For instance, health education through the mass media seems to have a rather small direct effect on alcohol consumption and the resulting problems, but it can be important in influencing the public perception of alcohol and related problems, and thus for obtaining popular support for other measures in public health alcohol policy (9). Investment in the treatment of alcohol dependence does not prevent more people becoming dependent on alcohol, but preventive policies could lose credibility if the treatment of people with alcohol problems were neglected (10). Community action for preventing alcohol problems is effective when supported by other preventive strategies. Such action is also needed to change popular attitudes to alcohol use, problems and policies. At the same time, experience from many projects has demonstrated that community action has not been effective where other preventive measures have been neglected (11).

The experience with very tight alcohol control in some Nordic countries and the United States in the first part of this century and during the Soviet anti-alcohol campaign of 1985–1988 has shown that, without sufficient popular support and effective enforcement by the authorities, such policies cannot be implemented in the long run (12). Experience from smaller changes in alcohol control policy has also demonstrated that control measures should be developed within the framework of a comprehensive public health alcohol policy that combines, in a balanced way, the different strategies and creates popular support for the necessary public health measures.
Price Regulation

Alcoholic beverages are like any other commodity in respect of price. Demand increases if prices decrease or if the incomes of consumers rise more than prices. Demand falls if prices increase more than the rise in income of consumers. Price regulation can thus be used as a means of alcohol control.

Most price regulation has been enacted at the national level, but international economic integration has made it more important to create price regulation at the intergovernmental level also. In Canada and the United States, price regulation is enacted at the state or province level; in principle, restrictions on price competition could also be enacted at the local level.

REGULATION OF PRICE COMPETITION

Many countries regulate alcohol prices to counter price competition. The motivation for such measures includes balancing the wine market to safeguard the income of producers, and restricting marketing that may lead to increased consumption and thereby alcohol problems.

Public monopolies are the most powerful means of state price regulation. The absence of competition creates room for other factors to be taken into account in pricing alcoholic beverages. Price regulation can also be introduced through a system of licensed or free private enterprise, for instance by state authorities determining retail or wholesale prices, or minimum or maximum prices.
TAXATION AND OTHER MEANS OF INCREASING PRICES

Almost everywhere, alcoholic beverages are sold at a price higher than the cost of production. Sales taxes are added to the price, and different levels of excise tax and duty can be levied. The main aims of raising prices are to increase state revenue, to maintain the income of wine-grape producers, and to prevent excessive consumption. Revenue from alcohol can constitute a significant proportion of national income. In Finland, for example, about 7–10% of all state revenue comes from alcohol, and in Poland this figure was even greater during communist rule (5).

There is great variation in the systems and levels of alcohol taxation in different countries. Most countries have a special excise duty on alcohol. Many set the tax level by the pure alcohol content of the beverage, resulting in higher taxes on drinks with higher alcohol content. Many countries have set high duties on imported alcohol, but this kind of support for domestic producers is considered to conflict with the principles of free trade.

The Nordic countries, Ireland and the United Kingdom have much higher taxes on alcohol than the Mediterranean countries. The European Union has tried to harmonize alcohol taxation among its member states, but to date has succeeded only in setting minimum tax rates. As of 1 January 1993, they are as follows (13).

The minimum rate for wine (still and sparkling) is no tax.

For beer, the minimum rate is ECU 0.748 per hectolitre per degree Plato, or ECU 1.87 per hectolitre per degree of alcohol of finished product.

For intermediate products (beverages with an alcohol content under 22% and not belonging to the group of wines or beers), the minimum is ECU 45 per hectolitre of product.

For spirits, the minimum is ECU 550 per hectolitre of pure alcohol. Member states that apply a duty not exceeding ECU 1000 per hectolitre of pure alcohol may not reduce their national rate. Member
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states that apply a duty exceeding ECU 1000 per hectolitre of pure alcohol may not reduce their national rate below ECU 1000.

The taxes levied on spirits, wine and beer in the member states of the European Union are shown in Table 2 (14).

Table 2. Excise taxes in ECU/hectolitre on spirits, wine and beer in the 12 member states of the European Union in 1992

<table>
<thead>
<tr>
<th>Country</th>
<th>Spirits</th>
<th>Table wine</th>
<th>Beer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denmark</td>
<td>3316</td>
<td>125</td>
<td>76</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2653</td>
<td>172</td>
<td>76</td>
</tr>
<tr>
<td>Ireland</td>
<td>2503</td>
<td>256</td>
<td>121</td>
</tr>
<tr>
<td>Belgium</td>
<td>1464</td>
<td>35</td>
<td>19</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1358</td>
<td>35</td>
<td>20</td>
</tr>
<tr>
<td>Germany</td>
<td>1231</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>France</td>
<td>975</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Portugal</td>
<td>643</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Italy</td>
<td>618</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Spain</td>
<td>559</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>214</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Greece</td>
<td>90</td>
<td>0</td>
<td>6</td>
</tr>
</tbody>
</table>

*Source: Rossi (14).*

EVALUATION OF EFFECTIVENESS AND OTHER CONSEQUENCES

Only a few studies have been conducted on the effect of restricting price competition (15). This kind of restriction may result in a small decrease in alcohol consumption. The impact of price changes has been the subject of many studies (16). The econometric concepts of "price elasticity" and "income elasticity" are used to describe how the demand for alcohol changes when the price of alcohol or the incomes of consumers change (5).

Most studies show price elasticities for the total consumption of alcohol of from –0.3 to –0.8 (16). This means that a 1% increase in
the real price of all alcoholic beverages will result in a decrease in consumption of 0.3–0.8%. The income elasticities seem to be a little greater, from 0.4 to 1.5, meaning that a 1% increase in the real income of consumers will result in an increase in consumption of 0.4–1.5%. Thus, alcohol consumption is likely to increase if alcohol prices are not pegged to the rise in other prices and wages during times of inflation.

In most studies, the price and income elasticities are greater for wine and spirits than for beer (16,17). The “cross-price elasticity”, i.e. the effect of a change in the price of one type of alcoholic beverage on the demand for another type of beverage, seems to be rather small, although these factors have not been extensively studied (18). It seems, therefore, that most people do not change their beverage of choice simply as a result of changes in price differentials.

The impact of price increases have sometimes been evaluated separately for heavy and moderate drinkers. The conclusion of these studies (19,20) is that heavy drinkers are more sensitive to price changes than moderate drinkers. Price increases would therefore be expected to reduce the alcohol consumption of heavy drinkers more than that of moderate drinkers.

Pricing is an effective means of alcohol control. The adverse effects of tax increases are not very significant, one being the influence of alcohol prices on overall consumer prices that might have some inflationary effect on the national economy. A second adverse effect is the growing cross-border movement, both legal and illegal, of alcoholic beverages (21).
Regulation of Alcohol Marketing

Alcohol marketing uses many different strategies, including advertising on television and radio and in newspapers and journals, advertising directly to some consumer groups, sponsoring sports and cultural activities, and promoting the visibility of alcohol in television programmes and popular songs.

A marketing strategy for any commodity quite naturally tries to emphasize the benefits of that commodity to the customer. Although it may mention possible harmful properties, these are not expressed in a way that would dissuade the customer from buying the commodity. This is why the marketing of alcoholic beverages causes problems from the public health perspective.

Most industrialized countries have developed at least some restrictions on alcohol marketing (Table 3). In many countries they are based partly on the voluntary agreement of the alcohol industries or the mass media, and often there are similar restrictions on the marketing of tobacco and other health-damaging products. Many countries have also used legislative measures to regulate marketing (9).

There are two strategies for restricting the marketing of alcohol. The weaker strategy tries to control the content of the campaign and the target audience so as to avoid the promotion of an especially harmful use of alcohol. A more ambitious strategy is based on a pessimistic evaluation of the effects of partial regulation, and tries to ban all alcohol marketing in some or all of the media.
<table>
<thead>
<tr>
<th>Country</th>
<th>Existence of public restrictions</th>
<th>Existence of self-regulatory codes</th>
<th>Restrictions on the marketing of beer or wine on television</th>
<th>Restrictions on the marketing of spirits on television</th>
<th>Restrictions on sponsorship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>-</td>
<td>x</td>
<td>-</td>
<td>-</td>
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<td>x</td>
<td>-</td>
</tr>
<tr>
<td>Italy</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Norway</td>
<td>x</td>
<td>x</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>Portugal</td>
<td>x</td>
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<td>x</td>
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<tr>
<td>Spain</td>
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<tr>
<td>Sweden</td>
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<tr>
<td>Switzerland</td>
<td>x</td>
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<td>x</td>
<td>-</td>
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<tr>
<td>United Kingdom</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
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<tr>
<td>United States</td>
<td>x</td>
<td>x</td>
<td>-</td>
<td>x</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: Rossi (14).
RESTRICTIONS ON THE CONTENT OF ADVERTISING

There are many agreements among private alcohol companies or among advertising media on so-called voluntary restrictions on the content of advertisements. Very often these “voluntary” agreements arise from the pressure of groups concerned with alcohol problems, or from the threat of legislative measures if no voluntary agreements are reached. Some countries have also issued legislation that restricts the content of advertisements.

An example of legislative restriction on the content of advertisement is the Council of the European Communities’ 1989 Directive on television broadcasting (22), which states:

Television advertising for alcohol beverages shall comply with the following criteria:

(a) it may not be aimed specifically at minors or, in particular, depict minors consuming these beverages;
(b) it shall not link the consumption of alcohol to enhanced physical performance or to driving;
(c) it shall not create the impression that the consumption of alcohol contributes towards social or sexual success;
(d) it shall not claim that alcohol has therapeutic qualities or that it is a stimulant, a sedative or a means of resolving personal conflicts;
(e) it shall not encourage immoderate consumption of alcohol or present abstinence or moderation in a negative light;
(f) it shall not place emphasis on high alcoholic content as being a positive quality of the beverage.

It has sometimes been proposed (9) that alcohol advertisements should also contain accurate information on the health effects of alcohol.

RESTRICTIONS ON THE USE OF DIFFERENT MEDIA

In many countries there are restrictions on the use of certain media for marketing alcohol. Because television is such a powerful means of influencing people’s attitudes, and because of the supposed susceptibility of young people to the influence of electronic media,
advertising on television and radio is more often banned voluntarily or by legislation than marketing in other media. In many countries, too, the marketing of alcohol in programmes or magazines directed at minors is banned voluntarily or by legislation.

In France, a law restricting the advertising of all drinks containing more than 1.2% alcohol was passed in 1991. The law bans all advertisements targeted at young people and all advertising on television or in sports grounds, as well as sponsorship of sports events. Advertising is permitted only in the adult press, in the places where the product is made and sold, and during special events. A health message must be included on each advertisement to the effect that abuse of the product is dangerous to health (23).

RESTRICTIONS ON EVENTS THAT CAN BE USED TO PROMOTE ALCOHOL

The sponsorship of cultural, sports and other public events has recently become more significant in the marketing of many commodities. The sponsor gets its name publicized, and can often also use the event for marketing its products. Karel Vuurstren, president of the Dutch brewery Heineken, states the following objectives for sponsorship:

Sponsoring events is an important activity for a company like Heineken. The main aim is to secure world-wide brand exposure on television, radio and in the printed media. We also make good use of the opportunity to provide hospitality during sponsored events (24).

Sponsorship by alcohol industries can either be banned totally or for certain events such as those involving sport or those directed at minors. A total ban on alcohol advertising could also restrict sponsorship, because the industry is less interested in sponsorship that does not provide good opportunities for advertising.

WITHDRAWAL OF TAX RELIEF ON MARKETING

The marketing costs of a company are considered in most countries as production costs. Companies are normally obliged to pay tax only on
that part of income that exceeds production costs. Thus, by increasing marketing costs a company can reduce its taxes — and one interpretation of this is that the taxpayer pays that part of the company's marketing costs. This has led to the idea of withdrawing tax relief on the costs of alcohol marketing (25).

**TOTAL BAN ON ALCOHOL ADVERTISING**

Some countries have issued a total ban on advertising, either of all alcoholic drinks or of spirits. A total ban forbids not only advertising in some media but also the advertising of alcohol on posters, outside restaurants or liquor stores, or in other places.

**REGULATION OF THE WAY ALCOHOL IS PORTRAYED BY THE MASS MEDIA**

The portrayal of alcohol in newspaper articles, and especially in the popular entertainment programmes on television and radio, probably has a greater impact on drinking behaviour than overt advertising (9). Sometimes sponsorship activities are directed at obtaining publicity in ordinary television programmes or through photographs in newspapers. This is most noticeable in television sports programmes such as motor racing.

There have been attempts to restrict such "hidden" marketing in many countries. The state-owned media have been under particular pressure to issue such restrictions. In the United States, for instance, voluntary agreements on restricting the ways in which alcohol is portrayed in the media have been tried (9).

**HOW SIMILAR ARE THE VARIOUS REGULATIONS ON MARKETING?**

Most of the regulations on marketing have been issued at the national level or, in Canada and the United States, at the level of the provinces and states. Some of the regulations, such as those concerning advertising on posters and outside premises where alcohol is sold or
the sponsoring of cultural and sports activities, could also be issued at the local level. The Council of the European Communities has issued its first directive to regulate advertising at the intergovernmental level. There is an increasing need for international measures to control marketing, especially through the electronic media. Measures within national borders are not enough when broadcasting increasingly occurs across borders, often through satellite television. This has been an important factor in changing the attitudes of young people in the countries of central and eastern Europe towards alcohol in the 1990s (26).

**EVALUATION OF EFFECTIVENESS AND OTHER CONSEQUENCES**

Evaluative research on changes in alcohol advertising, such as the experimental 14-month advertisement ban in British Columbia or the total bans in Finland and Norway, has not found clear short-term effects on overall alcohol consumption (9,15,27). Some studies, however, have shown that advertisement bans can have a statistically significant effect in reducing consumption and alcohol problems (28). The impact of advertising on young people seems to be clearer: in California, advertisements created more positive attitudes towards drinking alcohol among elementary schoolchildren and thus a greater predisposition to alcohol and drinking (15).

The main conclusion from evaluative research is that the most important effect of advertising is not the immediate impact on consumption but the way in which it powerfully shapes views on alcohol in social life, associating alcohol with the most enjoyable moments of life and leaving its harmful effects out of the picture (9). Thus, the effect on young people appears quite quickly, whereas the impact on the general population takes much longer.

Although the quantitative effects of advertising on alcohol consumption and the associated problems may take a long time to appear, the qualitative impact is more immediately visible. If an advertisement portrays alcohol as similar to any other commodity, it is difficult to convince people that they should deal with it more carefully or that any health education or control measures are needed.
Regulation of advertising is also needed, therefore, to support other alcohol policy measures (25).

When comparing the effectiveness of different advertising control measures, it should be borne in mind that restrictions on the content of advertisements are often very difficult to enforce because there can be many interpretations of codes of responsible advertising. Partial bans tend to move advertising activities from one medium to another. A total ban on direct advertising can also have adverse effects if the industry begins to use other, indirect marketing strategies such as sponsorship, and if the use of these marketing methods is not effectively restricted (9,25).
Regulating the Retail Sale of Alcohol

The systems of retailing alcoholic drinks vary significantly from one country to another. There are various licensed premises such as bars, saloons, restaurants, pubs and tavernas, and different kinds of liquor stores, wine shops, corner shops, supermarkets, etc. for off-licence sales. The composition of the whole retail system and the significance of the different types of retail outlet vary between different alcohol cultures and socioeconomic contexts.

There is also great variation in regulatory measures on retail sales. These include age limits and other limits on clients, restrictions on hours of sale and types of outlet, regulations on servers of alcohol, licensing, restrictions on the number of outlets, a public monopoly of retail sales, and prohibition. These measures can be used for public health purposes, both to restrict the overall consumption of alcohol and to influence consumption and the related problems of specific population groups.

AGE LIMITS

The minimum age for purchasing alcoholic drinks is prescribed by law in most countries, with age limits varying from 16 years to at least 21 years (Table 4). In many countries there are different age

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1 The British term "off-licence" is used generically in this publication to describe all retail outlets other than licensed premises.
Approaches to alcohol control policy

limits for different types of alcoholic drink, and often different age limits for sales on licensed premises and from off-licences (29).

Table 4. Minimum age for purchasing spirits in some countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Minimum age (years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>18</td>
</tr>
<tr>
<td>Austria</td>
<td>16</td>
</tr>
<tr>
<td>Canada</td>
<td>18</td>
</tr>
<tr>
<td>Denmark</td>
<td>18</td>
</tr>
<tr>
<td>Finland</td>
<td>18</td>
</tr>
<tr>
<td>France</td>
<td>18</td>
</tr>
<tr>
<td>Germany</td>
<td>18</td>
</tr>
<tr>
<td>Ireland</td>
<td>18</td>
</tr>
<tr>
<td>Italy</td>
<td>16</td>
</tr>
<tr>
<td>Japan</td>
<td>20</td>
</tr>
<tr>
<td>Netherlands</td>
<td>18</td>
</tr>
<tr>
<td>Norway</td>
<td>20</td>
</tr>
<tr>
<td>Poland</td>
<td>18</td>
</tr>
<tr>
<td>Spain</td>
<td>16</td>
</tr>
<tr>
<td>Sweden</td>
<td>18</td>
</tr>
<tr>
<td>Switzerland</td>
<td>16</td>
</tr>
<tr>
<td>Former USSR</td>
<td>21</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>18</td>
</tr>
<tr>
<td>United States</td>
<td>21</td>
</tr>
</tbody>
</table>

Source: Rossi (14).

Many countries lowered the age limit between 1960 and 1990, at the same time as or after lowering the voting age. In the United States, where such decisions are taken at state level, there has been a move towards raising the age limit back from 18 to 21 years (30).

The reasons for age limits are twofold. The first is to minimize alcohol-related problems, such as traffic and other accidents and alcoholic poisoning, in young people. The second is to prevent early habituation to alcohol, which in some people could lead to unhealthy levels of alcohol consumption.
REGULATING THE RETAIL SALE OF ALCOHOL

RESTRICTIONS ON SALES TO OTHERS
POTENTIALLY AT RISK

Many countries prohibit the selling or serving of alcohol to those who are already intoxicated, and prohibit the serving of alcohol in restaurants unless consumed with a meal. In many countries alcohol cannot be sold on credit to individual purchasers, and the selling of alcohol to soldiers or those driving a car can also be prohibited. Regulations have also existed that obliged off-licences to ration or control individual purchases to a certain level (31).

In some American states and Canadian provinces, special emphasis is placed on the responsibility of those who serve alcohol to enforce these regulations. Special training courses are organized, and the liability of servers to enforce the law is supported by information and monitoring (32).

The reason for such regulations has often been to prevent problems related to alcohol intoxication and to restrict the consumption of heavy drinkers.

LIMITS ON THE HOURS AND DAYS OF SALE

Many countries restrict the hours and/or days on which alcohol may be sold. In some countries off-licence sales are not permitted on Sundays, and in others they are not allowed on Saturdays either. Restrictions on the hours of sale by both off-licences and licensed premises are in force in most countries (33).

There can be many reasons for such regulations. One of them is to safeguard public order late in the evening or at times of religious significance, such as on Sundays or during church services. Another aim is to restrict the length of drinking periods on licensed premises and to remove the temptation to buy more alcohol to continue drinking during weekends. Whatever the original motivation, these regulations have also been used to influence the total consumption of alcohol.
RESTRICTIONS ON RETAIL SALES OUTLETS

Some countries prohibit the sale of alcoholic beverages near churches or schools, in petrol stations or at sports events (34). The reason appears to be an attempt to distance alcohol from children, religious activities, sport and driving.

The sale of alcohol at places of work is banned in many countries, either by the employers, by agreement between the employers and the trade union, or by law. The reason is to prevent accidents and loss of production.

LICENSING AND RESTRICTIONS ON THE NUMBER OF OUTLETS

A licence issued by a local or central administration is required in many countries before some types of alcoholic drinks can be sold, either on licensed premises or from off-licences. In some countries the licensing of outlets selling spirits is much stricter than regulations on the retail sale of beer and wine. Licensing systems can be used to restrict the number of different types of outlet (29). In Norway, anyone who intends to sell or serve alcoholic beverages is required to have a licence from the municipal council. The Ministry of Health can grant a licence to a tourist hotel in cases where one has not been granted by the municipal council (34).

There are many reasons for licensing retail sales. One is to make sure that outlets observe other regulations such as age limits and opening times. Another is to ensure that tax is collected on every drop of alcohol sold. When the system is used to restrict the number of outlets, most often the aim is to prevent health and public order problems by limiting the alcohol supply. Licensing systems have also been used to control the standard of licensed premises, for instance to deny licences to places that are perceived to encourage heavy drinking and to grant licences to outlets that appear to encourage "civilized" drinking.
STATE MONOPOLIES ON RETAIL SALES

In many Nordic countries, the American states and the Canadian provinces, the countries of central and eastern Europe and some developing countries, at least part of the retail sale of alcohol has been regulated by a system of state monopoly. The coverage of such systems varies considerably. The off-licence sale of spirits and other strong alcoholic beverages is more often in the hands of a state monopoly than are sales on licensed premises or the off-licence sale of beer and wine (35).

In more than ten American states the off-licence retail sale of spirits is a state monopoly. In some states there is provision for a local public retail sales monopoly on all alcoholic beverages (36).

The aim of such a state monopoly is often the guaranteed implementation of various alcohol control policies, such as age and other limits or restrictions on advertising. A retail monopoly can also be used to restrict the supply of alcohol or special types of alcoholic beverages for public health or public order purposes. One motive is the significant and guaranteed state revenue on alcohol sales.

ENFORCEMENT OF REGULATIONS ON RETAIL SALES

Even in a rather small country there can be tens of thousands of licensed premises and off-licences, and enforcement of the various regulations is not always easy to achieve. Enforcement is normally the responsibility of the police and the courts, though voluntary organizations and community action may also be used in support (11).

Especially in North America, emphasis may be placed on the responsibilities of those who serve alcohol (32). In Ontario, Canada, for example, the licensed server of alcohol is held liable under civil law for injuries suffered or caused by intoxicated patrons. The server may also be held liable for serving anyone past the point of intoxication (37).
HOW SIMILAR ARE THE VARIOUS RETAIL SALES REGULATIONS?

Most of the regulatory measures described in this chapter have been used at the national alcohol policy level. In federal states, most of these measures are under the jurisdiction of the states or provinces (38). Some measures, including the limiting of hours of sale and the licensing of premises, are decided at local or municipal level. Many other measures can, at least in principle, also be decided at the local level. Table 5 gives examples of types of the regulatory measure employed in various countries.

Table 5. Various types of regulation on the retail sale of alcoholic beverages

<table>
<thead>
<tr>
<th>Regulatory measure</th>
<th>Examples of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age limits</td>
<td>Most industrialized countries</td>
</tr>
<tr>
<td>Restrictions on selling to intoxicated persons</td>
<td>Most industrialized countries</td>
</tr>
<tr>
<td>Restrictions on selling to other groups of people</td>
<td>Many countries especially, for instance, during wartime</td>
</tr>
<tr>
<td>Limits on the hours and days of sale</td>
<td>Most central and western European, Nordic and North American countries</td>
</tr>
<tr>
<td>Restrictions on retail sales outlets</td>
<td>Many American states and European countries</td>
</tr>
<tr>
<td>Licensing and restrictions on the number of outlets</td>
<td>Nordic, North American and some other countries</td>
</tr>
<tr>
<td>State monopolies on the retail sale of some alcoholic beverages</td>
<td>Finland, Norway, Sweden and some American states and many central and eastern European countries at least before 1989</td>
</tr>
</tbody>
</table>
In principle, at least some of these regulations could also be decided at intergovernmental level. Examples could be the minimum purchasing age and minimum limits to the hours of sale. Up to now, however, intergovernmental decisions have not been made on these kinds of regulation. On the contrary, there is pressure to dismantle some types of national control policy, as expressed in the claim of the European Commission that the state monopoly systems of the Nordic countries could not be sustained if these countries became members of the European Union (39).

EVALUATION OF EFFECTIVENESS AND OTHER CONSEQUENCES

Age Limits

The effects have been studied, especially in Canada and the United States, of lowering or increasing the minimum age at which alcohol may legally be consumed. In the 1980s many American states lowered the minimum age to 18 years. Evaluative studies concluded that one consequence was a significant increase in alcohol-related traffic accidents involving 18–20-year-old drivers (30). The results of these studies were one reason for some American states increasing the minimum age in the latter part of the 1980s. Subsequent studies revealed a reduction in alcohol-related accidents involving young drivers (30).

In many countries it is felt that the minimum drinking age cannot be greater than the age at which people may begin to vote or to exercise other rights and responsibilities of citizenship. It is also thought that a high age limit is difficult to enforce. Thus the adoption of higher age limits seems to be possible only if there is strong popular support, such as existed for the powerful campaigns against drunken driving in the United States in the latter part of the 1980s.

Restrictions on Selling to Adults

There has been little research into the effects of restrictions on selling alcohol to intoxicated persons or to certain special groups of adults. In any case, research undertaken in North America on the training and liability of those serving alcohol (32) has indicated that by
emphasizing the enforcement of these restrictions it is possible to reduce alcohol-related traffic accidents and most probably other alcohol-related problems.

Rationing the purchase of alcohol by individual buyers has been shown to be a very effective way of reducing potentially harmful drinking. These types of restriction have, however, been discontinued because they were seen to intrude too deeply in the personal freedom of the individual (31).

Limits on the Hours and Days of Sale

Studies have been conducted on the effects of changing the hours and/or days on which alcohol may be sold. In an Australian city, the introduction of the sale of alcohol on Sundays was accompanied by an increase in the number of traffic accidents (40). In Sweden, an experimental closing of liquor stores on Saturdays led to a reduction in alcohol sales and in the number of interventions by the police in domestic disturbances (41). In Norway, experimental Saturday closing had only a small effect on overall alcohol consumption but led to significant reductions in police reports of drunkenness and domestic problems (42). A similar Finnish experiment (43) resulted in the reduction of both overall consumption and related problems. Thus, limits to the hours and days of sale seem to be effective tools in an alcohol control policy.

Restrictions on Retail Sales Outlets

There has been no systematic evaluation of the effects of restricting retail outlets. These types of restriction may result from local alcohol action or action against certain specific alcohol-related problems, such as drinking and driving. When they are combined with other limitations or types of action their separate effectiveness is difficult to evaluate. In principle these kinds of restriction emphasize that alcohol is a special commodity, and can have long-term effects on cultural norms concerning alcohol.

Licensing and Restrictions on the Number of Outlets

There is clear evidence that a major decrease in the availability of alcoholic beverages normally results in a reduction in total consumption and alcohol-related problems. This has been shown during strikes
by retail sales workers (44), during wartime (31) and during the anti-alcohol campaign in the USSR during 1985–1987 (12). There is also clear evidence that a major increase in the availability of some types of alcoholic beverage normally results in an increase in total consumption as well as in related problems. An increase in the consumption of one type of beverage does not reduce the consumption of other types by the same amount but becomes, at least partially, an addition to previous consumption. This was shown, for example, when Finland and Iceland liberalized restrictions on beer sales (45) (Olafsdottir, H., unpublished data, 1990).

It has been more difficult to evaluate the effects of less dramatic differences in the density of retail outlets. Evidence from the United Kingdom (46) and the United States (47) shows, however, that a higher density of outlets leads to greater total consumption and more alcohol-related problems. The relationship was most significant between the density of licensed premises and acute problems measured by the number of arrests involving drunkenness (47).

State Monopolies on Retail Sales

Comparative studies (35,47) have shown that the existence of a state monopoly on some parts of the retail trade is accompanied by a lower level of overall alcohol consumption as well as by a lower level of at least some alcohol-related problems. The effectiveness of a state monopoly in preventing the harm done by alcohol use depends, however, on the aims and management of the monopoly. If the monopoly's main aim is to increase state revenue from alcohol, as seems to be the case in some American states (Holder, H., unpublished data, 1992), there is not much difference from a private company. If the state monopoly does not give good quality service to its customers, it loses popular acceptance and the popularity of any alcohol control policy is reduced. This has been the experience in many central and eastern European countries (26). If a state monopoly has a responsibility to advance public health objectives, as is the case with the Nordic monopolies, it can act as a partner in local and national health promotion (48).
Enforcement

There has not been a great deal of research into the effectiveness of enforcing different retail regulations. As mentioned above, North American studies on the training and liability of those serving alcohol show that improvements in enforcement can result in a significant reduction in alcohol-related problems. Comparative studies have also concluded that the enforcement of different regulations seems to be more effective where market restrictions, such as state monopoly systems or other limits to competition, are strongest (49).

At the same time, however, experience with the failure of tight alcohol control policies has revealed that without sufficient enforcement, tight restrictions on retail sales can encourage the growth of a large black market in alcohol. The regulations will be broken, the market in "moonshine", surrogate alcoholic beverages or smuggled alcohol may grow, and the health and social problems associated with alcohol use may even become greater (12,26).

2 Illegally produced alcohol offered for sale.

3 Alcohol originally produced for other purposes (industrial alcohol, perfumes, etc.) but used as a beverage.
Regulations Aimed at Consumers

Most of the legislation on alcohol is directed at the supply side, but there are also many examples of legislative restrictions on the consumer side. The motivation for these restrictions is almost always to protect either public health or public order.

Most regulations aimed at consumers are enacted at the national level or, as in some federal states, at the state or provincial level. The European Union is attempting to harmonize some of these regulations. Some, such as those concerned with places where alcohol may be consumed, can also be enacted at the local level.

PURCHASING ALCOHOL

These are the same restrictions that regulate the selling of alcohol to certain categories of people. The most common of these are age limits and bans on selling to intoxicated persons. These restrictions can be made more effective by training those who serve and sell alcohol.

Up till 1955, Sweden had a ration book system that allowed all alcohol purchases by all buyers of alcohol to be monitored. By withdrawing the ration book from those with alcohol dependence, it was possible to prevent such people from buying alcohol in shops run by the state monopoly (50).
Approaches to alcohol control policy

Rationing of or restrictions on the purchase of alcohol have also existed during times of crisis, particularly during war. This is usually done along with the rationing of other foodstuffs and commodities.

TRANSPORTING ALCOHOL

Many countries have enacted legislation placing tight limits on the quantity of alcoholic beverages that a person is allowed to bring into the country without paying duty. In many countries the limit is about 1–2 litres of spirits and about 2–3 litres of other beverages. In the European Union, the attempt to harmonize alcohol taxes and duties is supported by raising these limits to very high levels for people other than air travellers. In 1993, an adult citizen of the European Union could bring for personal use from one European Union country to another 110 litres of beer, 90 litres of wine and 10 litres of spirits (48,51).

PLACES WHERE ALCOHOL MAY BE DRUNK

Many countries ban the drinking of alcohol in certain localities, such as schools, sports and military establishments, trains and buses, or near a church. Drinking at work is banned in many countries. In the United Kingdom, the drinking of alcohol was restricted in sports and some other establishments after football violence and public order problems in the 1980s. Some countries, such as Finland, have banned the drinking of alcohol in all public places not specially designated for the purpose.

ACTIVITIES ALLOWED UNDER THE INFLUENCE OF ALCOHOL

Drunkenness in a public place has been against the law in many countries. During the last few decades, however, public drunkenness has been largely decriminalized. Being drunk at work is punishable in many countries, either by law or under other regulations. Restrictions on driving a motor vehicle under the influence of alcohol have been created and tightened in most industrialized countries over the last
Regulations aimed at consumers

few decades. The blood alcohol limits for driving set by certain European countries are shown in Table 6 (52).

Table 6. Blood alcohol limits for driving in some European countries

<table>
<thead>
<tr>
<th>Blood alcohol limit (mg/100 ml blood)</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td>Ireland</td>
</tr>
<tr>
<td>80</td>
<td>Austria, Belgium, Denmark, France, Germany,</td>
</tr>
<tr>
<td></td>
<td>Greece, Luxembourg, Spain, Switzerland, United</td>
</tr>
<tr>
<td></td>
<td>Kingdom</td>
</tr>
<tr>
<td>60</td>
<td>Iceland</td>
</tr>
<tr>
<td>50</td>
<td>Finland, Netherlands, Norway, Portugal, Turkey</td>
</tr>
<tr>
<td>20</td>
<td>Poland, Sweden</td>
</tr>
<tr>
<td>0</td>
<td>Bulgaria, Romania, former USSR</td>
</tr>
</tbody>
</table>

Source: Commission of the European Communities (52).

EVALUATION OF EFFECTIVENESS AND OTHER CONSEQUENCES

The effectiveness of regulating consumption depends very much on the level of enforcement. If the training and liability of those serving alcohol are emphasized, restrictions on buying alcohol can result in a decrease in alcohol-related problems (30). If the police are allowed greater control of and information on drinking and driving, restrictions on driving under the influence of alcohol can result in a reduction in alcohol-related road traffic accidents. Alcohol action campaigns at places of work have also reduced work-related accidents (53).

The Swedish rationing system effectively prevented alcohol-related problems, and its discontinuation led to a large increase in
alcohol consumption and especially in problems related to excessive drinking (50).

Without popular support and effective enforcement, the impact of these regulations is much smaller. Some restrictions, such as banning drunken behaviour in public places, have sometimes even become counterproductive when attempts to enforce them have done more harm than good (54). This has been one reason for the decriminalization of public drunkenness.
Alcohol production is a public health issue, at least:

- when conditions endanger the health of production workers;
- when the production of alcohol takes resources badly needed to satisfy the basic needs of the people;
- when extraordinarily unhealthy types of alcoholic beverage are produced; and
- when the regulation of production can be used in an indirect way to influence alcohol consumption and to control its marketing.

Regulation of the import of and wholesale trade in alcohol can be used to complement the regulation of national alcohol production or as an independent control strategy to promote public health.

**PRODUCT SAFETY STANDARDS**

Most countries have at least some product safety standards concerning the quality of alcoholic beverages, including general standards banning the production of any foodstuff with unhealthy impurities. Most countries also have regulations governing the maximum ethanol content of different beverage types. Beverages in which the taste of alcohol is concealed, and bottles or cans that look like packages of non-alcoholic beverages may be banned.
Many countries have regulations regarding the packages in which alcohol is sold and the information that should be given on the package, such as the ethanol content of the beverage. A Council directive (55) requires that the packing of beverages with more than 1.2% alcohol should include this kind of information. In the United States, packages must have labels warning of the unhealthy effects of alcohol, using the following text (15).

GOVERNMENT WARNING: (1) According to the Surgeon General, women should not drink alcoholic beverages during pregnancy because of the risk of birth defects. (2) Consumption of alcoholic beverages impairs your ability to drive a car or operate machinery, and may cause health problems.

LICENSING

In many countries the producer, importer or wholesaler of alcohol needs a government licence. A licence may be required only for those in the business of producing and selling alcoholic beverages, production for one's own use being free. A licence may also be required for certain beverages only. Often the production and trade in spirits is much more tightly licensed than that in beer or wine. In Germany, for example, private distilleries and private distillers need a licence, and a large proportion of the distilled alcohol is delivered to a state-owned alcohol company. Much of the raw materials for companies manufacturing spirits is also delivered through the state company (56).

A licensing system can be used for many purposes. If it is combined with limits on the volume produced, it can be used to restrict the total volume of different beverages produced for consumption. It can be used to restrict the supply of certain types of beverage, for instance those with high alcohol content such as spirits. It can be combined with quality demands such as product safety standards. Licensing can also be used for other than public health purposes, such as defending certain producers from competition.
STATE MONOPOLIES

State monopolies on the trade in alcoholic products exist in many countries, even those with market economies. Most of them have a monopoly in one or more areas of export, import, wholesale or retail sales. Some of them have also been or are at present alcohol production monopolies. Such a production monopoly is commonly limited to the national production of spirits, while the production of beer and wine is regulated by licence (35).

In Poland, the history of a state monopoly for the production of alcoholic beverages goes back to the Middle Ages. Alcohol production was first the privilege of the ruling classes, and later the privilege of the landowners. In the 1920s a state monopoly on the production of spirits was established under the influence of the temperance movement, but was dismantled during the Nazi occupation. The monopoly was reactivated immediately after the end of occupation, in 1944. The dismantling of the monopoly began once more in 1988 (57) (Moskalewicz, J., unpublished data, 1992).

One reason for a state monopoly is to maximize revenue for the government. Another is to stabilize the wine market through a state wholesale monopoly on spirits, which has been the practice in France, Germany and Switzerland. A third aim is to eliminate private profit motives and to create direct control over a commodity, the use of which is associated with public health and public order problems (31).

Very often the objectives of state monopolies have been mixed or even contradictory. In principle, however, such a monopoly offers possibilities for public health alcohol policies; it can be a powerful tool in restricting pressure to increase consumption. It can also be made responsible for supporting preventive action and research, in the way that the Nordic monopolies are obliged to act.

PROHIBITION

In the first half of this century, some Nordic countries and the United States prohibited the consumption of, trade in and production of alcoholic beverages. This total prohibition was repealed before the
Second World War, but it is still exercised in some Islamic countries. Prohibition can also be confined to certain beverages, such as the ban on the production and sale of beer in Iceland until 1989.

In many industrialized countries the production and sale of extremely strong alcoholic beverages, such as vodkas containing more than 50–60% pure alcohol, are prohibited. Normally, however, this kind of product safety regulation is not perceived as "partial prohibition".

**SUBSIDIES**

Many countries subsidize those who produce alcohol, particularly wine-grape growers. The European Community subsidized the alcohol sector by about ECU 2 billion in 1989, equivalent to ECU 7 for every citizen (58).

The main argument for subsidies is securing work for farmers. The European Community subsidies have also been used to raise the quality of wine by giving larger subsidies for better quality. One important purpose is to defend national producers from foreign competition or, in the case of the European Community, to defend producers of its member states from outside competition (59).

From a public health perspective, subsidies are not always a positive measure. On the contrary, they usually increase the supply of alcohol, and thus make it more difficult for policy-makers to accept measures that would reduce demand for the subsidized product (50). Also, subsidies are often used to support the export of alcohol, leading to a possible increase in alcohol-related problems elsewhere, particularly in developing countries.

In principle, however, subsidies could also be used to support people involved in the production of and trade in alcohol in moving away from the alcohol business. This strategy is used in the fight against illicit drug production: farmers may be encouraged away from this illicit activity by being subsidized to change to growing other crops or to move from agriculture to another occupation (60). A similar strategy may be needed in some countries, complementary to
restrictive law enforcement policies, to reduce the illegal production of and trade in alcohol (26).

HOW MUTUAL ARE THESE REGULATIONS?

Most of the regulatory measures described above have been used at the national alcohol policy level. In federal countries such as Canada and the United States, most of these measures have been under the jurisdiction of the states or provinces (31). In some countries, such as Norway and Sweden, municipal licensing and monopoly systems existed in the late 1800s and early 1900s (34,50). Table 7 gives examples of the types of regulatory measure employed in various countries.

In principle, many of these regulations could be imposed at intergovernmental level. Up to now, however, intergovernmental activities, such as those of the European Community and the General Agreement on Tariffs and Trade, have concentrated on attempts to reduce protectionist restrictions on imports and subsidies on exports of alcohol.

EVALUATION OF EFFECTIVENESS AND OTHER CONSEQUENCES

Product Safety Standards

The history of alcohol policy, in most industrialized countries, began with measures against "moonshine", industrial liquids containing alcohol, falsified alcoholic beverages4 and home-made alcohol. One of the main arguments for regulating the alcohol market was the damage to health caused by impure products. At the same time, controlling the alcohol market meant a significant state revenue from alcohol taxes.

4 Falsified alcoholic beverages may include surrogate alcohol (see page 32) but can also be a low quality beverage marketed as a well known brand.
### Table 7. Various types of regulation on the production, import and export of and wholesale trade in alcoholic beverages

<table>
<thead>
<tr>
<th>Regulatory measure</th>
<th>Examples of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>General product safety standards</td>
<td>All industrialized countries</td>
</tr>
<tr>
<td>Specific product safety standards for alcohol, such as maximum ethanol content or information on alcohol content</td>
<td>Most industrialized countries; European Union</td>
</tr>
<tr>
<td>Warning labels on packages</td>
<td>United States</td>
</tr>
<tr>
<td>Licensing of the production of, wholesale trade in and/or import of spirits</td>
<td>Many countries with less control on beer and wine</td>
</tr>
<tr>
<td>Licensing of wine and beer production</td>
<td>Finland, Norway, Sweden and some North American states and provinces</td>
</tr>
<tr>
<td>State monopoly on the production of and/or wholesale trade in spirits</td>
<td>Germany and Switzerland</td>
</tr>
<tr>
<td>State monopoly on the wholesale trade in, import and export of, and some parts of the production of alcoholic beverages</td>
<td>Finland, Sweden, some North American states and provinces, and central and eastern Europe before 1989</td>
</tr>
</tbody>
</table>

Experience from history, from many developing countries and from some countries of central and eastern Europe shows that, without effective regulation of "moonshine", surrogate alcohol and other alcoholic products produced without quality and safety controls, the possibility of pursuing a public health alcohol policy is very limited. Tight control of the legal alcohol market without effective regulation of the illegal market can result in many health and social problems related to the increased use of impure or extremely strong alcohol (26).

Many countries have also set upper limits on the percentage of pure alcohol permitted in different types of beverage. In general, experience has shown that such measures have reduced the number of cases of alcohol poisoning and maybe also the harm related to
Regulation of the production of and trade in alcohol

intoxication, although little research has been undertaken on their effectiveness.

The obligation to state the pure alcohol content of the beverage on the container is justified by research that reports that people often do not know exactly how much alcohol they have consumed and that they often underestimate the amount (61). This could be especially hazardous when driving a car or operating machinery. The effectiveness of this information is better if given not only as a percentage of pure alcohol but also as a "standard" measure, since this makes it easier for the consumer to compare the alcohol content of different beverages (62).

The introduction of warning labels in the United States is reported to have increased public awareness of the risks. Although there is little evidence of a decrease of high-risk behaviour among the high-risk groups mentioned on the labels, the increased public awareness could have a positive impact in the long run (15). The evidence on the contribution of similar warning labels on cigarette packages to reducing the level of smoking is more clear, and there is also more experience from many countries of this policy (63).

Licensing, State Monopolies and Prohibition

The fact that licensing and state monopoly systems can serve many other than public health purposes also means that the effects of these systems can be different and their effectiveness can be evaluated by different criteria.

An extensive comparative study on state monopolies and alcohol prevention (13) found evidence that in countries with broad state monopolies and licensing policies, the level of alcohol consumption as well as of alcohol-related problems was in general lower than in countries without state monopolies and with looser control policies. It is difficult to determine whether the result is caused by the systems themselves, or whether these regulations generally exist only in countries with other control policies that can at least partly explain the result.
Experience from the total prohibition of alcoholic beverages is not encouraging. Prohibition in some Nordic countries and the United States in the early part of this century created, after a temporary decrease in alcohol consumption and related problems (64), great problems with the illegal production of and trade in alcohol and with smuggling of alcohol. The actual decrease in alcohol consumption was not significant, and the illegality of alcohol encouraged more hazardous drinking habits. Thus, prohibition was eventually discontinued and replaced by state monopolies or other control policies (33).

The experiment in the USSR during 1985–1988 with very tight alcohol control through a large decrease in production resulted initially in a clear reduction in alcohol-related problems. Later, however, the production of illegal liquor (samogon) and other open forms of resistance to the policy, as well as the general political development, made it so unpopular that it had to be abandoned (12).

Experience with prohibition and the sudden drastic tightening of control in the USSR show very clearly that any meaningful control policy must have sufficient popular support and be effectively enforced. A reduction in consumption and harm cannot be attained by unpopular state control “from above”. Thus, increasing public awareness through health education and other policies should complement any measures aimed at reducing the supply and availability of alcohol.

One problem with regulatory measures aimed at alcohol production and trade is the current process of economic and political integration and liberalization of international trade. During this process, pressure has grown against alcohol control measures because they are perceived to contradict the principles of free trade. For instance, there was a move to dissolve the Nordic state alcohol monopolies during the process leading to those countries possibly becoming members of the European Union (48). Similar pressures exist in the countries of central and eastern Europe against creating new alcohol control policies after the major political, economic and social changes during the last few years.

These international processes emphasize the need for a public health alcohol policy in those intergovernmental organizations
Regulation of the production of and trade in alcohol
dealing with alcohol production, trade and subsidies. Such a policy has nothing to do with protecting the interests of national industries. It is to do with protecting public health both at home and in other countries, especially in those countries that have fewer resources to resist the powerful marketing of alcohol.
Responsibilities of Alcohol Suppliers to Fund Health Promotion

There are at least three ways in which alcohol suppliers can be obliged to fund health promotion, including the prevention of alcohol problems.

Taxes are levied on alcohol in all industrialized countries. The revenue from these taxes is used to finance the state budget, and if there are funds for health promotion in the state budget it can be said that alcohol taxes are used among other things for that purpose. There is, however, no direct link between alcohol taxes and health promotion.

Some countries have earmarked a part of alcohol tax explicitly for health promotion or, in a more general way, for health policies. For example in Switzerland, 10% of the net proceeds from the state monopoly on spirits received by the cantons is earmarked “for combating the causes and effects of alcoholism” (65). Elsewhere, such as in some American states, special taxes on alcohol have been proposed to fund the prevention and treatment of the harmful consequences of drinking alcohol (66).

The third alternative is to organize health promotion activities as part of the responsibilities of state alcohol monopolies, where these exist. For instance, the legal responsibilities of the state monopolies in Finland, Norway and Sweden are not restricted to alcohol production and trade but include some areas of public health as well (48).
It can be argued that there should be no need to earmark money or responsibilities for health promotion activities that address alcohol problems: the need for such action should be self-evident. In practice, however, prevention and research seem to develop on a much more permanent basis in those countries that have special guarantees for their funding (31,67).
Discussion and Conclusions

There are many possible combinations of alcohol control policies and the ways they are implemented. All industrialized countries have enacted some legislation on alcoholic beverages. Nowhere is alcohol just a commodity like other foodstuffs or goods: it is a special commodity everywhere.

Dismantling the Old Controls—And Creating New?

It can be said that there has been a process in many countries of the "liberalization" of old-style alcohol controls (5). But it is equally true that there is strong pressure to develop at least some new controls, such as measures against drinking and driving, drinking at work and the advertising of alcohol. Regulations restricting drinking by young people in general, or in certain places such as football stadiums, have also been tightened in some countries. Excise duty on spirits could be increased in those countries where the level has hitherto been low.

A "rudimentary scale of alcohol control" (29) has been developed to compare control measures in different countries (Annex 1). It reflects the scope of alcohol control policy without giving different values to different control measures, even though different measures will differ in their effectiveness. Thus, the scale gives a rather crude overview of the differences in control policy, but nevertheless presents a rather interesting picture of developments in some European countries (Table 8).
Table 8. The rates on the rudimentary scale of alcohol control policy (RSA) in 1991, the total consumption of alcohol per head in 1990 and the change in these rates between 1981 and 1990–1991 in some European countries

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway</td>
<td>23</td>
<td>4.1</td>
<td>-4</td>
<td>-2</td>
</tr>
<tr>
<td>Sweden</td>
<td>21</td>
<td>5.5</td>
<td>-3</td>
<td>+2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>17</td>
<td>7.6</td>
<td>+1</td>
<td>+7</td>
</tr>
<tr>
<td>Ireland</td>
<td>16</td>
<td>7.2</td>
<td>+1</td>
<td>+3</td>
</tr>
<tr>
<td>France</td>
<td>15</td>
<td>12.7</td>
<td>+3</td>
<td>-12</td>
</tr>
<tr>
<td>Switzerland</td>
<td>14</td>
<td>10.8</td>
<td>0</td>
<td>-3</td>
</tr>
<tr>
<td>Belgium</td>
<td>13</td>
<td>9.9</td>
<td>+2</td>
<td>-6</td>
</tr>
<tr>
<td>Denmark</td>
<td>13</td>
<td>9.9</td>
<td>-1</td>
<td>+3</td>
</tr>
<tr>
<td>Italy</td>
<td>12</td>
<td>8.7</td>
<td>+3</td>
<td>-33</td>
</tr>
<tr>
<td>Spain</td>
<td>10</td>
<td>10.8</td>
<td>+4</td>
<td>-17</td>
</tr>
<tr>
<td>Federal Republic of Germany(^a)</td>
<td>9</td>
<td>10.6</td>
<td>-3</td>
<td>-5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>9</td>
<td>8.2</td>
<td>0</td>
<td>-7</td>
</tr>
<tr>
<td>Austria</td>
<td>8</td>
<td>10.4</td>
<td>+2</td>
<td>-5</td>
</tr>
</tbody>
</table>

\(^a\) Prior to the accession of the former German Democratic Republic.

Source: Rossi (14) and Produktschap voor Gestilleerde Dranken (68).
Approaches to alcohol control policy

There seems to be a trend towards the adoption of more alcohol control measures in southern Europe, whereas the northern European countries are tending to give up some of their former controls. There seems to be some correlation between the total consumption of alcohol and the number of points on the scale, though there are exceptions. There also seems to be some correlation between a change in the number of points and a change in total consumption. Particularly in France, Italy and Spain, total consumption has fallen with the adoption of new control measures.

Although there are certainly differences among the European countries, a Dutch list of starting points for new alcohol control legislation (69) could be of interest. According to this list, the development of alcohol legislation should have five aims:

- simplicity
- decentralization
- equal treatment
- self-regulation
- deregulation.

The first aim means that clear overall rules should replace complex, specific regulations with numerous exceptions.

Second, competence should shift from the central government to the municipalities, which have more knowledge of local alcohol problems.

Third, alcohol is alcohol. Control measures should deal with different types of beverage equally; from a public health point of view, the ethanol in different beverages has the same harmful effects on health.

Further, self-imposed restrictions on producers and traders may be preferred to legislation in political practice. The question arises, however, as to whether self-regulatory measures have satisfactory range, content and sanctions.

Finally, fewer rules for the private sector are preferred in political practice. This emphasizes the need for simple and clear overall rules.
Discussions and conclusions

At the same time as there is a tendency to prefer decentralized control of alcohol to central government measures, there is also a growing need for international control measures. This need arises, among other things, from the internationalization of the alcohol industries and marketing media, and from the increasing movement of people across national borders. Up to now, however, alcohol has been dealt with as a trade and agriculture issue rather than as a public health issue at the international negotiating tables. The balance should be changed in favour of the public health interest.

EVALUATION OF DIFFERENT CONTROL OPTIONS

It seems to be rather difficult to make a scientific evaluation of the effectiveness of a single control measure, because so many factors affect the development of alcohol consumption and related problems. Very often the impact of control measures is indirect, mediated through changes in the whole culture of eating, drinking, meeting friends and perceiving the role of alcohol in different contexts. It is possible to say that countries with tighter overall control policies are also those with a lower total consumption of alcohol per head and with fewer alcohol-related health problems (5). But it is more difficult to say which specific control policies have been the most effective from the public health point of view.

For some control measures, such as restrictions on the marketing of alcohol, it can be decades before the total impact on alcohol consumption and related problems can be seen. Thus we cannot expect immediate and great changes after introducing such measures. Very often the results of dismantling controls can be seen much sooner than the results of introducing controls. Nevertheless, some control measures also produce immediate changes in alcohol consumption and related problems, the most effective of which seems to be the price and tax policy.

With many regulatory measures, effectiveness depends on enforcement. For instance, age limits, the prohibition of drinking and driving, and assigning responsibilities to those serving alcohol are effective only if their enforcement is effective and they have broad popular support. Also, the impact of state monopoly and licensing
Approaches to alcohol control policy

systems on preventing alcohol-related problems seems to depend, at least partially, on a more effective enforcement of alcohol control in the absence of a private profit motive to promote drinking.

Many of the alternative control policies are directed at all consumers. There are also measures directed at high-risk groups, including age limits, limits on the sale of alcohol to intoxicated persons, and other responsibilities of those selling and serving alcohol. Also, some measures that in principle are directed at the whole population have a greater impact on certain specific groups. For instance, restrictions on advertising seem to have more immediate impact on young people and price increases have a greater effect on heavy drinkers. Thus, by combining different control measures it is possible to attain both an overall reduction in alcohol consumption as well as special effects on high-risk groups.

HOW TO CHOOSE THE RIGHT APPROACH

There is no optimal combination of measures that could be suggested to all countries. Different combinations will suit different countries. There are some common questions that should be asked and answered, however, in order to permit rational choice between the policy alternatives.

1. What is the aim of the control policy? Is it public health, state revenue, or safeguarding the interests of the national alcohol industry?

2. If the aim is public health, what is the more specific aim? Is it to reduce adolescent drinking, or liver cirrhosis, or traffic accidents or all alcohol-related public health problems?

3. What are the most effective policies for attaining the aims, bearing in mind that there is always a need for a combination of different control, community action, health education and treatment strategies?

4. Is it possible to get popular support for the policy choices, bearing in mind that there are always some interest groups that will
oppose any control measure but that without sufficient popular support such a measure can become counterproductive?

5. What are the possible adverse effects of introducing the control measures, such as restrictions or limitations to the freedom of citizens or industry?

It is not easy to answer these questions. Sometimes the most effective policy is not popular enough, or creates too many adverse effects. Sometimes the most popular policy does not have any of the expected effects. Sometimes it is very difficult for politicians to make any decision against the interests of very small but influential groups, even though there could be broad popular acceptance of the proposed policy.

Thus, a comprehensive alcohol policy cannot be based only on a scientific evaluation of the effectiveness of different policies. It also needs also political wisdom and political skills. Nor can it be created after one seminar with policy advisers. It can only grow through a process of combining different measures, obtaining experience from implementing them, and broadening support for a long-term public health alcohol policy.
References

2. *Health for all targets: the health policy for Europe*. Copenhagen, WHO Regional Office for Europe, 1993 (European Health for All Series, No. 4).
10. RITSON, B. Services available to deal with problems faced and created by alcohol users. In: *Negative social consequences of alcohol use*. Oslo, Norwegian Ministry of Health and Social Affairs, 1991.
References


22. Council Directive on the coordination of certain provisions laid down by law, regulation or administrative action in member
Approaches to alcohol control policy


42. NORDLUND, S. Effects of Saturday closing of wine and spirits shops in Norway. Oslo, National Institute for Alcohol Research, 1985.


58. TIGERSTEDT, C. EG och den alkoholpolitiska dimensionen [EC and the alcohol policy dimension]. In: Tigerstedt, C., ed. EG,
References


### Rudimentary Scale of Alcohol Control

#### Control of production

<table>
<thead>
<tr>
<th>Control</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. State monopoly for spirits production</td>
<td>1</td>
</tr>
<tr>
<td>2. State monopoly for wine production</td>
<td>1</td>
</tr>
<tr>
<td>3. State monopoly for beer production</td>
<td>1</td>
</tr>
<tr>
<td>4. Licence required for the production of alcoholic beverages</td>
<td>1</td>
</tr>
<tr>
<td>5. Allocation of part of a monopoly's profits for alcohol prevention and/or treatment</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Control of distribution

<table>
<thead>
<tr>
<th>Control</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. State monopoly for the distribution of spirits</td>
<td>1</td>
</tr>
<tr>
<td>7. State monopoly for the distribution of wines</td>
<td>1</td>
</tr>
<tr>
<td>8. State monopoly for the distribution of beers</td>
<td>1</td>
</tr>
<tr>
<td>9. Restrictions on hours and days of sale or serving</td>
<td>1</td>
</tr>
<tr>
<td>10. Restrictions on the frequency of outlets</td>
<td>1</td>
</tr>
<tr>
<td>11. Restrictions on the type and location of outlets</td>
<td>1</td>
</tr>
<tr>
<td>12. Restrictions on the age for sale and serving (16 years)</td>
<td>1</td>
</tr>
<tr>
<td>13. Restrictions on the age for sale and serving (18 years)</td>
<td>1</td>
</tr>
<tr>
<td>14. Restrictions on the age for sale and serving (20 years)</td>
<td>1</td>
</tr>
<tr>
<td>15. Restrictions on alcohol advertising: voluntary code</td>
<td>1</td>
</tr>
<tr>
<td>16. Restrictions on alcohol advertising: statutory controls</td>
<td>1</td>
</tr>
</tbody>
</table>
Social and environmental measures

17. National alcoholism prevention agency(ies) 1
18. National alcohol education programme 1
19. Alcohol-free legislation 1
20. Drinking and driving: blood alcohol level (any) 1
21. Drinking and driving: blood alcohol level (50 mg per 100 ml or lower) 1
22. Drinking and driving: automatic suspension 1
23. Drinking and driving: automatic imprisonment 1

Price and fiscal measures

24. Alcohol taxation on wines 1
25. Alcohol taxation on beers 1
26. Alcohol taxation on spirits 1
27. Annual adjustment of taxation on wines 1
28. Annual adjustment of taxation on beers 1
29. Annual adjustment of taxation on spirits 1
30. Maintenance of or increase in real price of alcoholic beverages 1

Total 30

Source: Davies & Walsh (29)
The forms and range of alcohol control by the international, national, regional and local state authorities vary greatly from country to country and also from one period of time to another. At one end of the scale may be seen the system of total prohibition in some Islamic countries. At the other end is perhaps the provision of lighter alcoholic beverages in those countries where wine and beer are perceived as ordinary foodstuffs without many special control measures. In many countries there is almost a continuous political debate on dismantling or establishing different control measures. The measures used in at least some counties include regulating the purchase and consumption, pricing, marketing, wholesale and retail sale, import, export and production of alcohol, and the production of raw materials for making alcohol. The purpose of this booklet is to describe the various alcohol control measures that have been used for public health purposes, and to review research undertaken on the effectiveness, consequences and conditions of these measures. Emphasis is placed on legislative and fiscal policy measures used in alcohol control policy.