Towards a Tobacco Free Society

Report of the Tobacco Free Policy Review Group

Minister,

We have pleasure in presenting to you this report 'Towards a Tobacco Free Society'. We recognise that it will be extremely difficult and take some time to fully achieve a 'Tobacco Free Society' but we are confident that the measures we recommend in this report will go a long way towards achieving this objective. We are also conscious that this report is the latest of four reports[1] dealing with various aspects of smoking. We recognise that there is some inevitable overlap in these reports and that the actual recommendations may be somewhat different but there is a common objective of seeking the most effective measures possible to dramatically reduce the level of smoking in our society and above all to prevent our children from starting to smoke.

Tobacco products are not just another consumer product with regrettable adverse effects. These products, when used in the manner intended by the manufacturer, cause addiction followed by illness and premature death. They have no beneficial effects. Each year, over five hundred thousand citizens of the European Union die prematurely from tobacco-related diseases and at least six thousand die in this country. Unfortunately, the ill-effects of smoking is not confined to smokers alone and many passive smokers also suffer illness and premature death.

Cigarette smoking is highly addictive and for most smokers the withdrawal symptoms as they try to quit are very severe. Time and again, smokers attempt to quit and fail. In our deliberations, we had particular sympathy for many smokers whose personal and financial difficulties place considerable burdens on them. Smoking is often seen by them as the only means they have to cope with stress. Trying to quit in these circumstances is especially difficult. Yet to continue smoking can only add to their health and financial difficulties. Accordingly, our recommendations focus not only on the restrictions which should be placed on the availability and use of tobacco products but also on the assistance which should be made available to smokers who want to break their addiction.

The tobacco industry, in our view, faces serious questions about their knowledge of the harm caused by their product and by their marketing activities which impact so strongly and deliberately on children.

We are also conscious that many initiatives in the past were not as successful as their initiators might have hoped and it is our view that this lack of success is due in part, at least, to the lack of a sustained effort of enforcement. Consequently, we have devoted much effort to design what we feel is an effective management system to ensure that the momentum for action set out here is sustained over time.

Beating the tobacco epidemic requires the commitment of society as a whole. No one sector can achieve it. In this policy, we have sought to create a framework which would include as many interests as possible in this important task of creating a tobacco free society.

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Tom Mooney
Chairman

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[1]Report of Joint Oireachtas Committee on Health and Children
The report of the Cardiovascular Health Strategy Group " Shaping Healthier Hearts"
Report of the Tobacco Free Policy Review Group to the Minister " Issues Arising from the US
Litigation."

Towards a Tobacco Free Society

Executive Summary ..... Pg. 6
Overview of Tobacco and Health ..... Pg. 8

Chapter 1. Cigarettes ..... Pg. 9
The Contents of Cigarettes ..... Pg. 9
The Contents of Cigarette Smoke ..... Pg. 11
Summary: ..... Pg. 13

Chapter 2. Health Effects of Smoking ..... Pg. 14
Background ..... Pg. 14
Main Stream Smoke ..... Pg. 14
Environmental Tobacco Smoke (ETS) ..... Pg. 16
Other Uses for Tobacco ..... Pg. 16
Advantages for Smokers Who Quit ..... Pg. 17
Summary ..... Pg. 17

Chapter 3. The Tobacco Industry ..... Pg. 18
Ownership ..... Pg. 18
Responsibility and Accountability for Tobacco Related Illness' ..... Pg. 19
Marketing Practices ..... Pg. 19
Advertising in Ireland ..... Pg. 22
Children's Perception of Risk ..... Pg. 22
Summary ..... Pg. 23

Chapter 4. Tobacco Use In Ireland: ..... Pg. 24
Trends in Use of Cigarettes ..... Pg. 24
Smoking by Gender: ..... Pg. 26
Current Smoking Prevalence: ..... Pg. 27
Current Smoking Prevalence Among Children ..... Pg. 29
Income and Tobacco Consumption ..... Pg. 30
Summary: ..... Pg. 31

Chapter 5. Tobacco Related Diseases in Ireland ..... Pg. 32
Life Expectancy: General: ..... Pg. 32
Tobacco Related Deaths ..... Pg. 33
International Comparisons: Tobacco Related Diseases ..... Pg. 33
Summary ..... Pg. 35

Chapter 6. Our Present Response . Pg. 36
Existing Measures . . . Pg. 36
Environmental Controls: . . . Pg. 36
Controls on Industry Behaviour . . . Pg. 36
Education: . . . Pg. 38
The Outcome from These Measures: . . . Pg. 40
Summary . . . Pg. 41

Chapter 7. Future Direction: . Pg. 42
Mission . . . Pg. 42
Prohibition . . . Pg. 42
Priorities . . . Pg. 42
Strategy . . . Pg. 43
Objective 1: To Change Attitudes . . . Pg. 43
Objective 2: To Support and Empower . . . Pg. 43
Objective 3: To Protect . . . Pg. 43
Objective 4: To Focus on Children . . . Pg. 44
Action Plan . . . Pg. 45
Managing the Action Plan: . . . Pg. 55
The Prospects for Success . . . Pg. 57
Non Governmental Organisations (NGOs): . . . Pg. 57
Summary . . . Pg. 58
Membership . . . Pg. 59
Acknowledgements . . . Pg.59

Tables

Table. 1: Additives in Cigarettes ..... *Pg. 10*
Table. 2: Benefits for Those Who Quit Smoking ..... *Pg. 17*
Table. 3: Expenditure on Advertising and Sponsorship in Ireland ..... *Pg. 22*
Table. 4: Life Expectancy at Certain Ages in Ireland ..... *Pg. 32*
Table. 5: Deaths Attributable To Smoking in Ireland ..... *Pg. 33*
Table. 6: Mortality Rates in Europe ..... *Pg. 34*
Table. 7: Overview of the Division of Functions of Principal Agencies ..... *Pg. 56*

Appendices

Appendix A: Additives to Tobacco Products ..... *Pg. 60*
Appendix B: Chemical Profile of Tobacco Smoke ..... *Pg. 80*
Appendix C: Tobacco Control Legislation ..... *Pg. 86*
Appendix D: Indicative Budget for a Standard Year ..... *Pg. 88*

Charts

Chart 1: Trends in Consumption of Cigarettes	*Pg 24*
Chart 2: Cigarettes Per Capita	*Pg 24*
Chart 3(a): Consumption of Tobacco by Tonnes (Countries more than 20,000 tonnes)	*Pg 25*
Chart 3(b): Consumption of Tobacco by tonnes (countriies less than 20,000 Tonnes)	Pg 25
Chart 4: Trends By Gender	*Pg 26*
Chart 5: Smoking Prevalence by Gender	*Pg 26*
Chart 6: Current Smoking Prevalence by Age and Gender	*Pg 27*
Chart 7: Current Smoking Prevalence Among Women by Age and Social Class	*Pg 27*
Chart 8: Current Smoking Prevalence among Men by Age and Social Class	*Pg 28*
Chart 9: Current Smoking Prevalence Among Boys	*Pg 29*
Chart 10: Current smoking Prevalence among Girls	*Pg 29*
Chart 11: Per Capita expenditure in Current and Constant 1995 prices	*Pg 30*
Chart 12: Ratio of Household Income Spent on Tobacco	*Pg 30*
Chart 13: Mortality Rates in Ireland	*Pg 34*
Chart 14: Cigarettes prices in $	*Pg 37*

Executive Summary

(Chapter 1)
Cigarettes, the most common form of tobacco product, are made from tobacco, reconstituted tobacco, genetically modified tobacco and other additives. Tobacco farming is labour intensive and expensive. Cigarettes are mass produced and have a number of different chemicals added during manufacturing, some of which are carcinogenic. Tobacco contains nicotine which is a highly addictive drug. The smoke from cigarettes has many well known carcinogenic agents. "Light" cigarettes are not safer than ordinary cigarettes. In general switching to cigars or pipes offers no reduction in risk for cigarette smokers.

(Chapter 2)
Tobacco use was established in our society before we became aware of its harmful effects. Tobacco smoke causes lung disease, cancer and cardiovascular disease. Environmental tobacco smoke is further implicated in other illness such as cot deaths. It is extremely difficult to break the smoking addiction but the rewards are significant and immediate for those who succeed.

(Chapter 3)
The tobacco industry is globally owned and managed. It is a marketing based industry that, in public, denies its products are addictive or that they are a direct cause of disease and conducts its business accordingly. Smokers have not been properly informed by the industry of the nature of the risk they are taking and the marketing practices of the industry put children at risk.

(Chapter 4)
In common with most western countries tobacco use is endemic in our society. Despite considerable reductions in smoking rates since the 1970s little progress has been made in recent years in addressing this concern and there is a disturbing underlying increase in smoking prevalence among children and young people, especially girls and young women. About 32 % of Irish adults smoke cigarettes with smoking commencing in childhood and peaking at about 18-35 years of age. The real cost of cigarettes has, in general, remained static in the 1990s and, therefore, the price barrier, identified by the World Bank as the most effective instrument in preventing young people from smoking, has been progressively lowered in recent years as incomes improve. The substantial increase in taxation in the Budget of December of 1999 has adjusted this position.

(Chapter 5)
Life expectancy in Ireland is lower than the EU average. The diseases which contribute to this fact are heart disease and cancer. Tobacco use is the leading preventable cause of these diseases. Reduction in tobacco consumption should, therefore, result, in time, in an increase in life expectancy in Ireland.

(Chapter 6)
Despite the considerable success of our existing response to the tobacco problem the present arrangements are unlikely to yield further progress in this vital public health objective.

(**Chapter** 7
Our mission for the future is to promote a Tobacco Free Society. To further this mission we have identified four key strategic objectives, viz. to change attitudes towards smoking, to support and empower people, to protect people against passive smoking and to focus on protection for children.

To achieve these objectives a seven tier action plan is proposed. This plan advocates better communications and education. It would provide more help for smokers to quit and introduce tougher regulation of the tobacco industry to eliminate inducements to children to experiment with tobacco. Smokers would be fully informed by the tobacco industry of the risks they are undertaking and there would be further protection against the harmful effects of passive smoking. The plan also advocates improved compliance with existing laws. To be successful full community involvement both in Ireland and abroad is required. An adequately resourced management system is necessary to ensure success and the cost of this initiative should be internalised to the tobacco sector. Progress would have to be independently monitored.

Overview of Tobacco and Health

1) Tobacco is the leading cause of preventable deaths in the western world.

This view is shared by all public health advocates and most governments throughout the world. Tobacco contains nicotine which is a highly addictive substance. Tobacco smoke contains thousands of chemicals many of which are carcinogenic.

2) Tobacco control is a major priority with the World Health Organisation (WHO).

The WHO had set a target of getting 80% non smoking populations in its constituent member States by the year 2000. In a recent review of progress of anti-smoking programmes in Europe the WHO has noted that while much progress has been made, this target has not been achieved. Accordingly the WHO has launched a major new initiative "The Tobacco Free Initiative."

3)The World Bank advocates tobacco control measures.

In a recent report the World Bank highlights the need for strong tobacco control policies and calls for high prices as a major instrument for prevention which, it argues, does not threaten tax buoyancy. The international experience is that high prices work without reducing tax revenues. While high prices may increase inward smuggling the evidence suggests that tax buoyancy remains high and more smokers quit. High prices for tobacco products are the most cost effective way of reducing consumption. Furthermore, their effectiveness is even greater where adolescents and children are concerned. For every 1% increase in the price of cigarettes it is estimated that there is a decrease of approximately 0.5% in consumption.

4)The tobacco industry, in public, denies that tobacco is addictive or that it causes death. Disclosures during litigation in the United States suggest that the industry hold a contrary view in private and that they have research results which support this.

The industry is a marketing based industry with a strong commitment to advertising. The powerful imagery of cigarette advertising is very effective in persuading young people to smoke. Banning tobacco advertising has the effect of reducing the numbers of young people taking up smoking. The majority of Europeans favour a complete ban on tobacco advertising.

Reducing the industry's access to children has been shown to contribute to reducing the numbers of children taking up smoking. Poor compliance with legislation on selling cigarettes to children is a cause for concern.

5) There is a need for a sustained multi sectoral approach to the tobacco epidemic.

There is no single intervention, however vigorously applied, which will ensure success on its own. The experiences of those countries who are having success in this field is that comprehensive policies on tobacco control backed by strong political commitment and adequate resources are needed to ensure a significant decrease in smoking.

Chapter 1. Cigarettes

The Contents of Cigarettes

Tobacco: Cigarettes are, by far, the most common form of tobacco product in use. The primary ingredient in cigarettes is tobacco (Nicotine tabacum L.). The tobacco plant grows to a height of about 1.5m to 2 m. Originating in South America it is cultivated annually. The seeds are planted in the spring and the seedlings are transplanted when they have 4 to 7 leaves. Tobacco is a very labour intensive, difficult and expensive plant to grow. It is estimated that it takes 2,200 hours of work per annum for each hectacre of tobacco compared with 147 hours for general crops. The plants are harvested at the end of the summer. The leaves, once dried, are sorted with regards to their delicacy, colour and lamina. There are a large variety of tobacco plants but tobacco is usually classified according to how it is cured. ie Flue-cured, Light-cured, Sun-cured, Dark air-cured ,or fire-cured. Once the crop is dried it is sold to a processor who prepares the tobacco to a state that is ready for warehousing (this is sometimes referred to as baled tobacco). The product is then delivered to manufacturing plants for processing into consumer products (cigarettes, cigars, pipe tobacco, snuff).

Reconstituted tobacco: Traditionally only the leaf of the plant was used but in recent years, with the introduction of modern chemical technologies, the stalk and other residues are also harvested. Using various chemical and steam technologies, these stalks and residues are rendered into a fine paste to which nicotine and other unknown ingredients are added in such quantities as the industry considers appropriate. The paste in then stiffened using various gases and processed into cardboard like sheets known as reconstituted tobacco sheets. These sheets are then distributed to cigarette manufacturing plants around the world where they are added to regular tobacco. It is believed that the levels of nicotine in these reconstituted sheets are manipulated chemically and that other chemicals such as ammonia are added which help release higher levels of nicotine from the burning tobacco. It is thought that reconstituted tobacco may account for about 25% of the tobacco in cigarettes.

Additives: From 1825 to 1977 it was illegal in Ireland to introduce anything other than tobacco into tobacco products. Following the repeal of this provision the use of an extensive range of additives (approx. 600) became legal. At present there are no regulations on what may be added to cigarettes or what chemicals may be used in the manufacturing process. A typical chemical profile of a cigarette is illustrated in Table 1 and Appendix A provides a more comprehensive list of the chemicals permitted for use in tobacco products manufactured in the UK.[2]

[2]Appendix VII of the Second Report of the Independent Scientific Committee on Smoking and Health' and in Appendix I of the Committee's Fourth Report,

Table.1: Additives in Cigarettes	
Category	**Name and CAS No.**
a: additives	1. triacetin/Filter Bonding Agent Glycerol Triacetate CAS No. 102-76-1
	2. Seam Adhesive
	3. Die Imprint Ink
	Fliter Wrapper adhesive /Hot
	Fliter Tipping adhesive
b. ingredients: (Cigarette)	Tobacco
	Water
Ingredients: (Filter)	Celluse Acetate/filter material CAS No. 9004-35-7
	Titanium Dioxide/Whitening Agent CAS No. 13463-67-7
	Food Grade Mineral
	Oil/process Lubricant CAS No. 8042-47-5
	Water
	Tippiing Paper and Filter wrap (Celluluse)
Ingredients: Cigarette paper	Celluse/Paper Base (Calcium) CAS NO. 9004-34-6
	Calcium Carbonate/Chalk (Carbonate Sodium Potassium) CAS NO. 471-34-1
	Ash Conditioner (Citrate) CAS No. 68-04-2 & 866-84-2
	Guar Gum CAS No. 08411-49-9
	Water
Ingredients: (PVA Adhesive)	Polyvinyl Acetate Emulsions /Adhesive CAS No 9003-20-7
	Defoamer and Preservatives
	Polyvinyl Alcohol CAS No. 9003-20-7
	Triacetin CAS No. 102-76-1
	Sugar CAS NO. 57-50-1
	Water
Ingredients:Die Imprint Links	Phenolic resin
	Alkyd Resin
	Linseed Oil CAS No. 67746-08-1
	Mineral Oil CAS No. 8042-47-5
	Antioxidant (BHT) CAS No. 128-37-0
	Yellow Pigment CAS No. 5102-83-0
	Red Pigment CAS No. 5281 -04 -9
	Carbon Black CAS No. 67746-08-1
	Silicon Dioxide CAS No. 63231-67-4

[1] Report of the British Columbia Ministry of Health

Genetically Modified Tobacco: Genetically modified tobacco is used commercially. Many of these plants are hybrids of tobacco plants genetically engineered to ensure a higher yield of nicotine than so called normal plants. [3]We were unable to determine whether the tobacco products used in Ireland contain genetically modified tobacco or not. (A considerable amount of tobacco products sold in Ireland are manufactured overseas.) Our present legislation does not allow for disclosure by the industry in relation to the contents of reconstituted tobacco sheet, which is the most probable source of genetically modified tobacco.

One variety of genetically modified plant, known as Y-1, is an offspring of a number of genetically altered plants created in the US and illegally exported to Brazil where it is grown in commercial quantities. Some of the genetically modified varieties are so high in nicotine that smokers can become physically sick while smoking them. In commercial practice they are blended with cheaper, weaker tobaccos to make cigarettes with nicotine levels that satisfy smokers needs. It is reported that the principal reason for developing genetically modified tobacco was that the industry were under pressure to reduce tar yields in their products. Cigarette companies knew how to reduce tar by chemically treating the tobacco, but this process also removed much of the nicotine. If nicotine fell to an "unacceptable" level then the product would not be addictive and sales would accordingly suffer. A genetically modified tobacco plant that yielded very high nicotine levels would have high residual nicotine after the tar reduction process.

Experimentation continues in this field and it is believed that new hybrids are being produced some of which are yielding over three times the normal nicotine levels. This knowledge has only come into the public domain in recent years and the full extent of this form of manipulation of nicotine is not yet understood.

The Contents of Cigarette Smoke

Main Stream and Side Stream Smoke: Once a cigarette is lit, it burns at approximately 600 degrees. This temperature increases to approx. 900 degrees when the smoker draws on the cigarette. Smoke from the burning cigarette, when it is not actually being smoked, is referred to as "side stream" smoke. The smoke inhaled by the smoker is referred to as "main stream" smoke. The lower heat at which the resting cigarette burns ensures a lesser combustion of the product and this in turn delivers higher levels of gaseous carcinogens and smaller sized particulate matter. This smoke is then inhaled without the benefit of a filter. For these reasons side stream smoke is more toxic than mainstream smoke.

Nicotine: Burning tobacco releases nicotine which is the pharmaceutically active ingredient that provides the desired physiological effects. The World Health Organisation has classified smoking as an addiction [4] Also, the 1988 US Surgeon General's Report concluded that:-

> "*Cigarettes and other forms of tobacco use are addicting. Patterns of tobacco use are regular and compulsive, and a withdrawal syndrome usually accompanies tobacco*

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[3] David a Kessler, M.D. Commissioner of Food and Drugs on The Control and Manipulation of Nicotine in Cigarettes before the SubCommittee on Health and the Environment Committee on Energ and Commerce U.S. House of Representatives June 21, 1994

[4]Tobacco dependence syndrome: Classification F17.2 in the International Classification of Diseases, Tenth Revision

abstinence. The pharmacological and behavioural processes that determine tobacco addiction are similar to those that determine addiction to drugs such as heroin and cocaine."

Nicotine has effects on brain dopamine reward systems similar to those of drugs such as heroin, amphetamine and cocaine. According to the World Health Organisation[5], in a ranking of the addictiveness of psychoactive drugs, nicotine was determined to be more addictive than heroin, cocaine, alcohol, caffeine, and marijuana. The pharmacological actions of nicotine are predominantly stimulant, with effects on electrocortical activation, the heart and endocrine systems. The nicotine received in the body through cigarette smoking affects nearly all brain neurotransmitters and neuroendocrine systems. Chronic exposure to nicotine through cigarettes causes structural changes in the brain by increasing the number of nicotinic receptors.

Other Toxins: The main chemical constituents of tobacco smoke have been identified. The more commonly known carcinogens are Ammonia, Benzene, Benzo[a]pyrene, Cadmium, Carbon Monoxide, Formaldehyde, Hydrogen Cyanide, Lead, Mercury. Appendix B provides a more detailed list of these chemicals and other chemicals found in tobacco smoke together with a brief note on the threat to human health posed by them.[7] Cigarette smoke also contains high quantities of CO_2 (Carbon Dioxide) which causes heart diseases.

"Light" cigarettes: Many smokers believe that 'light' or "low tar" cigarettes are safer than regular cigarettes, and that by smoking 'light' cigarettes they will inhale fewer cancer causing chemicals or less nicotine. Smoking tests conducted on behalf of the Government of British Columbia have shown that this is incorrect. Tests show little difference in carcinogenic substances in light and regular cigarettes.

Misleading labels: The values on cigarette packages for tar, nicotine and carbon monoxide can be much lower than those inhaled by smokers. That is because the label values are based on a measuring system developed some decades ago by the International Standard Organization (ISO)[8], which has not been changed in response to the new types of cigarettes on the market. Many cigarettes are now made with tiny holes around the filter which allow extra air to mix with cigarette smoke and give lower tar and nicotine readings on a smoking machine. On some cigarettes, these holes are visible to the human eye; on others, they are impossible to see. Most 'light' cigarettes have these dilution holes. Smoking machines don't block the ventilation holes, and so the smoke they measure is highly diluted with air. This is not true for smokers. It is difficult for smokers to avoid covering up the vent-holes with their fingers when holding the cigarette in the normal manner.

Cigars: Smoking cigars is just as dangerous as smoking cigarettes. Compared to a cigarette, one cigar has 20 times as much ammonia, and five to 10-times more cadmium.[9]

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[5] http://www/who.int/toh/worldnotobacco99/english/addiction.htm

[7] British Columbia Ministry of Health Canadian Council for Tobacco Control

[8] ISO 4387, ISO 3400, ISO 8243,

[9] The National Cancer Institute (USA) 11-April-1998 Report 2-229520

Tobacco used in cigars is aged and fermented, which increases its concentration of nitrate compounds. The burning process also is different, putting more toxic chemicals into cigar smoke. Cigars cause a wide variety of cancers of the throat, mouth and lungs, as well as heart disease. There also is evidence that cigar smoking is linked to cancer of the pancreas. Cigar smokers who have never used cigarettes tend not to inhale. The smoke of most cigars has an alkaline ph and as a result nicotine contained in the smoke can be absorbed more readily by the oral mucosa. Cigarette smokers who turn to cigars tend to inhale and so effect no risk reduction which remains proportionate to their level of smoking. This view is supported by the WHO and by the International Agency For Research On Cancer (IARC). In general the lower rates of lung cancer among cigar and pipe smokers are attributable to the fact that they consume less tobacco on average than cigarette smokers, and not because cigars and pipe tobacco are less harmful.

Summary:

Cigarettes, the most common form of tobacco product, are made from tobacco, reconstituted tobacco, genetically modified tobacco and various chemical additives. Tobacco farming is labour intensive and expensive. Cigarettes are mass produced and have a number of different chemicals added during manufacturing, some of which are carcinogenic. Tobacco contains nicotine which is a highly addictive drug. The smoke from cigarettes contains many well known carcinogenic agents. "Light" cigarettes are not safer than ordinary cigarettes**.** In general, switching to cigars or pipes offers no reduction in risk for cigarette smokers.

Chapter 2. Health Effects of Smoking

Background

Tobacco was first used by native Americans who cultivated the plant and smoked it in pipes for medicinal and ceremonial purposes. It was one of the products brought back to Europe by Christopher Columbus though it was not until the mid-16th century that tobacco use became widespread. Virginia became the first US tobacco State and by the mid 17th century tobacco was its largest export. Tobacco was a labour intensive crop and this fuelled the demand for slave labour over the next two centuries.

The introduction of tobacco to European society was controversial with many opponents, even then, contending that tobacco smoke was dangerous and evil. However, despite numerous efforts to curtail or prohibit tobacco use over the centuries smoking became both fashionable and commonplace. In fact, in the earlier years some physicians advocated its use in the belief that tobacco had beneficial effects.

At first, tobacco was produced mainly for pipe-smoking, chewing, and snuff. Cigars didn't become popular until the early 1800s. Cigarettes, which had been around in crude form since the early 1600s, become popular in the United States after the Civil War with the spread of "Bright" tobacco, a uniquely cured yellow leaf grown in Virginia and North Carolina. Cigarette sales surged again with the introduction of the "White Burley" tobacco leaf and the invention of the first practical cigarette-making machine, sponsored by James Buchanan Duke, in the late 1880s. By the first quarter of this century there was widespread mass production of cigarettes and the aggressive marketing that characterises the industry today was evident.

The medical community began to observe significant increases in what are now known to be tobacco related diseases. The tobacco epidemic had begun.

Main Stream Smoke

By the early 20th century, with the growth in cigarette smoking, articles addressing the health effects of smoking began to appear in scientific and medical journals. In 1930, researchers in Cologne, Germany, established a statistical correlation between cancer and smoking. Eight years later, Dr. Raymond Pearl of Johns Hopkins University reported that smokers do not live as long as non-smokers. By 1944, the American Cancer Society began to warn about possible ill effects of smoking.

Despite the growing scientific evidence public consciousness of the harmful effects of tobacco remained low. That changed in 1952, when the Reader's Digest published an article entitled "Cancer by the Carton." The effect of the article on popular opinion was enormous. Similar reports began appearing in other periodicals, and the smoking public began to take notice. The tobacco industry responded and by 1954 they had formed the Tobacco Industry Research Council (TIRC) to counter the growing health concerns. With support from the TIRC, tobacco companies began mass-marketing filtered cigarettes and

low-tar formulations that promised a "healthier" smoke. The public accepted this reassurance and soon sales recovered.

In 1964 the US Surgeon General released a report entitled "Smoking and Health." It concluded that "cigarette smoking is causally related to lung cancer in men." It said that the data for women, "though less extensive, point in the same direction." The report noted that the average smoker is nine to ten times more likely to get lung cancer than the average non-smoker and cited specific carcinogens in cigarette smoke, including cadmium, DDT, and arsenic.

[10]Extensive medical, epidemiological and other research since then has reinforced the conclusion that smoking causes chronic obstructive pulmonary disease, cardiovascular diseases, several forms of cancer, and is implicated in a variety of other diseases.

Chronic Obstructive Pulmonary Disease (COPD), in the form of chronic bronchitis and emphysema, is a major cause of disability and premature death. About three-quarters of deaths from this disease are attributable to smoking.

Cardiovascular diseases include coronary artery disease and heart attacks, aortic aneurysms which can lead to sudden death, carotid artery disease which can lead to strokes and peripheral vascular disease which, in the lower limbs, can lead to severe pain in the leg on walking and may necessitate amputation. Recent data show that smoking causes more rapid expansion of aortic aneurysm.

Smoking causes increased risk of cancers in several sites, pre-eminently the lung, but also several others such as the oral cavity, pharynx, larynx, oesophagus, pancreas and bladder.

The list of other diseases known to be associated with smoking includes cataracts, hip fracture (osteoporosis), and periodontal disease.[11]

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[10] 1964:Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service
1967: The Health Consequences of Smoking: A Public Health Service Review
1968: The Health Consequences of Smoking: 1968 Supplement to the 1967 Public Health Service Review
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1978: The Health Consequences of Smoking, 1977-1978.
1979: Smoking and Health: A Report of the Surgeon General.
1980: The Health Consequences of Smoking for Women: A Report of the Surgeon General.
1981: The Health Consequences of Smoking - The Changing Cigarette: A Report of the Surgeon General.

1982: The Health Consequences of Smoking - Cancer: A Report of the Surgeon General.
1983: The Health Consequences of Smoking - Cardiovascular Disease: A Report of the Surgeon General.
1984: The Health Consequences of Smoking - Chronic Obstructive Lung Disease: A Report of the Surgeon General.
1985: The Health Consequences of Smoking - Cancer and Chronic Lung Disease in the Workplace: A Report of the Surgeon General.
1986: The Health Consequences of Involuntary Smoking: A Report of the Surgeon General.
1988: The Health Consequences of Smoking - Nicotine Addiction: A Report of the Surgeon General.
1989: Reducing the Health Consequences of Smoking - 25 Years of Progress: A Report of the Surgeon General.
1990: The Health Benefits of Smoking Cessation: A Report of the Surgeon General.
1992: Smoking in the Americas: A Report of the Surgeon General.
1994: Preventing Tobacco Use Among Young People: A Report of the Surgeon General.

[11] SCOTH Report to the Department of Health, UK(1998)

Environmental Tobacco Smoke (ETS)

The inhalation of environmental tobacco smoke, sometimes referred to as passive smoking, is a risk in the following areas[12] [13]:-

Lung Cancer and Heart Disease: Exposure to environmental tobacco smoke is in itself a cause of lung cancer and, in those with long term exposure, the increased risk is reported to be in the order of 20-30%. Exposure to environmental tobacco smoke is a cause of ischaemic heart disease and in this respect alone represents a substantial public health hazard.

Smoking and Infants: Smoking in the presence of infants and children is a cause of respiratory illness and asthmatic attacks. Middle ear disease in children is also linked to environmental tobacco smoke.

Maternal Smoking: Smoking in pregnancy causes adverse outcomes notably miscarriage, reduced birth weight for gestation and perinatal death and Sudden Infant Death (cot deaths). A recent study [14] offers evidence that foetuses of women who smoke metabolise cancer-causing agents contained in tobacco. The study examined the first urine produced by 48 German new-borns. With the same equipment used to conduct sophisticated drug tests on athletes, scientists searched for traces of the chemical NNK -nicotine-derived nitrosaminoketone- one of the strongest cancer-causing agents found in all types of tobacco products. While researchers found no traces of NNK in new-borns of non-smokers, they detected the carcinogen in 22 of 31 newborns of mothers who smoked during pregnancy.

Cot Deaths: Where parents continue to smoke after pregnancy there is an increased rate of sudden infant death syndrome. The nicotine is believed to cause the babies' breathing and pulse to weaken. Cot deaths are now the main cause of post-neonatal death in the first year of life.

Other Uses for Tobacco

Certain diseases have been identified where nicotine use is alleged to offer a protective effect. However, smoking tobacco in pursuit of these alleged health benefits creates a greater risk of other diseases.

Tobacco is a very useful pesticide and certain varieties are grown as decorative plants. It has no other known uses apart from smoking.

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[12] ditto

[13] a) International Consultation on Environmental Tobacco Smoke (ETS) and Child Health Jan 11-14 1999 (WHO)
b) Australian Health and Medical Research Council The Health Effects of Passive Smoking
c) California Environment Protection Agency; Office of Environmental health hazard: Assessment Health effects of exposure to Environmental Tobacco smoke
d) US EPA : Respiratory Health Effects of Passive Smoking: Lung Cancer and Other disorders: EPA/600/6-90/006f. Dec 1992
e) US Department of Health and Human services. The health consequences of involuntary smoking-a report by the surgeon General. Washington DC:

[14] Study by Professor Stephen S. Hecht, University of Minnesota: Ssponsored by the National Cancer Institute

Advantages for Smokers Who Quit

Smoking is a notoriously difficult addiction to break, and very few smokers quit successfully without making several serious attempts. The chances of succeeding in a single unaided quit attempt are rated as no better than about 1 in 100. Researchers have found that the key clinical observation in smoking cessation is that attempts are cyclical, so that smokers who quit are at risk of relapse. An example of a population at high risk of relapse are postpartum women who have quit smoking during pregnancy. Once the baby (the motivating factor) has been born, the motivation to remain off the cigarettes while dealing with the increased stress levels associated with new-born infants is greatly diminished. It is important to realise that smokers often must make three or four cessation attempts in order to successfully stop smoking.

The rewards for those who quit are significant:-

Table 2 : Benefits for Those Who Quit Smoking	
Within 20 Minutes:	Blood pressure drops, pulse rates drops to normal, body temperature of hands and feet return to normal
Within 8 Hours:	Carbon Monoxide levels in the blood return to normal
Within 24 Hours:	Risk of heart attack decreases
Within 48 Hours:	Ability to smell and taste improves
Within 72 Hours:	Breathing gets easier as bronchial tubes relax. lung capacity increases
Within 3 Weeks:	Mucus in the lungs loosens, lung function and circulation improves
Within 2 Months:	Blood flows more easily to arms and legs, lung function increases up to 30%
After 3 Months:	Lungs become more healthy, you breathe more easily, you get less colds
After 1 Year:	Risk of sudden death from heart attack is almost cut in half
After 5 Years:	Lung cancer death rate for the average smoker decreases nearly 50%
Within 10 Years:	Risk of sudden heart attack and strokes becomes almost the same as a non smoker, risk of cancer drops significantly

[1] Burnside, G., Spiers, A., Winckles, W. Help Smokers Quit Kit. Ulster Cancer Foundation, Northern Ireland.

Summary

Tobacco use was established in our society before we became aware of its harmful effects. Tobacco smoke causes many diseases including lung disease, cancer and cardiovascular disease. Environmental tobacco smoke is further implicated in other illness such as cot death. It is extremely difficult to break the smoking addiction but the rewards are significant and immediate for those who succeed.

Chapter 3. The Tobacco Industry

Ownership

There are thought to be approximately 100 major tobacco companies quoted on various stock exchanges world-wide. In addition there are innumerable private companies. The industry has diversified extensively into food products and other non tobacco areas. The world market tends to be dominated by a small number of companies.

Philip Morris is the world's largest tobacco business; it controls about half of the US tobacco market, and the Marlboro name is one of the world's two most valuable brands. The company also makes such brands as Virginia Slims, Benson & Hedges, and Parliament. The tobacco division, in 1997, showed an 8.2% annual sales growth with sales exceeding $13 billion.

British American Tobacco (BAT) was formed as part of the reorganisation of British American Tobacco Industries. The world's Number 2 tobacco company (behind Philip Morris), BAT sells more than 240 brands of cigarettes in more than 180 markets. International brands include Kent, Benson & Hedges, and Lucky Strike. It is currently acquiring Rothmans, who make and distributes cigarettes under the Rothmans and Craven "A" brands as well as Belvedere, Number 7, Mark Ten, Viscount, and Rockport. Rothmans also distributes Sail pipe tobacco and produces Captain Black cigars.

R.J. Reynolds Tobacco Company (Camel brand) is a subsidiary of RJR Nabisco, Inc. It had about $4.9 billion in sales in 1997 with a one-year sales growth rate of 7.6%. RJR Nabisco Holdings will shortly be renamed Nabisco Group Holdings while RJR Nabiscos tobacco subsidiary will be spun off to shareholders and will be renamed RJ Reynolds Tobacco.

Gallahers is the largest UK cigarette company with a world-wide market. Its brands include Benson and Hedges, Silk Cut, Berkeley Superkings and Benson and Hedges Superkings, Mayfair and Sovereign. Gallaher is currently buying the RJR Nabisco's UK unit. Gallaher also makes cigars (Hamlet), hand-rolling tobacco, and pipe tobacco. Fortune Brands (formerly American Brands) separated Gallahers from its other business in 1997.

Imperial Tobacco Group is the second biggest cigarette maker in the UK just behind Gallaher Group. Its brands include premium Embassy and Regal, Superkings and JPS (John Player Special), and Lambert & Butler cigarettes; Castella cigars; and Amphora and St Bruno pipe tobacco. Imperial sells Drum (acquired from Sara Lee in 1998) and Golden Virginia hand-rolling tobacco as well as cigarette paper. Subsidiary Sinclair Collis operates more than 10,000 cigarette vending machines across the UK. Imperial sells its products in more than 70 countries (Sales Growth: 9.2% in 1998).

Liggett Group Incorporated: The firm's 1997 sales were $389.6 million and the one-year sales growth was 13.9%. Liggett's net income for 1997 was $49.9 million. (Brands:L&M, Lark, Chesterfield, and Eve.)

Note: In March 1996, Liggett publicly acknowledged the potential health risks of cigarettes. Liggett settled several smoking-related lawsuits brought by the Attorneys General of Florida, Louisiana, Massachusetts, Mississippi, and West Virginia. In March 1997, after several settlements, Liggett publicly acknowledged that cigarette smoking causes disease and is addictive. Liggett was the first US cigarette manufacturer to add a warning on cigarette packs that states "Nicotine is Addictive." Also, Liggett has instructed its marketing and advertising personnel to scrupulously avoid any and all advertising and marketing, which could appeal to children or adolescents.

In Ireland there are three major companies who have 99% of the market between them. They are P.J. Carroll's Ltd who have (40%) of the market and are based in Dundalk, Gallaghers with another (40%) are based in Tallaght and John Players with 19% of the market are based in the South Circular Rd in Dublin. They market approximately 115 different brands and employ around 900 persons. The industry is not a provider of new jobs. It is an ageing industry where new technology is replacing individuals who retire or are made redundant.

These Irish companies are owned by multi national companies. Carroll's is owned by Rothmans International who are currently being taken over by British American Tobacco. Gallaghers was owned by Fortune Brands (previously American Brands Inc) and is now thought to be part of the new Gallaher Group. Players is owned by Imperial Tobacco (UK).

Responsibility and Accountability for Tobacco Related Illness'

None of the global companies marketing in Ireland accept responsibility for the illness caused by tobacco. While they acknowledge that their product is a risk factor in relation to certain diseases they have always denied that their product is addictive, that it causes cancer or that they target children in their marketing practices. These attitudes are discernible here in Ireland in their commercial practices.

Marketing Practices

The tobacco industry is principally a marketing based industry and it promotes its products locally and globally in a variety of ways e.g.:-.

a**) Direct Advertising:** The tobacco industry invests heavily in all forms of advertising though in some countries such as Ireland they are severely restricted in the scope and extent of advertising.

b) Women Focused Products and Packaging: The industry have produced a large variety of products in recent years designed to target women and young girls. These products are usually longer and slimmer than standard products and are marketed indirectly as slimming agents as well as symbols of women's independence.

c) Addiction: The industry has described cigarettes as "nicotine delivery systems." Nicotine is highly addictive and the industry relies on this for repeat business. This is the single most effective means the industry has for maintaining customer "loyalty".

d) Indirect advertising which falls into four main categories

(i) Brand Stretching: This involves using the tobacco brand name on other advertised products with a view to maintaining a brand presence in the market. This is illegal in Ireland.

(ii) Sponsorship: Through sponsorship, especially of sporting events, the industry builds financial dependence on them among significant influencers in society. Sponsorship is severely limited in Ireland and will shortly be abolished completely.

(iii) Product Placement: Product placement means paying someone to show the product in a play, a film, as part of an advertisement of other products or in sporting events.

(iv) Tobacco Industry Promotion: The industry seek to win public support against regulatory arrangements by highlighting, through various events, positive aspects of their industry, e.g. employment, charity donations, taxes paid etc.

These forms of indirect advertising build positive associations between tobacco and socially worthwhile activities and thus induces an ambivalent public attitude about the dangers of tobacco.

Children and Tobacco Marketing

The European Union, the United States, Canada and Australia together with many other countries, have come to the conclusion that the smoking epidemic among children is sustained, to a large extent, by the marketing practices of the tobacco industry and, in particular, by the advertising and promotional practices combined with the addictive nature of nicotine. This view has been held by successive governments in Ireland over many decades.

During court cases in the US evidence emerged that the tobacco industry deliberately target children in their advertising campaigns. Many of these campaigns have a global impact (product placement in children's movies, sponsorship of global and glamourous events such as Formula 1 racing etc. all of which are distributed around the world via magazines, cinema and television). Other practices are discernible in all retail outlets throughout the world (e.g. placing tobacco products on shelves near children's confectioneries) and are clearly part of a global marketing strategy. ASH UK issued a report which cites extensive evidence from the industries own documentation on the negative behaviour of the tobacco industry[15].

[15] Tobacco Explained by ASH, UK

Nicotine Levels: The New Zealand government disclosed that cigarettes marketed in New Zealand had nearly twice the level of nicotine of those marketed in the US and that cigarettes packed in ten packs (mostly bought by young people) consistently had higher levels of nicotine than those in the twenty packs.[16] The evidence from the US shows that the industry deliberately manipulates the levels of nicotine in order, it is alleged, to foster and sustain addiction.[17] The only apparent explanation for the significant disparity between the nicotine levels in New Zealand products and US products is the manipulation of nicotine levels during the manufacturing process.

Survey of Teenagers in the United States: In a survey of teenagers in the US, 76.2% of youths (12 to 17 years of age) believe that cigarette companies advertise to teenagers and try to sell them cigarettes. Younger children (ages 12-14 years) are more likely to perceive cigarette company marketing efforts directed to them than teens 15-17 years of age. (82.4% compared to 70.4%). The top three reasons given for attraction to a cigarette brand by teenagers were:

Advertising	25.9%
Friends Smoke Brand	15.5%
To Be Cool	9.9%

Survey of Advertising Executives In United States: In another survey (December, 1996,) conducted in the US by Shepardson Stern & Kaminsky on behalf of "The Initiative on Tobacco Marketing to Kids" the opinions of professional advertisers overwhelmingly supported the view that tobacco advertising is targeted at, and impacts on children. [18]

Four out of five said that, even if it is not the intention of the tobacco industry, cigarette advertising reaches children and teenagers (82%) and makes smoking more appealing and socially acceptable to them (79%).

While the tobacco industry says that the goal of advertising is only to influence adult smokers to switch brands, the majority of advertising executives interviewed believe that the industry also intends to market cigarettes to teenagers, both those who already smoke and those who are non-smokers.

The view that advertising by the tobacco industry is intended to market cigarettes to teenage smokers is particularly marked among the most senior executives. 77% of those with over twenty years experience in advertising say that marketing to teenage smokers is a goal of tobacco advertising while of those who have worked on tobacco accounts 68% say it (i.e. marketing to children) is the goal.

Financial Analysis: In an analysis of one tobacco company a major investment analyst identified the industry's opportunity as..." the emerging markets where there are no strict

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[16] Public Health Report published 27th May 1997

[17] David A Kessler, MD. Comissioner of Food and Drugs before the Subcommittee on Health and the Environment, Committee on Energy and Commerce, US House of Representatives (JUNE 21, 1994).

[18] National Centre for Tobacco-Free Kids (US)

rules in those markets relating to advertisement. That is why the international sales are surging."[19]

Eurobarometer: In a survey published by the European Commission[20] 64% of Irish people surveyed said that they believed the tobacco advertising was aimed particularly at young people. This view was shared generally across European Union member states. This attitude translates into 61% of Irish people surveyed supporting a ban on all forms of advertising of tobacco products. This view is also shared across the EU with the highest number (77%) in Greece favouring such a ban.

Advertising in Ireland

Direct advertising has been restricted for some years in Ireland and, in the case of the electronic media it has been completely prohibited, though the circumvention of these controls via international sponsorship has been considerable. In particular, the use of Formula 1 racing as a vehicle for tobacco promotion and the regrettable willingness of television stations world-wide to broadcast such tobacco sponsored events has gone a long way to undermine public health efforts.

Direct advertising is still permitted in newspapers and magazines though with considerable restrictions. Ireland has been particularly strong in promoting this form of restriction but our efforts have been undermined by "spill over" advertising from the UK in particular.

Following the introduction of budgetary restrictions on tobacco advertising and sponsorship there has been a small decline in spending in recent years. (Table 3).

Table 3. Expenditure on Advertising and Sponsorship in Ireland

IR£Millions	1991	1992	1993	1994	1995	1996	1997
Advertising	7.47	7.73	7.91	8.03	8.22	8.42	8.00 est
Sponsorship	2.56	2.3	2.26	1.2	3.15	2.02	1.85
Total	10.03	10.03	10.17	9.23	11.37	10.42	9.85est

Retailers: Since the abolition of retail licences in 1960 tobacco products are readily available all over Ireland. At a crude estimate there are over 12,000 pubs and an estimated 51,000 retail outlets in the country most of whom sell cigarettes.

The industry vigorously exploit the right to promote their products in trade journals and through trade fairs and focus considerable efforts on building loyalty with retailers. It is not surprising, therefore, to find evidence that some retailers are not sufficiently sensitive to the dangers of the product they are selling. Reports of sales to children continue to be made and it appears that tobacco companies have virtually uninhibited access to children at present. The value of sales to children is difficult to estimate but is in the order of £10 millions each year.

Children's Perception of Risk

[19] Strategic Analysis by Fidelity Investments (Lux). regarding British American Tobacco PLC (Dec 1998)

[20] Eurobarometer survey

People are usually under age when they become addicted to nicotine and have a very immature sense of danger. It is our opinion that the industry exploit this immaturity when marketing their products. This is an experience shared with most developed countries. Telling a fifteen year old girl or boy that they may die at forty five from smoking is not likely to have any significant positive impact and often may even enhance or romanticise tobacco use. The more remote the effect the less likely we are to react to the dangers even if we recognise them. Cigarettes are slow, silent, un-dramatic killers that can take years to destroy someone's health.

The illusion of choice also tends to distract even adult smokers into believing that they will give them up when they choose. The reality, as anyone who has attempted to quit smoking will say, is that it is extremely difficult to break the smoking addiction. Significant commercial forces are at play which propagate the misleading idea that smoking is a matter of free choice. In fact, freedom of choice is greatly diminished by the addiction.

Summary

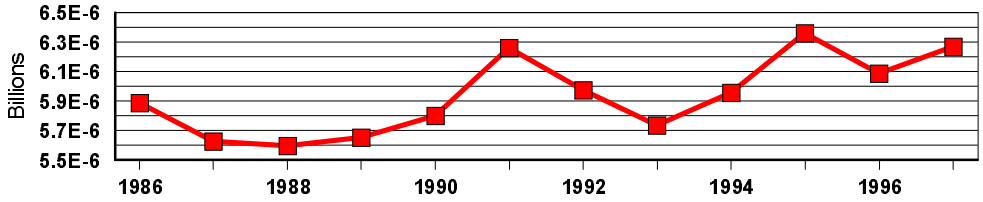
The tobacco industry is globally owned and managed. It is a marketing based industry that, in public, denies its products are a direct cause of disease and conducts its business accordingly. Smokers have not been properly informed by the industry of the nature of the risk they are taking and the marketing practices of the industry put children at risk.

Chapter 4. Tobacco Use In Ireland:

Trends in Use of Cigarettes

Chart 1 shows consumption trends from 1986 to 1997. Despite the erratic pattern in the data there is a clear underlying upward trend in consumption. This is believed to be understated by between 5% and 15% which is accounted for by smuggled goods.

Chart1: Trends in Consumption of Cigarettes

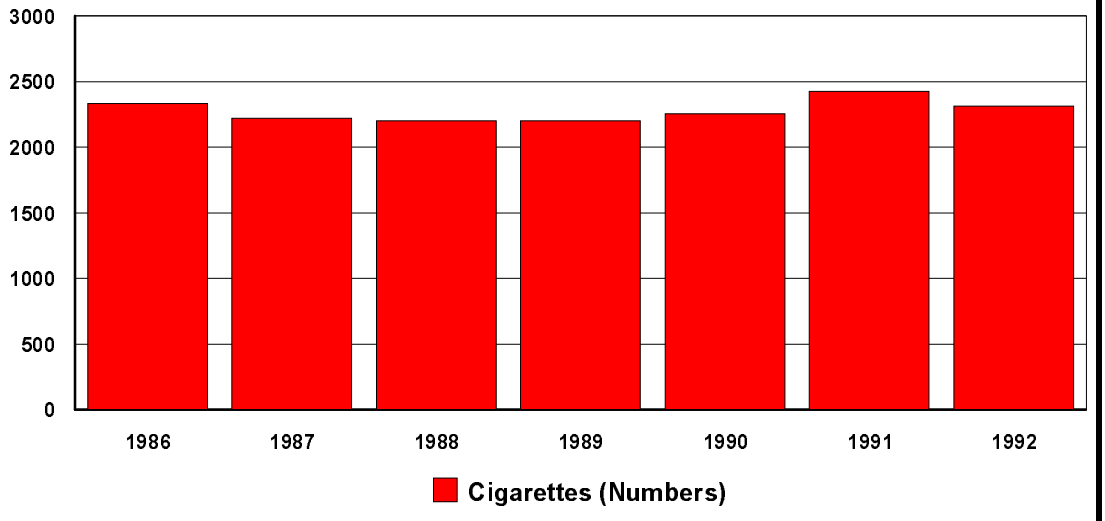


	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Cigarettes	5887	5628	5598	5656	5800	6262	5978	5738	5958	6365	6088	6272

Source:Annual reports of Revenue Commissioners

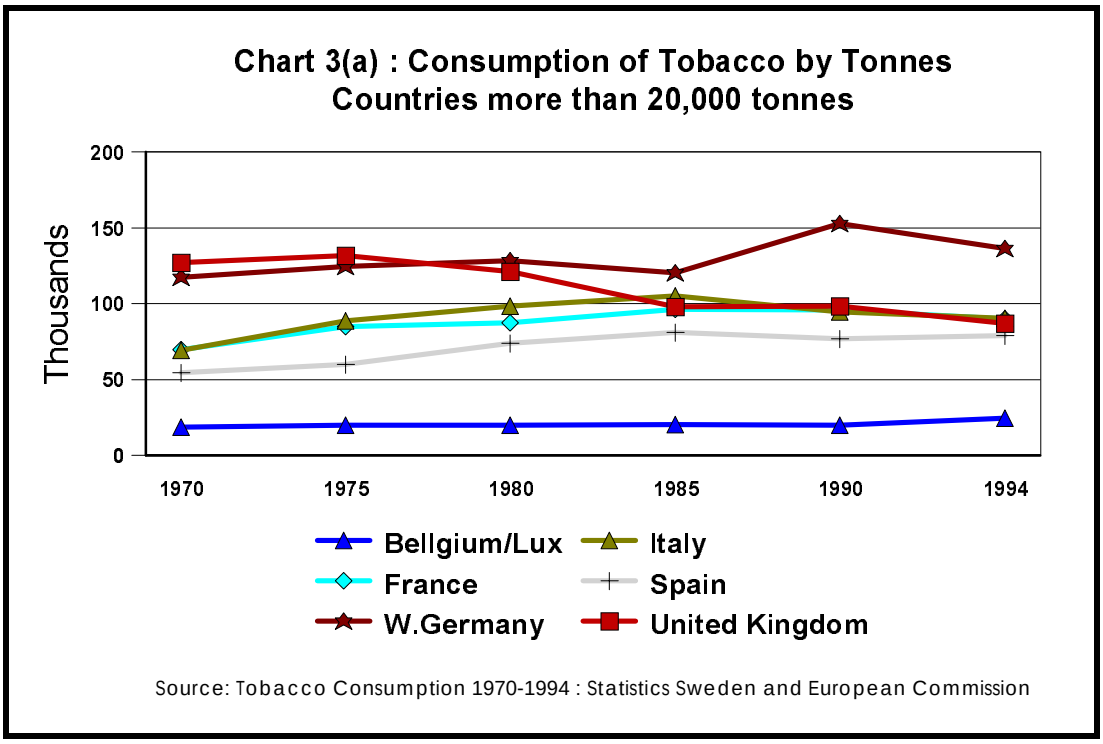
Cigarettes smoked per capita of population are fairly constant from 1986 to 1992. (Chart 2)

Chart 2: Cigarettes Per Capita p.a.

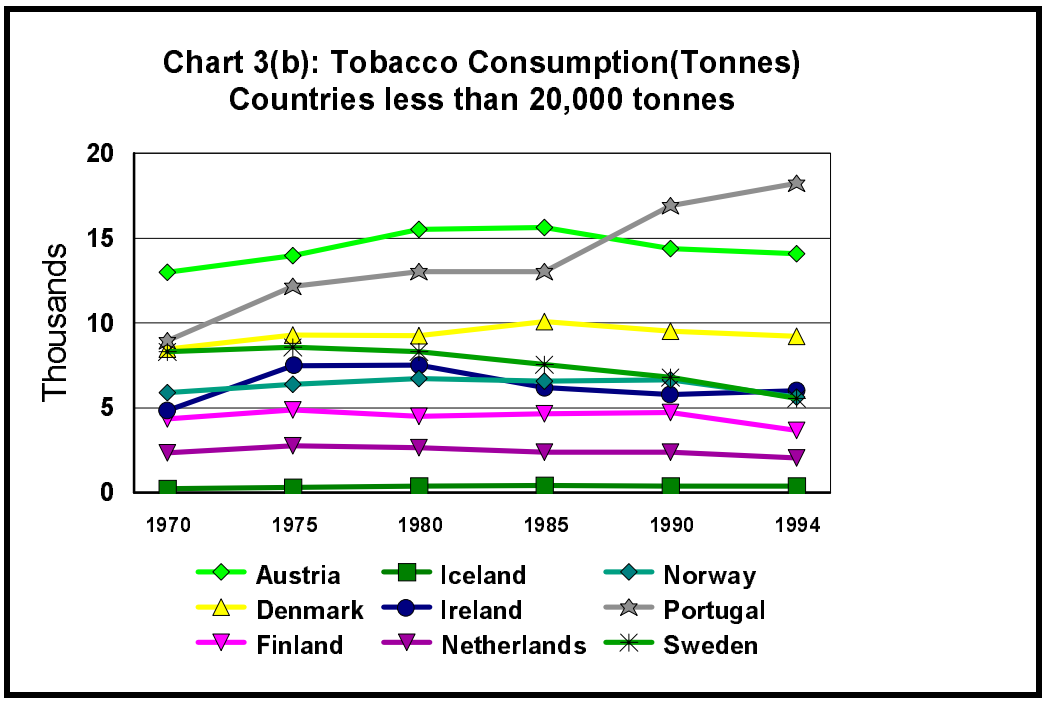


Source: Revenue Commissioners

In general, in Europe there appears to be a slight overall increase in consumption (Chart 3) though the UK seems to be an exception. The Irish pattern is consistent generally with the other comparator countries in Europe.



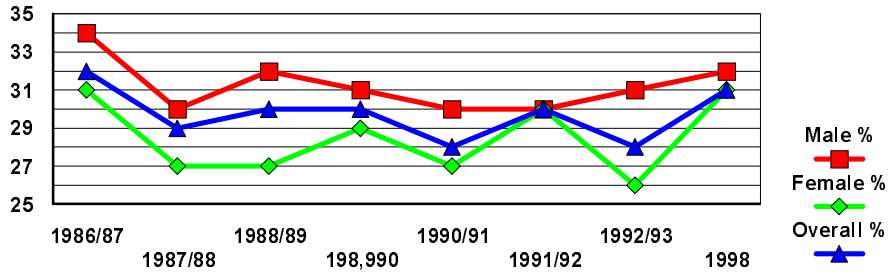
Source: Tobacco Consumption 1970-1994 : Statistics Sweden and European Commission



Smoking by Gender:

Historically smoking was seen as primarily a male addiction. However, the data indicate that smoking prevalence among women in recent years has greatly increased .(Chart 4). There is little difference at present between the overall rate of smoking among men and women smokers though of course the reasons men and women smoke can be different. In particular it appears that percentage of Irish women who smoke is among the highest in the comparators countries which are mostly comprised of EU member States (Chart 5). The different distribution between men and women in the age and social class cohorts would seem to indicate gender specific motivations for smoking. (Charts 7 and 8)

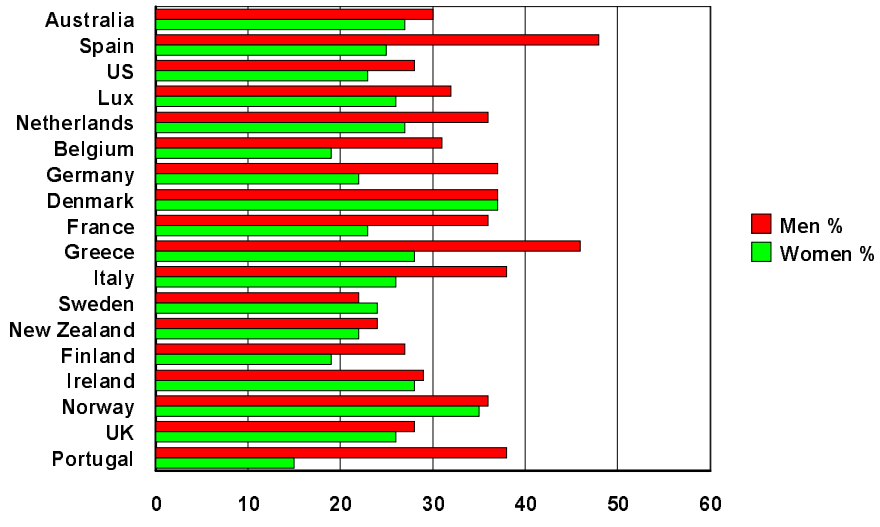
Chart 4. Trends By Gender
Percentage of Men and Women
Who Smoke



	1986/87	1987/88	1988/89	198,990	1990/91	1991/92	1992/93	1998
Male %	34	30	32	31	30	30	31	32
Femal	31	27	27	29	27	30	26	31
Overa	32	29	30	30	28	30	28	31

Source: World Health Organisation

Chart 5: Smoking Prevelance by
Country and Gender

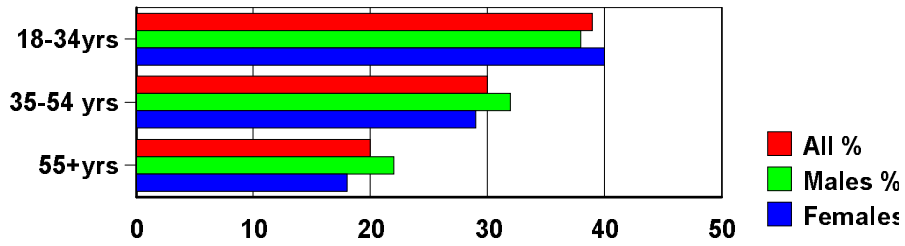


Source: World Health Organisation

Current Smoking Prevalence:

The most recent data available to us comes from the Slan Survey.[21] According to this survey 31 % of the adult population are current cigarette smokers. (32% of men and 31% of women.) (Approximately a further 7% smoke either pipe or cigars.) There is a strong age gradient visible in these data (Chart 6). Smoking is a problem for all social classes (Charts 7 and 8) and for all age groups but with a distinct bias towards the young people with low incomes.

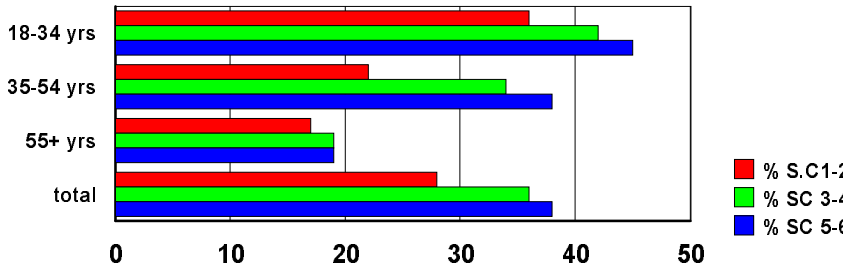
Chart 6: Current Smoking Prevalence By Age and Gender



	18-34yrs	35-54 yrs	55+yrs
All %	39	30	20
Males %	38	32	22
Females %	40	29	18

Source:The National Health and Lifestyle Surveys (Health Promotion Centre, UCG)Feb 1

Chart 7: Current Smoking Prevalence Among Women by Age and Social Class

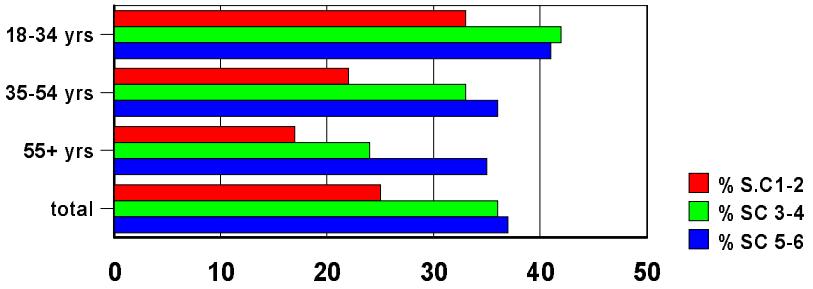


	18-34 yrs	35-54 yrs	55+ yrs	total
% S.C1-2	36	22	17	28
% SC 3-4	42	34	19	36
% SC 5-6	45	38	19	38

Source:The National Health and Lifestyle Surveys (Health Promotion Centre, UCG)Fe

[21] The National Health and Lifestyles Surveys: Department of Health and Children and The Centre for Health Promotion Studies, UCG.

Chart 8: Current Smoking Prevalence Among Men by Age and Social Class



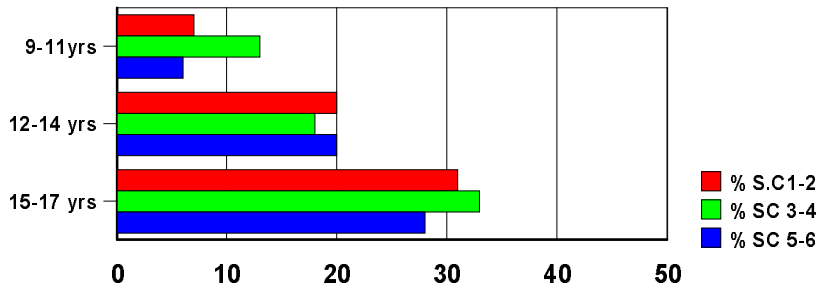
	18-34 yrs	35-54 yrs	55+ yrs	total
% S.C1-2	33	22	17	25
% SC 3-4	42	33	24	36
% SC 5-6	41	36	35	37

Source:The National Health and Lifestyle Surveys (Health Promotion Centre, UCG)Fe

Current Smoking Prevalence Among Children

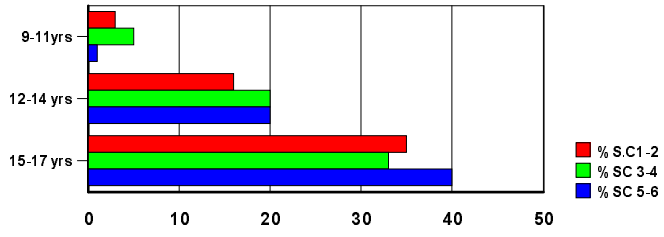
The rate of smoking among children (as reported by them) accelerates very rapidly from 11years of age. The social gradient, very pronounced among adults, is also apparent among children, especially boys, though much less so among girls. Boys also appear to start smoking earlier than girls. The very high levels of smoking reported prior to reaching 18 years would support the international experience that smoking behaviour is induced while smokers are still under age. The data would also seem to suggest that children of lower income groups experiment later with tobacco than middle income groups. Older children from higher income families are more likely to smoke than children from middle income families. (Charts 9 and 10). Smoking prevalence as reported appears to peak at 18-35 years.

Chart 9: Curent Smoking Prevalence Among Boys



	9-11yrs	12-14 yrs	15-17 yrs
% S.C1-2	7	20	31
% SC 3-4	13	18	33
% SC 5-6	6	20	28

Chart 10: Current Smoking Prevalence Among Girls

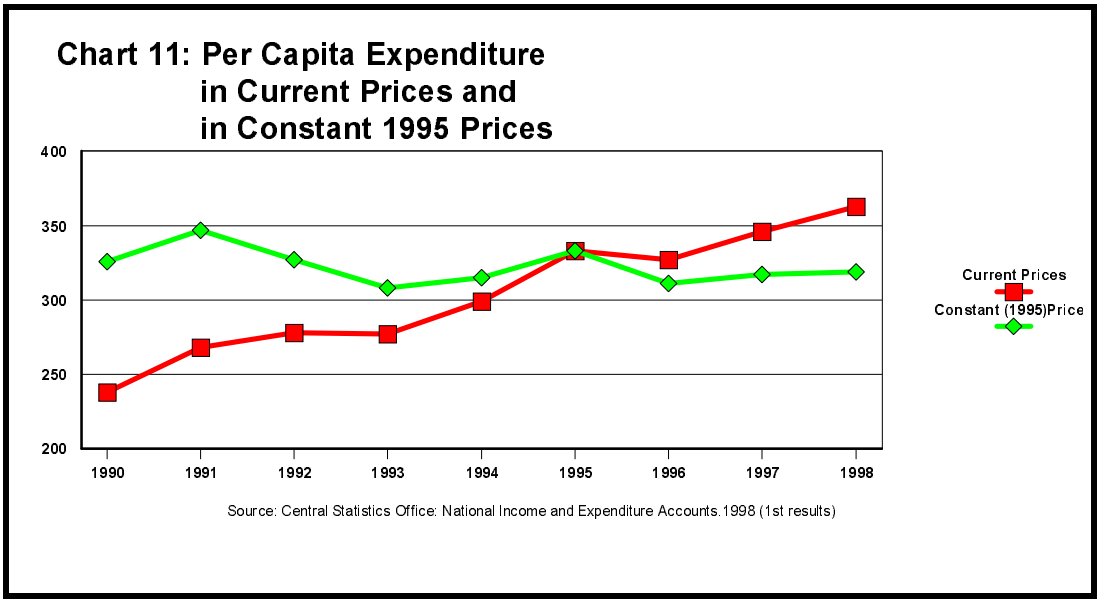


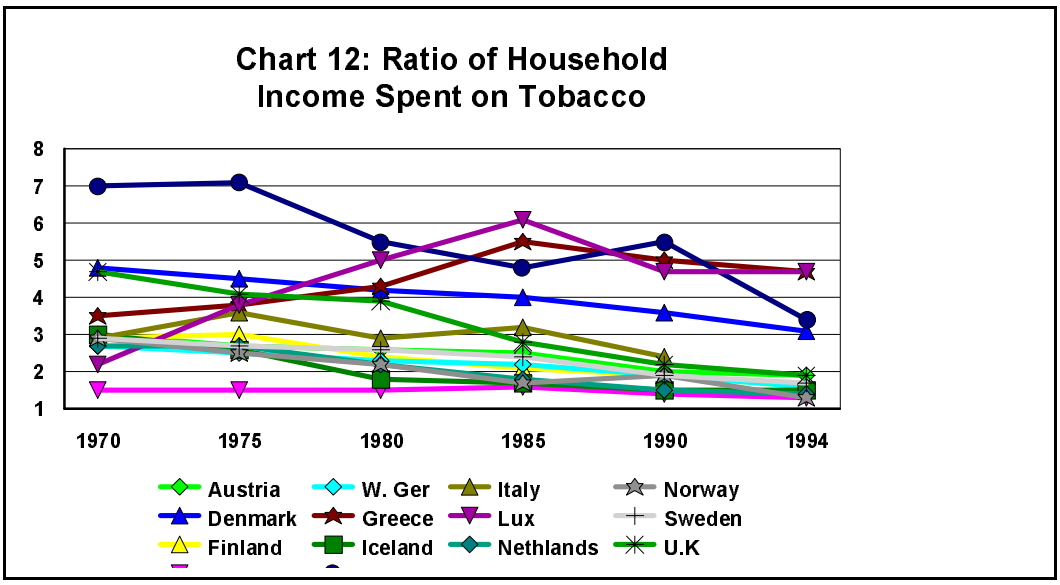
	9-11yrs	12-14 yrs	15-17 yrs
% S.C1-2	3	16	35
% SC 3-4	5	20	33
% SC 5-6	1	20	40

Source:The National Health and Lifestyle Surveys (Health Promotion Centre, UCG)Feb 1999

Income and Tobacco Consumption

The average per capita expenditure on tobacco in the 1990s in Ireland has remained fairly constant. (Chart 11). The evidence available also suggests that there has been a slight increase in the numbers of persons smoking and the volume of tobacco being smoked in the same period while the number of cigarettes smoked per person remains fairly constant over these years. Closer analysis is required of the economics of tobacco consumption but these data suggest that there has been no material improvement in our position over the past ten years.





Irish consumers are the third highest spenders on tobacco among the comparator countries in Chart 12. In 1970 Irish consumers spent significantly more on tobacco than consumers in the other countries. In line with most other countries the percentage of household income being spent on tobacco by Irish consumers is decreasing. This is attributable to an increase in income rather than a decline in consumption of tobacco products which has, in fact, being increasing in Europe generally (Chart 3).

The evidence from the data in Charts 11 and 12 would seem to suggest that the price barrier in real terms has been lowered significantly over the past number of years. The recent increase of 50 pence per package of cigarettes in the Budget goes some way to adjust this.

Summary:

In common with most western countries tobacco use is endemic in our society. Despite considerable reductions in smoking rates since the 1970s little progress has been made in recent years in addressing this concern and there is a disturbing underlying increase in smoking prevalence among children and young people, especially girls and young women. About 32 % of Irish adults smoke cigarettes with smoking commencing in childhood and peaking at about 18-35 years of age. The real cost of cigarettes has, in general, remained static in the 1990s and, therefore, the price barrier, identified by the World Bank as the most effective instrument in preventing young people from smoking, has been progressively lowered as incomes improve. The substantial increase in taxation in the Budget of December of 1999 has adjusted this position.

Chapter 5. Tobacco Related Diseases in Ireland

Life Expectancy: General:

Life expectancy has risen considerably in recent decades in Ireland (Table 4). However, as with most developed countries, life expectancy continues to be depressed by preventable illness especially tobacco related illness. Furthermore, life expectancy in Ireland remains lower than most other countries in the EU. Based on 1994 figures, Ireland ranks 12th out of the fifteen countries for women and 9th for men. In particular life expectancy in Ireland for the middle age has increased only slightly in recent years and compares very poorly with our EU neighbours: Irish women rank second lowest and men fourth lowest at forty years of age.

Heart disease and cancers are the major causes of premature death. While deaths from heart disease in Ireland have been falling they are still above the EU average. Cardiovascular disease was the single largest cause of all deaths in 1997 with coronary heart diseases causing about one in four deaths at all ages. Strokes cause about one in ten of all deaths [22]

Mortality rates from cancer for the EU as a whole have risen in recent decades though since about 1990, there has been a consistent decline. Irish trends are comparable to the EU experience though the Irish overall levels remain significantly above the EU average. (Table 6) Lung cancer is the most common cause of cancer mortality in Ireland and accounted for a growing number of deaths until around 1987. While it has fallen since then, it continues to compare unfavourably with the EU average. [23]

There is a need to focus on these disease groups if we wish to improve life expectancy in Ireland. We have already identified the extensive and compelling evidence that smoking is the main preventable cause of these diseases. It follows, therefore, that any measures to prevent these diseases must pay particular attention to tobacco and smoking.

Table 4. Life Expectancy at Certain Ages in Ireland

In year	'50-'52	'60-'62	'70-'72	'80-'82	'90-'92	'93*	'94*
Males at age 0	64.5	68.1	68.8	70.1	72.3	72.6	73.2
1	66.9	69.3	69.2	69.9	71.9	72.1	72.7
10	58.8	60.8	60.6	61.3	63.1	63.3	63.8
20	49.3	51.1	51	51.6	53.4	53.5	54.1
30	40.3	41.7	41.5	42.1	43.9	44.1	44.6
40	31.3	32.4	32.1	32.6	34.4	34.5	35.1
50	22.8	23.5	23.3	23.6	25.2	25.3	25.8
60	15.4	15.8	15.6	15.9	17	17	17.4
65	12.1	12.6	12.4	12.6	13.4	13.5	13.9
70	9.2	9.7	9.7	9.7	10.4	10.4	10.8
75	6.8	7.1	7.3	7.3	7.8	7.9	8.2

[22]Building Healthier Hearts Published by Department of Health and Children. (pg28)

[23]Cancer Services in Ireland: A National Strategy. Published by Department of Health and Children.

Females at Age 0	67.1	71.9	73.5	75.6	77.9	78.2	78.7
1	68.8	72.9	73.8	75.4	77.4	77.5	78.1
10	60.6	64.1	65.1	66.6	68.6	68.7	69.2
20	51.2	54.3	55.3	56.8	58.7	58.8	59.3
30	42.2	44.7	45.6	47	48.9	49	49.5
40	33.3	35.3	36	37.3	39.2	39.3	39.7
50	24.7	26.3	27	28	29.8	29.9	30.3
60	16.8	18.1	18.7	19.5	21.1	21.1	21.5
65	13.3	14.4	15	15.7	17.1	17	17.4
70	10.2	11	11.5	12.2	13.5	13.3	13.7
75	7.6	8.1	8.5	9.1	10.2	10.1	10.4
* Estimate figures: Demographic Statistics , Eurostat 1996 Source: Central Statistics Office							

Tobacco Related Deaths

In 1995 tobacco was responsible for an estimated 1.2 million deaths in Europe. In the Member States of the European Union alone approximately 500,000 die prematurely each year from smoking. In Ireland in 1989 nearly 7,000 deaths from smoking occurred. (Table 5)

Table. 5. Deaths Attributable To Smoking in Ireland

Year	Males	Females	All Smoking Deaths	All Deaths	Smoking Deaths as %
1970	2,700	500	3,200	33,000	9.7
1975	4,000	1,400	5,400	33,200	16.3
1985	4,600	2,200	6,800	33,200	20.5
1989	4,200	2,600	6,800	32,100	21.2

[1] Private communications with ESRI

The World Health Organisation (WHO) estimate that cigarettes are responsible for about 30% of all cancer deaths, 20% of deaths from coronary heart disease and stroke and 80% of cases of chronic obstructive lung disease. Apart from the most common form of tobacco related lung cancer many cancers of the mouth and pharynx are also caused by smoking tobacco. Half of all people who regularly smoke will die from cigarettes. Of these deaths half will occur in middle age i.e. a quarter of all smokers die in middle age from tobacco related diseases.

International Comparisons: Tobacco Related Diseases

Comparisons between European countries in relation to the disease profile associated with tobacco is shown below (Table 6). Ireland scores significantly worse than the EU average in the relevant disease categories (Chart 13). As tobacco use is the main preventable cause of these diseases there is a reasonable inference to be drawn that Ireland has a greater need than our European neighbours to address the tobacco epidemic.

Table. 6: Mortality Rates in Europe

AGE-STANDARDISED MORTALITY RATES PER 100,000 FOR EU COUNTRIES [24]

Country	Year of data	All causes	Diseases of the Circulatory System			Cancer		
			All Circ. System Diseases	Ischaemic Heart Disease	Stroke	All Malignant Neoplasms	Cancer of the Trachea, Bronchus and Lung	Female Breast Cancer
Austria	1996	732.3	367.0	147.9	84.1	184.6	33.9	30.1
Belgium	1992	770.2	267.7	81.0	66.8	214.5	53.4	35.5
Denmark	1995	868.5	316.5	163.9	68.2	234.2	55.1	42.6
Finland	1995	772.4	354.0	207.4	90.9	163.0	31.3	25.1
France	1994	639.7	182.8	54.3	46.0	194.3	34.8	28.2
Germany	1995	764.1	343.8	151.2	78.3	196.7	36.3	31.7
Greece	1995	700.5	340.9	90.4	122.9	163.0	39.2	22.9
Ireland	**1993**	**895.4**	**401.3**	**225.2**	**82.6**	**220.0**	**46.8**	**37.4**
Italy	1993	695.5	284.8	90.0	85.5	199.9	42.2	29.5
Lux	1995	724.4	284.8	90.8	86.9	208.7	45.2	36.2
Nether-lands	1995	724.5	269.3	110.5	62.0	206.8	50.6	36.6
Portugal	1995	877.5	352.5	74.5	187.4	170.8	22.3	25.0
Spain	1994	674.5	245.9	70.3	75.4	179.7	34.8	24.6
Sweden	1995	647.7	295.9	158.1	61.0	161.3	24.6	24.8
United Kingdom	1995	770.7	317.2	181.0	74.4	206.5	48.6	36.0
EU Average	**1995**	**725.1**	**289.8**	**117.3**	**76.4**	**195.1**	**39.5**	**30.6**

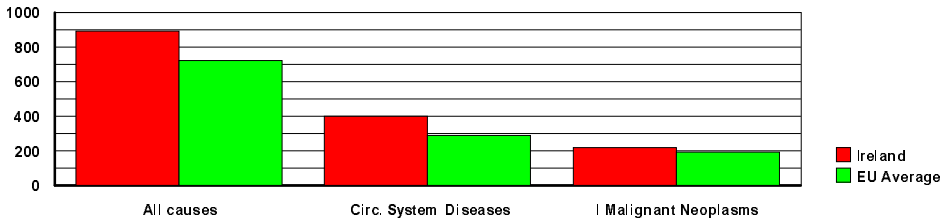
Cause of death for all countries, with the exception of Denmark, is classified in accordance with International Classification of Diseases, Ninth Revision

Basic Tabulation list as follows:
Diseases of the Circulatory System: 25-30
Ischaemic Heart Disease: 27
Stroke: 29
Cancer: 08-14
Cancer of the Trachea, Bronchus and Lung: 101
Cancer of the Female Breast: 113

For Denmark the International Classification of Diseases, Eighth Revision abbreviated list has been used.
Disease of the Circulatory System: A80-A88
Ischaemic Heart Disease: A83
Stroke: A85
Cancer: A45-A61
Cancer of the Trachea, Bronchus and Lung: A51
Cancer of the Female Breast: A54

Chart 13: Mortality Rates in Ireland

AGE-STANDARDISED MORTALITY RATES PER 100,000



	All causes	Circ. System Diseases	I Malignant Neoplasms
Ireland	895.4	401.3	220
EU Average	725.1	289.8	195.1

Source: Health for All, World Health Organisation

[24] Health for All, World Health Organisation

Summary

Life expectancy has improved in recent decades in Ireland but is still lower than the EU average. The diseases which contribute to this fact are primarily heart disease and cancer: Tobacco use is a major cause of much of the incidence of these diseases. Reduction in tobacco consumption would, therefore, result, in time, in an increase in life expectancy in Ireland.

Chapter 6. Our Present Response

Existing Measures

The Department of Health and Children has implemented an integrated approach to the control of tobacco since 1964. This strategy has progressed through a number of stages:-

- the Voluntary Code on Advertising (1964);
- the Banning of Tobacco Advertising on TV (1971);
- the Banning of Tobacco Advertising on Radio (1979)
- to the current combination of measures dealing with advertising, sponsorship, health education and promotion, controls in the workplace and fiscal and pricing measures.
- the Revenue Commissioners, for taxation reasons, have developed a sophisticated legal code to control the production and storage of these products.
- We have pursued a high retail price strategy through a combination of high taxes, price management and minimum pack sizes.
- We have long recognised the supra national dimension of tobacco production and promotion and we have participated in a number of initiatives with the European Union and with the World Health Organisation.

Our present tobacco control measures, therefore, comprise of statutory and voluntary environmental controls, controls on industry behaviour, and health education.

Environmental Controls:

Statutory: We impose specific legal prohibitions on smoking in a wide number of areas such as schools, health care facilities, theatres, public offices, taxis, buses, restaurants, hairdressers etc. (cf. Appendix C for a note on the legal arrangements)

Voluntary: We have a voluntary code of practice for the work place developed with the Social Partners.

Controls on Industry Behaviour

Advertising: We prohibit advertising of tobacco products completely in the electronic media and restrict the tobacco industry's scope for advertising in the print media by regulating advertising content and by restricting budgets. We also restrict sponsorship by curtailing budgets and restricting the numbers of those who may avail of such sponsorship. The level of spending on advertising and sponsorship by tobacco companies is controlled by law[25].

Health Warnings: A general health warning is required on all advertising material including packaging.

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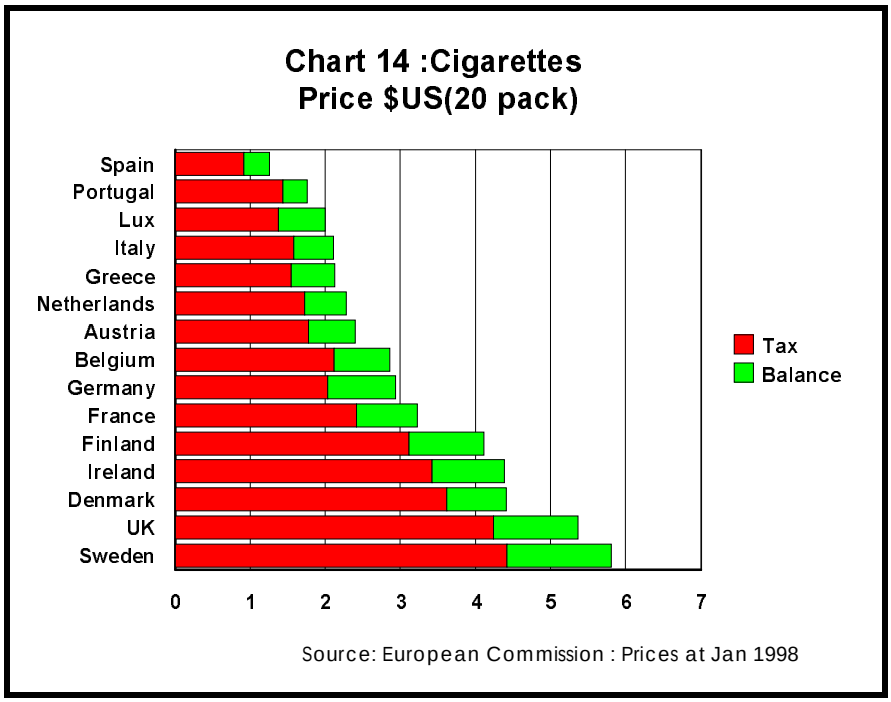
[25] Articles 19(2) and 21(1) of the Tobacco (Control of Advertising, Sponsorship and Sales Promotion) Regulations 1991

Fiscal Measures: Ireland imposes a high price policy on tobacco products through a system of retail price management and through taxation. (Chart 14). The increase of fifty pence per twenty package of cigarettes imposed in the December 1999 Budget was significant and will have placed Ireland even higher in the league of countries with high tax policies.



Retail Price Management: In addition to the high tax structure Ireland has a unique feature which prevents discounting at retail level. The prices shown reflects the price used to determine taxes and in most countries the retailer is free to discount. It is, however, illegal in Ireland to use price as a sales promotion device.[26] This measure is, at present, interpreted administratively by the Department of Health and Children on the basis of a mechanism, under which, each year, the Department sets a price for a packet of 20 of each of the three categories of cigarettes on the market. Under this procedure, retailers are permitted to sell cigarettes at a price down to 97% of the set price. Any price lower than 97% of the set price is considered to contravene the Regulations. Following discussions with the EU Commission this measure will now be enshrined in our legislation.

Taxation Policy: It should be noted that according to the World Bank[27], evidence from countries of all income levels shows that price increases on cigarettes are highly effective in reducing demand. Higher taxes induce some smokers to quit and prevent others from becoming addicted. They also reduce the number of ex-smokers who return to cigarettes

[26] Article 17 of the Tobacco Products [Control of Advertising, Sponsorship and Sales Promotion] Regulations, 1991).

[27] Curbing The Epidemic :Governments and the Economics of Tobacco Control: The World Bank Washington, DC May 1999

and reduce consumption among continuing smokers. On average, a price rise of 10 percent on a pack of cigarettes would be expected to reduce demand for cigarettes by about 4 percent in high-income countries and by about 8 percent in low-income and middle-income countries, where lower incomes tend to make people more responsive to price changes. Children and adolescents are more responsive to price rises than older adults, so this intervention would have a significant impact on them.

The World Bank Report also concludes that a useful yardstick to determine the "correct" amount of taxes may be the tax levels adopted as part of the comprehensive tobacco control policies of a number of countries where cigarette consumption has fallen. In such countries, the tax component of the price of a pack of cigarettes is between two-thirds and four-fifths of the retail cost. Currently, in the high-income countries, taxes average about two-thirds or more of the retail price of a pack of cigarettes. In lower-income countries taxes amount to not more than half the retail price of a pack of cigarettes.

The report also comments on concerns that higher tax rates will reduce government revenues. It concludes that raising tobacco taxes does, in fact, bring in greater tobacco tax revenues. This is explained, in part, because the proportionate reduction in demand does not match the proportionate size of the tax increase, since addicted consumers respond relatively slowly to price rises. The report concluded that modest increases in cigarette taxes of 10 percent world-wide would increase tobacco tax revenues by about 7 percent overall, with the effects varying by country.

Another concern often expressed is that higher taxes will lead to massive increases in smuggling, thereby keeping cigarette consumption high but reducing government revenues. Smuggling is a serious problem, but according to the World Bank report, even where it occurs at high rates, tax increases still bring greater revenues and reduce overall consumption.

A further concern is that increases in cigarette taxes will have a disproportionate impact on lower income consumers. Existing tobacco taxes do consume a higher share of the lower income consumers' funds. However, the impact of the entire tax and expenditure system needs to be considered.

Tar Contents: We control, by law, the tar content of tobacco products. There is, however, no safe level of tar.

Education:

Health Promotion Campaigns : The Health Promotion Unit of the Department of Health and Children conducts, on an ongoing basis, multimedia campaigns:

The *"I'm One Less"* campaign was in operation during the period 1993-1995. This was a multimedia campaign involving television, radio and outdoor advertising aimed largely at young people. It was directed at encouraging the friends, relatives and peers of smokers to adopt a positive and supportive role in helping them to stop smoking.

The campaign *"Say what you like-smoking kills"* was launched in November 1995. The campaign used television, radio, outdoor and print advertising in an effort to raise

awareness of the issue. It was evaluated by the Centre for Health Promotion Studies in University College Galway and showed a high awareness of the campaign message.

Based on that evaluation, a new campaign "*Break the Habit for Good*" was planned and launched in late 1998. This campaign took a slightly different approach than previous campaigns and emphasised the positive effects which quitting smoking can have on the individual. The campaign offered, by means of a series of national and local initiatives, help and support for people wishing to quit smoking. The campaign was run in conjunction with the Irish Cancer Society and the regional health boards.

Smoking Control Policies in the Workplace: The Voluntary Code on Smoking in the Workplace was developed by the Health Promotion Unit of the Department of Health and Children with the support of the Irish Congress of Trade Unions, the Irish Business and Employers Confederation, the Irish Cancer Society, the Irish Heart Foundation and the Health and Safety Authority. The Code is included in a booklet entitled, "Working Together for Cleaner Air" and was distributed to over 5,000 companies, state, and semi-state institutions in late 1994. This Code encourages a consensual approach to smoking control policies through a consultation process between staff and management interests.

Other Health Promotion initiatives in relation to Smoking: The HPU also co-ordinates two schools programmes which seek to prevent young people taking up smoking in the first instance.

SCRAP: The Smoking Reduction Action Programme (SCRAP) is a peer-led anti-smoking programme for schools which was developed by the Department of Health and Children in conjunction with the Irish Cancer Society, the National Youth Federation and with support from the Department of Education.

Smoke Busters: The "Smoke-busters" project, which is aimed at primary school children (7-11 years) in an urban environment, was developed by the Irish Cancer Society, the Departments of Health and Children and Education and the Eastern Health Board.

NGOs: The Health Promotion Unit, in association with voluntary agencies active in this area, produces a range of materials including leaflets and posters containing information on smoking and encouraging smokers to quit.

National No Smoking Day: Each year the Department of Health and Children co-ordinate a National Anti-Smoking Campaign, which commences on National No Smoking Day (Ash Wednesday).

The Outcome from These Measures:

Strengths:

- The prevalence of smoking has reduced from 45% in the mid-1970s to about 28% in the early 1990's and 31% currently.
- The proportion of household income spent on tobacco has nearly halved.
- Better public awareness of the dangers of smoking. Everyone now acknowledges that tobacco seriously damages your health.
- Ireland has an established worlwide leadership role in the fight against tobacco.
- Restrictions on smoking are now accepted by, and are even popular with, everyone including smokers.
- Tobacco advertising is relatively low key in Ireland and sponsorship arrangements are dwindling each year. The tobacco industry accepts the inevitability of further restrictions.
- People from higher income groups are far less likely to smoke than in the past.

Weaknesses:

There are two basic facts which, despite the good news, must give us cause for concern. viz. at least 31% of the population still smoke and the evidence now emerging suggest this is increasing. About two thirds of all children still experiment with tobacco and over a quarter are habitual smokers. There is also growing evidence that the numbers of children, especially girls, who smoke is on the increase. We have identified the main deficits in our present arrangements as follows:

- **Lack of Information:** We have had no defined system for gathering and correlating information about tobacco and its use in Ireland. The recent Lifestyles Surveys-Slan- provide a new response to this deficit in relation to smoking prevalence. Better information leads to more effective targeting of education and other interventions towards vulnerable geographical areas and client groups.

- **Public Awareness and Opinion**: Public consciousness and consciousness among key influencers of public opinion about the risks to health from tobacco needs to be raised further: we have no defined programmes to address this. Raising consciousness especially among leadership groups is critical to effecting attitude change- a necessary prerequisite to change in behaviour. Quality information is essential to this process. Readily understood truthful information about the hazards of tobacco is also necessary to ensure people have a sense of ownership of the public health message. The negative impact of the tobacco industry's public relations programmes is not specifically addressed.

- **Remedial Measures**: There are insufficient supports for those seeking to quit - especially for children who are addicted. Remedial measures are not sufficiently integrated into our main stream health care systems.

- **Protection: Existing Laws**: There are deficiencies in our laws, especially in relation to enforcement. Compliance with environmental controls is excellent in certain locations and sporadic in others. We do not have a proactive programme of inspection.

- **Protection: Advertising and Sponsorship**: Our existing controls on tobacco advertising are not effective. Tobacco advertising still impacts on children. There is evidence that the industry is not complying with existing arrangements regarding sponsorship, especially of local events.

- **Protection: Retail**: The present arrangements for retailers are not proving to be effective barriers between the tobacco industry and children.

- **Protection: Environmental Tobacco Smoke:** Our present arrangements do not adequately assert the primacy of the non smoker's rights. In relation to passive smoking we have provided a higher order of protection to public servants and employees in the financial services sector than to the general work force. This level of protection needs to be extended to all workers.

If we are to make further progress then we need to build on our past successes while addressing the weaknesses outlined above.

Opportunity:

- The need to transpose European Union legislation combined with the new revelations about the marketing practices of the industry presents us with a unique opportunity to review our arrangements. The Strategic Management Initiative also enables us to look strategically at this issue and to see it in its proper context. i.e. the single biggest preventable cause of premature death.

Threats:

- The most significant threats we face come from an excess of enthusiasm on the one hand which would serve to alienate rather than persuade people and, on then other hand, the very considerable resources and skills of the tobacco industry who seek to persuade people that smoking is an issue of personal freedom, that the dangers are exaggerated or so remote in time as to be irrelevant to the young smoker.

Summary

Despite the considerable success of our existing response to the tobacco problem the present arrangements are unlikely to yield further progress in this vital public health objective.

Chapter 7. Future Direction:

Mission

Our mission is to promote a Tobacco Free Society.

Prohibition

If tobacco were to appear for the first time today its sale would not be permitted. When a new product (smokeless or chewing tobacco) appeared on the international markets we banned it completely in Ireland. However, tobacco usage has been established for many centuries in Ireland though it is only in first half of the twentieth century that it gained a strong foothold.

There have been understandable calls for an outright ban on tobacco but this is not achievable at present because of the high numbers of persons who are addicted to the product and because of the ready availability of tobacco products in neighbouring jurisdictions. A complete ban would, in our opinion, lead to the emergence of a substantial black market in smuggled product with its associated criminality.

Priorities

In all our actions our priority will be to protect young people before they become addicted. Research shows that virtually all new smokers become addicted while they are still children. It must also be noted that adults are role models for impressionable children and, accordingly, we need to reduce children's exposure to adults as they smoke.

We know that in Ireland up to two thirds of all children have experimented with tobacco before they reach adulthood. We are statisfied that no strategy will be effective if this fact is not addressed. Real and substantial efforts have to be made to persuade and assist children who are already smoking to quit, while decisive action is needed to interrupt this cycle of childhood addiction.

Young people, in general, are very open to change and readily accept the challenges that change brings. The Irish population is a young educated one capable of understanding and rejecting tobacco. This demographic window presents us with a unique opportunity to change social behaviour in a positive and radical way. This opportunity is, however, also open to the tobacco industry who have considerable marketing skills and almost endless resources to focus on recruiting new smokers. We have to increase our efforts to expose the harmful propaganda of the tobacco industry and replace it with real information that reflects the truth about smoking in a manner that engages rather than alienates young people. It is particularly important that we bring young people with us and not turn tobacco into some exciting prohibited substance which could be used as an expression of rebellion and defiance.

Creation of a tobacco-free environment for children requires rigorous and sustained multiple actions that focus on reducing prevalence of tobacco use.

Strategy

To further this policy we have set four key strategic objectives.

Objective 1: To Change Attitudes

It is our view that the efficacy of our existing measures is compromised by a social ambivalence towards tobacco use. This ambivalence is fostered and promoted by a variety of factors, not least the marketing activities of the tobacco industry. A change of public attitude towards tobacco use is an essential precursor to change in social behaviour. This attitudinal change can be effected by positive programmes delivering real and truthful information in readily understandable forms. It is also essential that false or misleading information should be challenged. In a modern society each person has the right to be fully and truthfully informed about those factors which affect their health and well being. We need, therefore, to put in place measures which will ensure that smokers and non smokers alike, especially those in leadership or who have social influence, can access truthful information about tobacco. It is also essential if attitudinal change is to lead to change in behaviour that the restrictions imposed on the industry and on smoking in general are properly enforced. These arrangements will focus on four areas:

1. The positive social and personal health gains to be enjoyed from a tobacco free lifestyle
2. The dangerous properties of tobacco smoke and the addictive nature of nicotine
3. The negative marketing strategies of the tobacco industry
4. A proactive enforcement programme.

Objective 2: To Support and Empower

Despite high recidivism, programmes to assist smokers to quit are valuable and, as a secondary output, help to reaffirm the message that smoking is addictive and to ensure that smokers will actively discourage their children from smoking. A variety of programmes already exist to assist smokers to quit and there is a need for further research and actions which reduce the present rates of recidivism. Further initiatives will also be developed which focus on the unique needs of child smokers. It should be noted that about 80% of smokers want to quit.

Objective 3: To Protect

There is now irrefutable evidence that environmental tobacco smoke is a real and substantial threat to health. We identify six key locations where people are compelled to be and in which they need to be given priority protection against tobacco smoke. viz

1. Enclosed workplaces,
2. Places of essential commercial transactions,
3. Public transport,
4. Places of entertainment open to persons under 18years or where choice is limited,
5. Health establishments
6. Education establishments.

Objective 4: To Focus on Children

We propose to give a distinct focus to the need to assist children who are addicted to tobacco and to provide an effective system of protection for non smoking children. We identify five priority areas to be addressed;

1. Remedial programmes for child smokers,
2. Programmes which inform and empower children,
3. The tobacco industries' access to children,
4. Marketing practices which impact on children,
5. Smoking in places mainly used by children.

This objective is at the heart of the proposed initiative. The group wishes to emphasise its abhorrence at the fact of eight and nine year old children smoking and feel that everyone is society has a duty to eliminate such a practice from the realms of social acceptability. Furthermore, it should be a criminal offence for anyone to seek to induce young children to smoke either by way of a deliberate act or by showing a reckless disregard for children's welfare as they pursue their commercial interests.

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Action Plan

In pursuit of our objectives we propose a seven tier action plan:

- **Tier 1: Better Communication and Education** which would raise public awareness and empower the community.

- **Tier 2: More Help for Smokers to Quit** by providing them with specific support.

- **Tier 3: Tougher Regulation of the Tobacco industry** to eliminate inducements to children to experiment with tobacco and to ensure that smokers are fully informed by the tobacco industry of the risks they are undertaking.

- **Tier 4: Further Protection** against the harmful effects of passive smoking.

- **Tier 5:** We will build **Better Compliance with the Law** by informing and educating key people in positions of responsibility in order that our laws are accepted by the wider community, and by a pro active approach to law enforcement.

- **Tier 6: Extending Ownership** of the Tobacco Free Society initiative: it requires total community commitment and engagement to create a tobacco free society.

- **Tier 7: International Co-operation** which addresses the fact that tobacco products are marketed globally.

The following paragraphs outline in some more detail the rational and specific content of each of these tiers.

Tier 1: Better Communications and Education:

1. **A Public Relations Programme**: A Public relations programme is needed which will focus on engaging the commitment of specific leadership groups and key influences in society, i.e. community leaders as well as leaders in political, industrial, entertainment and communications sectors. *(Objectives served: Objective. 1: To change Attitudes Objective. 4: To Focus on Children)*

2. **A Sponsorship Programme**: A programme of sponsorship of national children's events in return for positive exposure for the Tobacco Free Society initiative would build positive associations in children's minds with a tobacco free lifestyle. *(Objectives served: Objective. 1: To change Attitudes: Objective. 4: To Focus on Children)*

3. **Improved Public Knowledge of Tobacco Control Laws**: Dedicated resources have already been provided to the Environmental Health Officers Association to organise annual conferences on environmental health matters. (Tobacco controls will feature prominently in these conferences.)(*Objectives served: Objective 1. To Change Attitudes: Objective 3. To Protect: Objective 4. To Focus on Children.)*

4. **Tobacco Information and Resource Centre**: The Minister has already agreed to the establishment of a national Tobacco Information and Resource Centre. Specific funds have been allocated in 1999 to facilitate the development of this project in association with ASH Ireland. This will be an academic centre which will develop and maintain a database on all aspects of tobacco and health with particular emphasis on the supply side. (Scientific, Economic, Legal, Commercial etc.) This measure will also serve the objective in the "Building Healthier Hearts" policy Recommendation R5.20 and 5.24). It will provide assistance to persons interested in researching tobacco issues. It will concentrate, as a priority, on developing information pertinent to children . *(Objectives served: Objective 1. To Change Attitudes: Objective 2. To Support and Empower: Objective 4. To Focus on Children)*

5. **Clinical Research**: The Health Research Board will be asked to develop a distinct programme of research on the clinical aspects of childhood addiction to tobacco. *(Objectives served: Objective 2. To Support and Empower: Objective 4. To Focus on Children)*

6. **An Enhanced Health Education Programme**: A significant increase in allocation will be provided to augment existing health education programmes (eg. SCRAP and Smoke Busters) which focus on educating children about the advantages of a tobacco free lifestyle. *(Objectives served: Objective.1: To change Attitudes: Objective. 2: To Support and Empower: Objective. 4: To Focus on Children:)* This measure will also serve the objective set out in "Building Healthier Hearts" Rec 5.25(3))

7. **Diploma in Tobacco and Health:** Resources have been provided for the development of a third level diploma course in tobacco studies. The attendance of health care administrators, teachers and health care professionals will be facilitated and the diploma will be recognised for career purposes. *(Objectives served: Objective. 1 To Change Attitudes: Objective 2. To Support and Empower: Objective 4. To Focus on Children:)* This measure will also serve the objective set out in Building Healthier Hearts" (Recommendation 5.24(4))

8.**Integrating the Tobacco Free Initiative into Third Level Curricula**: The Institute of Public Health should be asked to undertake a review of existing educational programmes, on an all Ireland basis, for those professions most likely to have influence on children. The Institute should be asked to report with recommendations as to how to integrate the theme of tobacco and health into relevant curricula. Priority areas will be teacher training, especially primary school teaching, community and youth leadership programmes, midwifery and gynaecology as well as general medical practice. (*Objectives served: Objective.1. To Change Attitudes: Objective 2. To Support and Empower: Objective 4. To Focus on Children*)

Tier 2: More Help for Smokers to Quit

1.**Nicotine Replacement Therapy (NRT):** Personal motivation and commitment are vital if smokers are to quit successfully. But that being said, there are now pharmacological aids which make a real difference to smokers' chances of succeeding in a serious quit attempt. According to the World Health Organisation research over the past two decades has shown that nicotine itself can be exploited as an effective aid to treatment, and evidence for the efficacy of new non-nicotine drugs has recently begun to emerge. Randomised trials have established that all forms of NRT are effective aids to cessation, on average close to doubling the chances of a quit attempt succeeding. The efficacy of NRT appears to be largely independent of other elements of treatment: although absolute success rates are higher with more intensive behavioural support, the effect of NRT in doubling the chance of quitting is found in brief interventions and over-the-counter settings as well as in specialised smokers' clinics. This feature gives NRT an important role in public health approaches aimed at reaching the bulk of the smoking population with simple, brief interventions. According to the World Health Organisation the effect of NRT in promoting cessation emerges right from the start of quit attempts. Studies show that achieving complete abstinence within the first 48 hours is vital to long-term success. Nicotine replacement therapy (NRT) will, therefore, subject to conditions, be made available free of charge to persons participating in smoking cessation programmes. *(Objectives served: Objective 2. To Support and Empower: Objective 4. To Focus on Children)*

2. **Counselling**: There are a variety of counselling and personal support services operated and in development in health boards. We believe that there should be a systematic and on going process of evaluation of these projects and we suggest that systems for promoting best practice among health care providers be developed.

3.**Maternity Services:** Each maternity unit should be required to operate a specialist clinical to assist pregnant women during their pregnancy and to continue that support after discharge

4.**Patients with Special Needs**: Health boards should review their services addressing tobacco related diseases such as cardiovascular diseases and ensure that there is a specific support programme for these patients.

5.**Information and public support**: We recommend providing sustained public programmes of information and motivation. while the elimination of tobacco advertising and the extension of tobacco free areas in public life will support smokers who are attempting to quit.

Tier 3: Tougher Regulation of the Tobacco industry

1. **Advertising:** A complete ban on all forms of advertising of tobacco products is necessary if we are to reduce children's exposure to inducements to tobacco products. Ireland has, for many years, sought a European Union ban on tobacco advertising and sponsorship. In 1998 a Directive (Directive 98/43/EC) banning tobacco advertising and sponsorship by the industry was adopted by the European Union. The Directive provides for an end to general advertising of tobacco products not later than 30th July 2001 and an end to advertising of tobacco products in the press not later than July 2002. It also requires that general sponsorship by or on behalf of the tobacco industry end not later than 30 July 2003 and to sponsorship of certain significant international events by 30 July 2006 (eg Formula 1). The Minister for Health and Children has announced that he intends introducing these bans with effect from July 2000. It might be helpful to record the reasons for not introducing a ban immediately on adopting the Directive. The Irish media drew the Minister's attention to the level of advertising placed by the tobacco industry with them and they asked that the Minister avail of the full transition period to allow them to make the necessary adjustments. This request has been declined but the Minister did agreed to exercise some latitude in order to secure the media's good will and to build a platform of engagement with them which would heighten awareness within the media of the public health implications of tobacco. A media proactively committed to the public health message is a valuable asset in furtherance of our mission of creating a tobacco free society. The adverse effects of the extra period of time allowed for advertising which this model permits can only be justified if the public health returns from a long term commitment from the media to the public health position yields a greater public health gain. This is extremely difficult to quantify or even guarantee and its viability is a matter of judgement. *(Objective served: Objective 4. To Focus on Children)*

2. **Sponsorship**: The restrictions on the tobacco industry in relation to sponsoring events and activities has been successful in Ireland. There is now very little sponsorship by the tobacco industry and we propose that in line with the European Union Directive all forms of sponsorship by the tobacco industry be banned. The Minister has announced that all forms of sponsorship by the tobacco industry will end by July 2000. *(Objective served: Objective 4. To Focus on Children)*

3. **Broadcasting:** A variety of means have been devised by the industry to circumvent the intentions of the existing advertising ban on television advertising. The Ministerial Code of Practice regulating public broadcasting needs to be reviewed to ensure that all forms of indirect advertising including product placement in sporting events as well as films is excluded from the airwaves. As a result of an EU Directive further legal measures will also have to be introduced. *(Objectives served: Objective 1. To Change Attitudes: Objective 4. To Focus on Children)*

4. **Point of Sale Advertising**: All forms of advertising at the point of sale should be prohibited. Most retail outlets that sell tobacco products also sell groceries and confectioneries. Retailers often display tobacco products prominently and close to confectioneries. We believe this is building subliminal associations, whether intended or not, between confectioneries and cigarettes. The presentation of tobacco products in such a manner impacts significantly on children and undermines the retailers will to comply with the legal age requirements. We have concluded that any form of tobacco display at point of sale is a powerful means of advertising and accordingly we are recommending a

complete ban on such displays. *(Objectives served: Objective 1. To Change Attitudes: Objective 4. To Focus on Children).*

5. **Vending Machines**: Vending machines will continue to be restricted to secure areas which are under the direct supervision of staff. They should not be permitted to carry advertising and should , in the future, only be allowed in registered premises which are used wholly or for the time being by persons over 18 years. *(Objectives served: Objective 1. To Change Attitudes. Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children:)*

6. **Pack Sizes**: In line with most modern developed countries, cigarettes should, in future, only be permitted to be sold in packages of not less than twenty. Once a person is addicted to tobacco the decision to buy cigarettes becomes less price sensitive. However, price is a significant factor for young "would be" smokers. The cost to the individual is a function of the unit price and the minimum number of units which may be bought. By increasing the minimum number of units which may be bought we raise the price barrier higher for children at the experimental stage without penalising the adult smoker. *(Objectives served: Objective 4. To Focus on Children*:)

7. **Retail Registration:** The tobacco industry has to accept responsibility for the total marketing of this product (including retail sales). We recommend that the industry be required to maintain a register of the wholesalers and retailers of their tobacco products. Entry in the register should be conditional on the wholesaler/retailer being in compliance with the law. This registration process should include a system of warnings and penalties which would include, inter alia, removal of the non compliant retailer from the register at the direction of the Chief Executive Officer of the health board. Sales of tobacco products should only be permitted through registered premises. Registration fees should be charged and the proceeds for these fees should be used to fund the additional costs associated with this initiative. The information relating to sales to each registered premises should be accessible to the health board and to the Minister in a form to be prescribed by the Minister. This would allow for intense local surveillance of tobacco sales. *(Objectives served: Objective 1. To Change Attitudes: Objective 4. To Focus on Children:)* This measure will also serve the objective in the "Building Healthier Hearts" policy (Recommendation 5.21(3))

8.**Teenage Smokers**: In a recent study in the US (University of California School of Medicine, published in Journal of the National Cancer Institute) it has been shown that teenagers who take up smoking before 18 years suffer genetic damage that the body can never repair and that forever increases the risk of lung cancer, even if they quit smoking later in life. Furthermore, the influence older teens have on younger persons' lifestyle choices is significant. Secondary school pupils, being legally permitted to buy cigarettes, ensures that smoking is validated as a life style choice for the late teens and, therefore, is a highly desirable lifestyle for younger teens. Exhortations not to smoke to younger teens can, in these circumstances, look hypocritical. Accordingly we propose that the legal age at which cigarettes can be bought should be raised to eighteen years (i.e. the legal age at which a person reaches adulthood) from the present sixteen years. The onus to establish that the customer is of the legal age should be placed entirely on the retailer. *(Objectives served: Objective 1. To Change Attitudes: Objective 4. To Focus on Children:)* This measure will also serve the objective in "Building Healthier Hearts" (Recommendation 5.21.(2))

9.**Industry Disclosure**: The tobacco industry should be required to disclose to the public all information in their possession concerning their products which affect the health of their customers. *(Objectives served: Objective. 1 To Change Attitudes: Objective 2. To Support and Empower: Objective 4. To Focus on Children;)*

10. **Fiscal Policy**: We are recommending that in line with the World Bank recommendation taxes on cigarettes should be substantially increased each year above the rate of inflation.

11. **CPI:** A supplementary Consumer Price Index which excludes tobacco products should be published by the Central Statistics Office and agreement at European Union level should be sought for the exclusion of tobacco products from all EU consumer price baskets *(Objectives served: Objective 1. To Change Attitudes: Objective 4. To Focus on Children:)* This measure will also serve an objective in "Building Healthier Hearts" policy. (Recommendation *5.22(1))*

Tier 4: Further Protection for Non smokers

Tobacco free environments reduce people's involuntary exposure to tobacco smoke. They also help the young not to start smoking and smokers who have just quit, to persevere. The Member States of the European Union have specifically identified public places as areas requiring priority action.[28]

We should further develop this area through voluntary codes and regulatory arrangements. We need the support and commitment of the social partners in this regard. We regard voluntary codes as very effective instruments for bringing about social acceptance of tobacco free environments. There is also, however, a need to consolidate this culture change through legal instruments. Accordingly, we propose the following:-

1. **Tobacco Free Workplace**: In addition to the existing controls, and building on the success of the voluntary code for the workplace, smoking should be prohibited in all enclosed work places-other than certain places of adult entertainment- while allowing employers the right to make provision so that smokers may have reasonable access to an area, not used in the normal course of work, where they may smoke without affecting non-smokers. *(Objectives served: Objective 1. To Change Attitudes: Objective 2. To support and Empower: Objective 3. To Protect:)* This measure will also serve the objective in the "Building Healthier Hearts" policy. (Recommendation *5.21(1))*

2.**Commercial Transactions**: Smoking in places where essential routine commercial transactions are conducted should also be prohibited. *(Objectives served: Objective 1. To Change Attitudes: Objective 3. To Protect: Objective 4. To Focus on Children.)* This measure will also serve the objective in the "Building Healthier Hearts" policy. (Recommendation *5.21(1))*

3.**Cinemas etc**: The ban on smoking in other places of entertainment where choice is limited should be continued and extended as appropriate. Restrictions on smoking in restaurants should be continued. *(Objectives served: Objective 3. To Protect: Objective 4*

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[28] 89Y0726(01) Resolution of the Council and the Ministers for Health of the Member States, meeting within the Council of 18 July 1989 on banning smoking in places open to the public Official journal NO. C 189 , 26/07/1989 P. 0001 - 0002

To Focus on children.) This measure will also serve the objective in the "Building Healthier Hearts" policy (Recommendation *5.21(1))*

4.**Schools**: The existing prohibitions on smoking in primary and secondary schools should be extended to all educational and training establishments. *(Objectives served: Objective 1. To Change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children:)* This measure will also serve the objective in the "Building Healthier Hearts" policy (Recommendation *5.21(1))*

5.**Pubs:** A voluntary code of practice for pubs and licensed sporting facilities should be developed. The pub is often misrepresented as being resistant to good health messages. We believe there is a demand for clean air in pubs where patrons are free to enjoy their drink without having to breath someone else's tobacco smoke. *(Objectives served: Objective. 1 To change Attitudes: Objective 3. To Protect:)*

6. **Signs**: More robust and more visible non smoking signs in non smoking areas of public places are needed and these signs should identify the responsible person. (*Objectives served: Objective. 1. To change Attitudes: Objective 3: To Protect: Objective 4. To Focus on Children.)*

7. **Food**: Smoking in any area where food is prepared or sold commercially needs to be prohibited. (*Objectives served: Objective. 1. To Change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children:)* This measure will also serve an objective in the "Building Healthier Hearts" policy (Recommendation *5.21(1))*

Tier 5: Better Compliance with the Law

We have identified poor compliance with certain laws as a particular weakness in our present arrangements. While building a more compliant culture requires a multifaceted approach we need to be conscious of the fact that laws once enacted must be complied with and persons who refuse to meet their obligations must be prosecuted. We will improve enforcement of the tobacco control laws by :

1. **Proactive Inspection Programme**: Each health board should be required to prepare a proactive programme of inspection of those premises affected by tobacco control legislation and to report on the outcome of these inspections. *(Objectives served: Objective. 1 To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children.*) This measure will also serve an objective in the "Building Healthier Hearts" policy (Recommendation *5.21(1))*

2. **Work Place**: The Health and Safety Authority should review its existing arrangements regarding safety arrangements at work and to make proposals in 2000 for the inclusion of tobacco free measures to be integrated as a standard feature of statutory workplace safety plans. (*Objectives served: Objective. 1 To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect:)*

3. **Enhanced Powers:** There are a number of deficits in existing legislation regarding enforcement which should be rectified .(*Objectives served: Objective. 1 To change*

Attitudes: Objective 3. To Protect). This measure will also serve an objective in the "Building Healthier Hearts" (Recommendation *5.21(1))*

Tier 6: Extending Ownership

People are empowered by ownership. It is important, therefore, that the mission is owned by each individual (especially young people), each family, each community and the professions engaged in social and health care. We cannot succeed in our mission if ownership is perceived to be vested solely in state institutions or if it is been seen as being driven from the top down. Without a genuine empowerment at a community and a personal level all the restrictive measures in the world will not succeed.

1. **Voluntary Community Action**: The health board should provide grant aid for tobacco free initiatives with partners in the local community. The health boards should include this programme in their service plans and report annually on progress. *(Objectives served: Objective. 1 To change Attitudes Objective 2. To Support and Empower: Objective 4. To Focus on Children*

2.**Conferences for Local Community Leaders**: A specific information programme needs to be adopted by each health board for local community leaders and implementation should commence as a priority. This programme should be included in their service plans and reported on annually. *(Objectives served: Objective 1. To Change Attitudes: Objective 2. To Support and Empower.)*

3.**An Intern Programme**: Under the National Environmental Health Action Plan each health board is being required to establish an Environmental Health Committee with other local authorities and government agencies. It is proposed that a subcommittee of the Environmental Health Committee be established to deal solely with tobacco. The composition of this committee should be comprised of both board and non board members and should reflect the commitment to youth. It should engage young people directly in a leadership role. It should also seek to vest ownership of our mission by the direct employment of "interns" - transition year secondary students and other young people in related situations. This programme should be specifically included in the health board service plans and reported on annually. *(Objectives served: Objective 1. To Change Attitudes: Objective 2. To Support and Empower: Objective 4. To Focus on Children)*

Tier 7. International Co-operation

Tobacco is a global problem shared by most modern societies and we should continue to co-operate with the World Health Organisation and with the European Commission in developing global responses to tobacco.

A**) European Union**: We recommend that Ireland promotes, at European Union level, the following initiatives:

1. **Data Collection and epidemiological studies**: There is a need for the development of an EU wide system of monitoring tobacco consumption throughout the Community

(*Objectives served: Objective.1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

2. **Children** : European wide initiatives which protect children from the commercial exploitation by the tobacco industry and also to protect them from the secondary effects of tobacco smoke should be promoted*: (Objective. 4. To Focus on Children*)

3. **Community Fund for Research and Information** (CFRI): European wide studies and pilot projects on tobacco should be funded through the CFRI. Given the shared nature of the problem there are strong possibilities for developing common European responses. (*Objectives served: Objective. 1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children.*)

4.**Classification**: Nicotine addiction needs to be classified as a dependency in all member states, thus allowing it to be tackled through the relevant Community public health programmes. (*Objectives served: Objective. 1 To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children)*

5. **Additives:** There is a need to evaluate the toxicity and health consequences arising from additives to tobacco products. Community legislation on consumer protection already provides for extensive information on additives and ingredients in a very wide range of products where they have health consequences. Paradoxically, however, there is no such provision in relation to tobacco and this oversight should be corrected. Additives which prove harmful to human health should be prohibited. (*Objectives served: Objective 2. To Support and Empower: Objective 4. To Focus on Children*)

6. **Carcinogenic Agents:** A progressive reduction in the maximum tar content of 12 mg per cigarette permitted under Council Directive (90/239/EEC) should be promoted. Similarly, a maximum level of nicotine in cigarettes should also be considered. There should be independent testing and improved tracability. (*Objectives served: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children.*)

7. **Consumer Information and Protection:** Improvements in the existing labelling laws are needed. Bigger and more visible health warnings than those in the present labelling Directive are necessary. (*Objectives served: Objective.1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

8. **Misleading Claims:** Misleading terms such as "light" or "low tar" should be prohibited. (*Objectives served: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

9. **Workplace:** We advocate the inclusion of a specific programme relating to environmental tobacco smoke in the framework of the Agreement on Social Policy in order to improve the working environment and workers' safety in particular. (*Objectives served: Objective. 1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

10. **Price:** We propose that the Commission promote harmonisation of taxes on tobacco products and develop in the interim a system of price stabilisation. Increases in the price of tobacco products in real terms (i.e. in excess of the rate of inflation) is a significant means of deterring consumption especially by children and adolescents. (*Objectives served: Objective. 1 To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*

11. **Tobacco Subsidies**: We advocate the ending of subsidies to tobacco growers by the EU in conjunction with promoting alternative replacement industries for the affected regions. (*Objectives served: Objective. 1. To change Attitudes: Objective 3. To Protect: Objective 4. To Focus on Children*)

12. **Third Countries:** Ireland does not have a significant export trade in tobacco products but we still have, in this respect, as a member of the European Union, a responsibility to the developing world. The EU Treaty provides for closer co-operation with third countries and the competent international organisations in the sphere of public health. Many countries, especially in the developing world, are only now beginning to suffer the full impact of tobacco consumption. There are a number of areas where the European Union could co-operate with third countries to reduce the impact on public health of tobacco consumption. A code of practice on the marketing of tobacco products in developing countries, especially aimed at protecting vulnerable groups, should be developed. We will also support the policy practised by the World Bank of refusing aid to tobacco related projects in the context of its own development aid policies. (*Objectives served: Objective.1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

13. **Annual Report:** We should support the Commission in presenting a report each year on the progress achieved in relation to public health protection from the harmful effects of tobacco consumption. (*Objectives served: Objective. 1. To change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children*)

B **<u>World Health Organisation</u>:**

1. **Framework Convention on Tobacco Control (FCTC):** We should promote the development of an international and legally binding Framework Convention on Tobacco Control (FCTC) together with subsidiary Protocols on specific issues: e.g. Smuggling, Internet advertising, Price harmonisation, International co-operation etc. (*Objectives served: Objective. 1. To Change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children.*)

2. **The Lewin Project**:[29] We are participating in the Lewin Project which uses information technology to gather and collate data on tobacco use and related matters in a world wide standardised format. This project provides statistics about the burden of smoking related effects and shows the number of lives and health care costs that can be saved by various interventions. (*Objectives served: Objective 1. To Change Attitudes: Objective 2. To Support and Empower:*)

3. **Global Partnerships**: We support the extension of global ownership by WHO of the Tobacco Free Initiative to other international bodies e.g. World Bank, ILO, FAO, UNICEF and UN. In particular we support the commitment of the World Bank to exclude tobacco industries from their support programmes for developing countries and on their initiative in preparing a comprehensive evaluation of the economics of tobacco. The study concluded that tobacco is "bad economics" and that countries dependant on the industry should be assisted to diversify to other products. (*Objectives served: Objective. 1 To*

[29]http://www.who.dk/adt/ecos/whoweb.asp

Change Attitudes: Objective 2. To Support and Empower: Objective 3. To Protect: Objective 4. To Focus on Children.)

Managing the Action Plan:

It is essential if this plan is to succeed that we have effective management systems in place. This management process has to ensure that the momentum for action is sustained over a period of time, that it provides drive and commitment and that it has independent systems for monitoring progress against the stated objectives and for identifying adjustments to be made to strategies and plans as appropriate.

Accordingly we propose the following arrangements:-

1. **Health Promotion Unit:** The HPU will continue to integrate and develop the Tobacco Free Society message into its health promotion strategies and will offer leadership in key areas of communication and education.

2. **Tobacco Free Council:** The establishment of a Tobacco Free Council comprising of key individuals with expertise in the disciplines and skills necessary to promote a tobacco free society (leadership in public health; leadership in the entertainment's and communications industries; leadership in sporting organisations, legal and law enforcement experts, consumer and patient representatives). The role of the council will be to advise and assist the various agencies involved in promoting a tobacco free society.

3. **Office of Tobacco Control**: A national executive office will be established to co-ordinate the implementation of the programme. It will be staffed on a full time basis by staff from both the health boards and the Department of Health and Children. Secondments from other government agencies will also be considered.

4. **Health Boards' Service Plans**: Each health board will be required to designate a named senior officer as the regional tobacco counterpart and will include the Tobacco Free Society initiative in its service plans as an identifiable strategic objective. Each health board has received a small budget in 1999 to facilitate the development of this initiative.

5. **Budgets and Source of Finance:** We will continue to accelerate the level of funding to this public health initiative until each programme is fully operational. (We provided initial funds to the health boards and other bodies in 1999.) Our current estimate is that this will cost about £20millions in a full standard year (a standard year is defined as a year when all programmes are fully operational) (c.f. Appendix E). Funding will be kept under review and adjusted in the light of experience. These additional costs will be met from the tobacco industry on the "polluter pays principle." The introduction of a fifty pence additional tax on a package of cigarettes in the Budget of December 1999 will ensure, inter alia, an adequate budget base for this initiative.

6. **Monitoring, Review and Performance Indicators:** Each health board will include a separate section in its annual report on the measures they are taking to promote a tobacco free society and an integrated system for independent monitoring of our progress against the stated strategic targets will be developed. The most critical indicator of success will be a downturn in the prevalence of smoking among children and young people under 25

years. Failure to achieve the desired downturn should automatically result in the introduction of further measures.

Table7: Overview of the Division of Functions of Principal Agencies				
Organisation	**Primary Aim**	**Status**	**Source of Funding**	**Leadership in Action Tiers**
1. Health Promotion Unit	To determine policy and strategies in health promotion	Policy Unit	Exchequer and Tobacco and Health Taxes	Tier 1 and Tier 2
2. Community Health Unit	To determine policy and strategies relating to tobacco control	Policy Unit	Exchequer and Tobacco and Health Taxes	Tier 3 and 4
3. Office of Tobacco Control	To co-ordinate and monitor the implementation of the policy- and To act as a national competent authority in certain matters	Administrative Unit	Tobacco and Health Taxes	Tier 1 to Tier 7
4. **Tobacco Free Council**	To consult and engage social leadership on the Tobacco Free Society mission	Statutory Council under Sec 98 of the Health Act,1947	Office of Tobacco Control	Tier 5 and 6
5. Tobacco Resource Centre	To promote and develop academic excellence in tobacco and health studies: To conduct research	Incorporated Private academic institute with health services as anchor clients.	Office of Tobacco Control	Tier 1 and 6
6. Health Boards/ERHA a)Health Promotion c) Clinical services b)Environmental Health services	To deliver health promotion services To treat tobacco addiction and other tobacco related diseases To extend ownership and to enforce tobacco control legislation	Statutory Bodies	Department of Health and Children	Tier 1 to 3 Tier 2 Tier 5 and 6

The Prospects for Success

In the US (Florida) the multisectoral strategy has been particularly successful.. For example one school based programme "Project TNT" is reported to have reduced initiation of cigarette use by about 26 percent. It reduced weekly or regular use of cigarettes by about 60 percent.

There is a growing world-wide awareness at professional and political level of the public health implications of tobacco usage and a corresponding willingness to act. e.g.

- There is a new consensus at European level which allows for the introduction of an EU wide ban on all advertising of tobacco products. This approach is also adopted in Australia, New Zealand, Canada, and many other countries.

- In America the tobacco industry is facing a large number of court actions and are being brought to account for the harm their products caused and for their irresponsible approach to the marketing of their product. In particular the Attorneys General of most States initiated actions on behalf of their State. These actions have, with some exceptions, been settled in an aggregated agreement known as the Multi State Settlement. It constitutes de facto acknowledgements by the industry of serious wrong doing and includes the payment of substantial restitution. More importantly it requires a higher ethical standard of marketing from the US industry; a fact which should have global benefits. The US federal Government has now commenced further litigation on its own behalf.

- In Ireland the Oireachtas Joint Committee on Health and Children has published a preliminary report on their enquiries into tobacco and health and have requested powers to compel witnesses and papers in order that they might conclude their investigation. They recommended a national anti tobacco strategy be adopted and also recommended that the State initiate legal action against the industry for the harm caused by tobacco products.

- In Britain a House of Commons Select Committee has begun an investigation into the tobacco industry and the outcome of that enquiry will determine whether the UK Government litigates against the industry or not.

- The World Health Organisation (WHO) have now identified smoking as their number two priority next to malaria and they are engaged in developing a number of initiatives. The WHO has also initiated a separate investigation into the allegation that the tobacco industry obstructed its public health programmes over a number of years.

Non Governmental Organisations (NGOs):

Ash Ireland, The Irish Cancer Society, Irish Heart Foundation, Irish Medical Organisation Environmental Health Officers Association and the Irish Nurses Organisation as well as numerous other bodies and professional organisations have provided invaluable service in the struggle against tobacco. They have maintained a constant vigil over the issue for many years and have continuously alerted us to the dangers posed by this product. We

acknowledge the importance of the NGO's in this matter and the uniqueness of their contribution.

All major sporting bodies in Ireland as a matter of policy do not accept sponsorship from tobacco companies reflecting a proactive commitment from them to this agenda. This is very positive social leadership and it is our intention to invite these organisations to be represented on the Tobacco Free Council.

The complementary roles of voluntary and statutory agencies should be synergistic. There is a need to protect the independence and autonomy of action of the NGO's while also exploiting their capability and commitment. We hope they will participate in the "Tobacco Free Council" and support the other elements of this initiative in promoting a tobacco free society.

Summary

Our mission for the future is to promote a Tobacco Free Society. To further this mission we have identified four key strategic objectives, viz. to change attitudes towards smoking, to support and empower people, to protect people against passive smoking and to focus on protection for children.

To achieve these objectives a seven tier action plan is proposed. This plan advocates better communications and education. It proposes more help for smokers to quit and advocates tougher regulation of the tobacco industry to eliminate inducements to children to experiment with tobacco. Smokers should be fully informed by the tobacco industry of the risks they are undertaking and there should be further protection against the harmful effects of passive smoking. The plan also advocates improved compliance with existing laws. To be successful full community involvement both in Ireland and abroad is required. An adequately resourced management system is necessary to ensure success and the cost of this initiative should be internalised to the tobacco sector. Progress would have to be independently monitored.

Membership

Mr. Tom Mooney,	Assistant Secretary, Community Health Division, Department of Health and Children (Chairman)
Mr. Noel Usher	Department of Health and Children
Dr. Eibhlin Connolly,	Deputy Chief Medical Officer, Department of Health and Children.
Ms, Angela O'Flynn,	Legal Adviser, Department of Health and Children
Mr. Chris Fitzgerald,	Department of Health and Children.
Mr..Donal O Shea	Chief Executive Officer, Eastern Regional Health Authority.
Dr. Pat Doorly	Director of Public Health, Midland Health Board.
Mr. Tom Power,	Department of Health and Children.
Mr. Gearoid O Duffaigh,	Department of Health and Children,(Secretary)

Acknowledgements

The Group wishes to record its appreciation for the excellent support it received from Mr. Gearoid O'Dufaigh who, in addition to his many other duties, acted with courtesy and efficiency as Secretary to the group.

Mr. Tom Mooney, (Chairman) _____

Mr. Noel Usher _____

Dr. Eibhlin Connolly, _____

Ms. Angela O'Flynn, _____

Mr. Chris Fitzgerald, _____

Mr.Donal O Shea _____

Dr. Pat Doorly _____

Mr. Tom Power, _____

Mr. Gearoid O Duffaigh, (Secretary) _____

Appendix A: Additives to Tobacco Products[30]

ADDITIVE	SYNONYM OR BIOLOGICAL ORIGIN	CIGARETTE /RYO	CIGAR	PIPE TOBACCO
Acacia gum' Gum arabic	*Acacia senegai-*	1.0	1.0	*5.0*
Acetall Acetaidehyde diethyl acew Diethyl acetal		0.001	0.001	0.001
Acctaldehydel EdLinal Acetic aidehyde		*0.15*	*0.15*	0.5
Acctanisoic'para-Methoxyacetophenone para-Acetyl anisole		*0.15*	*0.15*	*0.5*
Acetic acid and/or its Ethanoic acid potassium and sodium salts'		2.0	2.0	2.0
Acetoin-' 3-Hydroxybutanone		*0.15*	*0.15*	*0.5*
Acetyl methyl carbinol Acetophenonel Methyl phenyl ketone Acetyl benzene		*0.15*	*0.15*	*0.5*
6-AcetoxySpiranol acetate dihvdrotheaspirane6-Hydroxy dihydrotheaspirane acetate		0.001	-	0.001
Acetyl hyl cellulose'Acerylated methy cellulose		15.0	*5.0*	5.0

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30 ADDITIVES TO TOBACCO PRODUCTS

The list includes additives to tobacco products (specifically cigarettes. cigarette papers', roll-your-own (RYO) tobaccos. cigars and pipe tobacco) approved for use on products marketed in the United Kingdom that appeared in Appendix VII of the Second Report of the Independent Scientific Committee on Smoking and Health' and in Appendix I of the Committee's Fourth Report, together with any additional but previously unpublished additives. Formerly there were three lists, comprising the following:

List I Additives with relatively high inclusion limits, expressed in terms of percentages in the final product, each entry being at or above 0. I %. An aggregate limit of 15 % for cigarettes, RYO or cigars, and 30% for pipe tobacco applied w additives in this list.

List 2 Additives with lower limits, expressed in terms of ;tg.g-I (= parts per million) in the final product, most entries being below 1.000 ug. g" (0. I%). A separate aggregate limit of 0. *15* % for cigarettes, RYO or cigars, and 0.5 % for pipe tobacco applied to additives in this list.

List 3 Solvents which may be used in the application of additives.

For convenience, these have now been merged into a single alphabetical list. with inclusion limits expressed as percentages throughout. To maintain essentially the same aggregate limits described above, all former list I and 2 additives are denoted in the alphabetical list.

The term *quantum satis* is used in the case of solvents which may be used in sufficient quantities for the application of additives, leaving negligible residues.

2-Aceryl pyrazine Methyl pyrazinyt ketone		0.001	-		0.001
2-Acetyl pyridine' Methvi-2-pyridvi ketone-		0.0001			
3-Acervl pyridine' Methvi-3-pyridyl ketone		0.001	0.001		
Aga resinoid'	*Pkvcenol scene-*	-			*0.5*
Allspice extract, oleoresin	*Pimenia officinalis*	0.15	*0.15*		0.5
and oil-'	*Pimenta dioica*				
Allspice leaf oil'	*Pimenta officinaiis* *Pimej,ua dioica*	*0.15*	*0.15*		*0.5*
Allura Red-'	FD & C Red 40 C.I. No. 16035	-	0.1		-
Allyi hex=oate	Allyl caproate	0.002	0.002		0.003
Almond oil'	*Amygdalus communis* *Pmnus anaygdalus*	*0.15*	*0.15*		*0.5*
Aluminium acetate'		2.0	-	-	
Aluniinium carbonate'		2.0			
Aluminium ciu-ate'		2.0		-	
Aluminium lacrael		2.0		-	
Aluminium oxide'		2.0		-	-
Aluminium phosphate'		2.0		-	-
Aluniinium tartrate'		2.0		-	-
Aluminium trihydroxide'					
Aluminium hydroxide		2.0		-	-
Aluminosilicates'					
Natural or synthetic		5.0		-	-
Containing cations of Al. Ca, Fe, Mg. K and Na					
Amber oil	*Pinus succinifera*	0.15		0.15	0.5
AmbersEris extract'	*Phvseter macrocepnalus*	0.15		*0.15*	*0.5*
Ambreae seed	*Hibiscus abelnwschus* oil and absolute'	*0.15*		*0.15*	*0.5*
Ambrox'		0.001		-	0.001
Ammonium acetate'		2.0		-	-
Ammonium carbonate'		4.0		4.0	*5.0*
Ammonium chloride'		2.0		-	-
Ammonium citrate'		2.0		-	-
Ammonium dihydrogen Anunonium phosphate phosphate' monobasic		2.0		-	-
Ammonium hydroxide'		2.0		-	-
Ammonium lactate'		2.0		-	-
Ammonium sulphate'		4.0		4.0	*5.0*
Anunonium tanratc1		2.0		-	
'Amyl -Acetate Peniyi acetate		*0.15*		*0.15*	*0.5*
Amyl alcohol-I-Penmnol Pentan-l-ol		*0.15*		*0.15*	*0.5*
'Amyt benzoatel	Pentyi benzoate	0.15		*0.15*	*0.5*
-Amyl butyra&	Pentyl butyrate	*0.15*		0.15	*0.5*
alpha-Amyl2-Benzylidene hepmnal cinnamaidehyde'alpha- Pentyl		*0 .15*		*0.15*	*0.5*

cinnamaidehyde				
'Amyl formate'Pentyl fonmic		0.15	*0.15*	*0.5*
-Amyl hexanoate-'Amyl caproate		*0.15*	0.15	*0.5*
Pentyl hexmoate				
-Amyl isovaleratc-'PenEyl isovalerate		*0.15*	*0.15*	*0.5*
Pentyl-3-methvl				
butanoace				
-Amyl ocianoatePentyl ocianoate		*0.15*	*0.15*	*0.5*
'Amyt phenylacetatePentvi phenyiacetate		*0.15*	*0.15*	*0.5*
'Amyl salicylate	Pentyl salicvlate	*0.15*	*0.15*	*0.5*
-Amyl valerate	Pentyl valeme	0.15	*0.15*	0.5
tr=s-Anethoic,	I -Metboxv-4-	*0.15*	0.1	0.5
propenylbenzenc				
para-(I-Propenyl)-anisole				
Angeiica root				
Angelica spp		0(1.1	0.1	
extract and oil'				
Anise and oil'*Pimpinella anisum*		0.1	0.1	0.1
Anisole' Methyl phcnyl cther		0.001	0.001	0.001
Para-Anisvi acetatepara-Methoxybenzvl		*0.15*	*0.15*	*0.5*
acetate				
para-Anisyi alcohol'				
para-Methoxvbenzvi		0.0001	-	0.0001
alcohol				
Arachis oil'				
Arachis hypogaea		*0.5*	*0.5*	4.0
Groundnut oil				
Ascorbic acid-				
Vitainin C		0.001	-	0.001
Azorubin-'				
Camaisine		0.1	-	
Balsam oil-'				
Myroiavion pereirae		*0.15*	*0.15*	*0.5*
Peru balsain				
Bay leaf, oil				
Pimema acns		0.15	0.15	*0.5*
and sweet oil'				
Pimenta racemosaLauris nobius				
Beech tar extract-'*Fagus spp*		0.0001	-	0.001
Bentonite'		*5.0*	*5.0*	5.0
Benzaidehyde'		*0.15*	0.15	*0.5*
Benzoic acid and/or its				
Benzene carboxylic		*0.5*	*0.5*	1.0
potassium and sodium salts'				
acid				
Benzoin-'				
2-Hydroxv-2-		0.003	0.003	0.01
phenylacetophenone				
Benzoin resinoid'				
Styr= benzoin		0.1	0.1	0.1
Styrax paralieloneurus				
Styrax tonkinensis				
(Gum benzoin)				
Benzyl acetate		*0.15*	*0.15*	*0.5*
Benzyl alcohol'	Phenyl carbinol	*0.15*	*0.15*	*0.5*
Benzyi benzoate	Benzyi benzene	*0.15*	*0.15*	*0.5*
carboxylate				
Benzyl butyrate'	Benzyl butanoace	*0.15*	*0.15*	*0.5*
Benzyi cinnamte-	Benzvl bem-	*0.15*	*0.15*	0.5
phenylacrylate				
Benzyi fonnate		0.15	*0.15*	*0.5*
Benzyi isobutyratel		*0.15*	*0.15*	*0.5*
Benzyi phenylacetatel		*0.15*	*0.15*	*0.5*
Benzyi propionaee-'	Benzyl propanoate	0.15	0.15	*0.5*
Bergamot oil'	*Citrus aurantium*	0.15	0.15	*0.5*

Citrus auraniiutn var bergamia				
Boric acid and/or its potmsium or sodium salts'		0.1	0.1	0.1
Bomyl acetate-' Bom-2-yi acetate (IR, 2S]	Bomeoi acetate	*0.15*	*0.15*	*).5*
"Brilliant Black BN'	C.I. No 28440	0.4	-	-
Brilliant Blue FCFI	C.I. No 42090	0.003	-	-
bem-Bromostyrene	I-Bromo-2-phenylethylene	*0.15*	*0.15*	*0.5*
Butyl acetate	Butyl ethanoate	*0.15*	*0.15*	0.5
Butyl burvraee'	Butyl butanoate	*0.15*	*0.15*	*0.5*
1,3-Butylene glycol'	Bumne-1, 3-diol	3.0	3.0	6.0
Butyl phenyl acetate	Butyi-alpha-toluate	0.15	*0.15*	*0.5*
-,ara-tert Butyl pyridine				
4-1 1, I -Dimethyl ethyl] pyridine		0.0001	-	0.0001
Butyric acid'				
Butanoic acid		*0.15*	0.15	*0.5*
Cadinene single or Mixed isomcrs;		*0.15*	*0.15*	*0.5*
Cajeput oil'				
Melateuca leucadendron		*0.15*	*0.15*	*0.5*
Calcium acceatel		2.0	-	-
Calcium carbonate,		*5.0*	5.0	*5.0*
Calcium chloride'		*5.0*	*5.0*	5.0
Calcium citratel		2.0	-	-
Calcium hydroxide'		2.0	-	-
Calcium lactate'		2.0	-	-
Calcium phosphate' (mono, di or tri-)		2.0	-	-
Calcium tartrate'		1.0	-	-
Camphene'				
2,2-Dimethyl-3-methylene norbomane		–	0.001	
d-Camphoe				
Boman-2-one		*0.15*	0.15	*0.5*
Camphor oil'				
Cinamomum camphora safrole free)		*0.15*	*0.15*	*0.5*
Caramel' obtained wholly by heating a sugar solution with or without a smaii amount of acid, alkali or alkali carbonate		3.0	3.0	4.0
Caraway oil				
Carum carve		*0.15*	*0.15*	*0.5*
Carboxy methvi cellulose and its sodium salt'		5.0	*5.0*	5.0
Cardamon oleoresin,				
Elettaria cardamomum extract, oil, seed oil, and powder'		*0.15*	*0.15*	*0.5*
Carob bean extract'				
Ceratonia siliqua		*0.5*	*0.5*	1.0
Carrot seed oil				
Daucus carota		0.15	*0.15*	*0.5*
Carvacroll				

2-Methyl-5-isopropylphenol	0.001	-	0.001
2-Hydroxy-para-cymene			
4-Carvomenthencil			
Terpinen-4-ol	–	0.001	
Carvone-			
para-Mentha-6. 8-dien-2-one	*0.15*	*0.15*	0.5
beta-Caryophyllene	*0.150.15*	*0.5*	
Caryaphyllcne alcohol'	0.001-	0.001	
Caryophyliene oxide'			
Caryophyliene epoxide	0.002	-	0.002
Cascarilla oil, bark			
Croton spp	*0.15*0.15	*0.5*	
oil and extract'			
Cascara saerada			
Cassia buds, bark			
Cinnamomum	0.3	0.3	
oil and extract'			
aromaticum			
Cassia extract'			
Cassia fistula	*0.5*	-	*0.5*
Castor oil-'			
Ricinus contmullis	-	0.01	-
Castorcum extract			
Castor spp	0.15*0.15*	*0.5*	
and absolute'			
Cedar leaf oil'			
Thuja occidentalis	0.150.15	*0.5*	
Cedarwood oil-'			
Juniperus virginiana	*0.15*	0.15	*0.5*
Cedrol'			
Cedarwood camphor	0.001-	0.001	
Cedarwood oil alcohol			
Cedryl acetate	0.001-	0.001	
Celery seed act. solid,			
Apium graveolens	0.0*0.1*	0.1	
oil, and oleoresin'			
Cellulose acetate'	2.0*5.0*	2.0	
(45-70% hydroxyl groups acetylated)			
Cellulose acetate propionate'	0.2	-	
Cellulose-alpha-	*5.0*	-	-
alkanoylab=oates'			
Cellulose fibre'			
Softwood or hardwood pulp	5.0	*5.0*	6.0
Chamomile flower oil			
Chantacmelum nobile	*0.15*	*0.15*	*0.5*
and absoiut&			
Chlorophyll'	2.0	-	-
/Chmamaldchydel			
3-Phenyl-2-propen-l-al	*0.15*	*0.15*	0.5
Ci=amic acid' 3-Phenylpropenoic acid	*0.15*	*0.15*	*0.5*
Cinnamon leaf. oil, *Cinnamomum*	0.1	0.1	0.1
Cark oil and extract' *zeykindicum*			

Cinnarnyl acetate-	3-Phenylallyl acetate	0.15	*0.15*	*0.5*
Cinnamyl alcohol-'	3-Phenyl-2-propen-l-ol	0.15	*0.15*	0.5
cinnainyl butvratel		*0.15*	0.15	*0.5*
Cinnamyl cinnaniae-'	3-Phenviallvi	0.15	0.15	0.5
cinnamate				
Cinnamyi isabutvrate-		*0.15*	*0.15*	*0.5*
Cinnamyl isovaleratel				
Cinnwnvi-3-methyl	0.15	*0.15*	*0.5*	
bu=one				
Citral-'	3,7-DimeEhyl-2. 6-	*0.15*	*0.15*	*0.5*
octadienal				
Citric acid and its		4.0	4.0	4.0
tripotusium and				
tri-sodium salts'				
Citroncila oil'	*Cymbopogon nardus*	*0.15*	*0.15*	*0.5*
Citroneliall	3,7-Diwethyl-6-menal	*0.15*	*0.15*	*0.5*
dl-Citronelloll	3,7-Dimethvi-6-ocien-l-	*0.15*	0.15	*0.5*
ot				
Citronellyl acetate	3,7-Dimethyl-6-octen- I -	*0.15*	*0.15*	*0.5*
yl acetate				
Citronellyl butyrate	3,7-Dimethyl-6-octen-l-	0.15	*0.15*	*0.5*
yi butyrate				
CitroneHyl formate'	3,7-DimeEhvi-6-octen-l-	*0.15*	0.15	*0.5*
yi formate				
Citronellyl isabuqmte				
3,7-Dimethyl-6-ocien- I -		*0.15*	*0.15*	*0.5*
yi isobutyrate				
Citmnc1lyl phenylacetate'				
3,7-Dimcthyl-6-mten-l-		*0.15*	*0.15*	*0.5*
yl phenyt acetate				
Citmnellyl propionate				
3,7-Dimethyl-6-octen-l-		*0.15*	*0.15*	*0.5*
yi propionate				
civet absolute'				
Vivera civerta		0.0001	-	0.0001
Vivera zibetha				
Clary sage oil and absolute				
Saivia sclarea		*0.15*	*0.15*	*0.5*
Clove stem oil, leaf oil.				
Eugenia caryophylia-'a		0.3	0.3	0.3
bud oil and extract'				
Cocoa, cocoa shcils and				
7heobroma cacao		*5.0*	*5.0*	*5.0*
extract, cocoa				
distillate and butter'				
Coffee extract,	*Coffea* spp	1.0	1.0	4.0
concentrate and powder'				
Cognac oil, white and green-'	Wine yeast oil	*0.15*	0.15	*0.5*
Coriander extract	*Coriandrum sativum*	0.1	0.1	0.1
and oil'				
Coumarin-				
1,2-Benzopyrone		0.06	0.06	0.1
Cubeb oil'	*Piper cubeba*	*0.15*	*0.15*	*0.5*
Cumin, cumin seed oil	*Cuminum cyminum*	0.1	0.1	0.1
and absolute'				
Cuminaldchyde	para-Lsopropyl	0.15	*0.15*	*0.5*
bcnzaidehyde				
Cyclamen aidehvdc-'	alpha-Methyl-para-	0.0001	0.0001	0.0001
isopropyl-phenyl				
propionaldchyde				
3-para-Cumcnvi-2-				
methyl propionaldehyde				

para-Cymenel	Cymol	-	-	0.001
Cypress oil'	*Cupres= sempervirens*	0.001	-	0.001
var *srncra*				
beta-Damascenone		0.003	-	0.003
bcm-Damascone-		0.001	-	0.001
Davana oil'	*Arteinisia pallens*	0.001	-	0.001
delta-Decalacwne	Decanolide	0.002	0.002	0.004
De-5-olidc				
ganum-Decalactonc-'				
De-4-olidc		0.001	0.001	0.002
Decanal'	Aldehvde C-10	*0.15*	*0.15*	*0.5*
Capraldchyde				
Decanoic acid'	Capric acid	0.001	-	0.(01
',Deeriongue and extract,				
Liatris adoratissima		0.15	*0.15*	0.5
Dextrin'	Starch gum	4.0	4.0	4.0
Diaceryll	Biacetvi	0.0001	-	0.001
Dianunonium hvdrogen				
Ammonium phosphate,		4.0	4.0	5.0
phosphate' di basic				
Dianonium phosphate				
Diatomaceous earth'	Kieseiguhr	5.0	5.0	5.0
Dibenzyl ethee		*0.15*	*0.15*	*0.5*
alpha-2,3-Diethylpyrazine-'		0.001	-	0.001
2,3-Diethyl-5-		0.0001	-	0.0001
methyl pyrazine-				
DieEhyl sebacate-'		*0.15*	0.15	*0.5*
Dihydroactinidiolide		-	-	0.001
Dihydrocarvyl acetate'			-	-
0.001				
3,4-Dihydrocoumarin'				
1,2-Benzodihvdropyrone		*0.15*	*0.15*	*0.5*
Dill seed oil and extract'				
Anethum graveolens	*0.15*	*0.15*	*0.5*	
para-Dimethoxybenzene				
Dimethylhydroquinone		*0.15*	*0.15*	*0.5*
1,4-DimeEboxybenzene				
alpha-alpha-	Benzyl dimethyl	*0.15*	*0.15*	*0.5*
Dimethylphenethyl				
carbinyl acetate				
acetate				
1,1-Dimethyl-2-				
phenylethvi acetate				
alpha-alpha-				
Benzyl dimethyl		*0.15*	*0.15*	*0.5*
Dimettiyiphenethyl				
carbinyl butymte				
butyrate				
I,I-Dimethyl-2-				
phenylethyl butyrate				
2,6-Dimetboxyphenoll				
Syringol		0.001	0.001	0.001
3,4-Dimethyl-1,2-	3,4-Dimethyl	0.001	-	0.001
cyclopentadione	cyclopentenolone			
para-alpha-Dimethyl	Methyl-para-tolyl	0.001	-	0.001
benzyl alcohol-'	carbinol			
2,5-Dimethyl-	Furaneoi	0.001	-	0.001

dihydrofuranolone-'	4-Hydroxy-2,5-dimethvi-3-[2HI furanone			
3,4-Dimethvi phenol-'				
1-Hydroxy-3,4-dimethvl benzene		-	-	0.001
I,I-Dimcthyl-2-phenvlethvi isobueyrate			0.15	*0.15* *0.5*
2,5-Dimethyl pyrazine-(.001			0.001	
2,6-Dimethyl pyrazinc-0.001			0.001	
3,5-Dimcthyl pyridine' 0.0001			0.0001	
pam-alpha-Dimethyl styrene-'	I-Methyl-4-isopropcnylbenzene para-isopropenyl toluene	-		0.001
Diphenyl cthee	Diph=yl oxide	0.001	0.001	0.001
Dipotwsium succinate-			2.0	-
delta-Dodecalactone-	Dodecan-5-olide	0.004	0.004	0.008
gamma-Dodecalactone 0.001		Dodecan-4-olide	0.001	0.001
beta-Elemene-		*0.15*	*0.15*	*0.5*
beta-Elemol'		*0.15*	*0.15*	*0.5*
Erythrosine'	FD & C Red 3 *C.I.* No. 45430	0.04	-	-
Estmgole-'	4-Allylanisole	*0.15*	*0.15*	*0.5*
Ethanol			*Quantum satis*	
Ethvi acetate'	Acetic ether	*0.15*	*0.15*	*0.5*
Ethyl acrylatel	Ethyl propenoate	*0.15*	0.15	*0.5*
Ethyl benzoatc-' benzcnecarboxviate	Ethyl	*0.15*	*0.15*	*0.5*
Ethyl butyratel	Ethyl butanoaee	0.15	*0.15*	0.5
Ethyl cellulose'		1.0	*5.0*	1.0
Ethyl cianamate;	Ethyl phenviacrviate	*0.15*	*0.15*	*0.5*
Ethyl decanoate-	Ethyl caprate	*0.15*	*0.15*	0.5
2-Ethyl-3.5-dimethyi pyrazine-	3-Ethyl-2,6-dimeEhyl pyrazine	0.001	-	0.001
3-Ethyl-2.5-dimeehyl pyrazinel		0.001		0.001
Ethvi formate-		*0.15*	*0.15*	*0.5*
4-Ethyi guaiacol'				
4-Ediyl-2-methoxyphenol		0.15	*0.15*	*0.5*
Ethyl heptanoace'	Ethyl ocnanthate	*0.15*	*0.15*	*0.5*
Ethyl hexanoaee-	Ethyl caproate	*0.15*	*0.15*	*0.5*
Ethyl hydroxv ethyl cellulose'			5.0	
3-Ethyi-2-hydroxy-2-Ethyl cyclopentenolone cyclopentene-l-one		*0.005*	-	*0.005*
Ethyl isovalerate	Ethyl isovalerianate	0.001	-	0.001
Ethyl lactate-'	Ethyl alpha-hydroxypropionate	0.007	0.007	0.007
Ethyl laurate-	Ethyl dodecanoatc	*0.15*	*0.15*	*0.5*
Ethyl maltoll	2-Ethyl-3-hydroxy-4H-pyran4-one	0.0001	-	0.001
Ethyl-2-methyi butyrate: Ethyl-2-methyl butanoate		0.001	0.001	0.001
3-Ethyl-2-methylpyrazine				

2-Methyl-3-ethyl pyranne		0.001	-	0.001
Ethyl myristat&	Ethyl tetradecanoate	*0.15*	0.15	*0.5*
Ethyl nonanoate	Ethyl pelargonate	*0.15*	*0.15*	*0.5*
Ethyl octanuatc1	Ethyl caprylate	*0.15*	*0.15*	*0.5*
Ethyl palmitatc-'	Ethyl hexadecanoate	*0.15*	*0.15*	*0.5*
para-Ethyl phenol-'	4-Hydroxy ethylbenzene	0.001	-	0.001
Ethyl phenyl acetate:	alpha-Toluic acid. ethyl ester	*0.15*	*0.15*	*0.5*
Ethyl propionatc'	Ethyl propanoate	0.15	0.15	0.5
3-Ethyl pyridine'		0.001	-	0.001
Ethyl salicylate'	Ethyl-2-hydroxvbenzoate	*0.15*	*0.15*	*0.5*
Ethyl-10-undecenoate				
Undecenoic acid, eehvl ester (to-)		0.15	0.15	0.5
Ethyl undec-10-enoate				
Ethyl valerate-	Ethyl pentanoate	*0.15*	0.15	*0.5*

EEhvi vanilliti benzaidehyde	3-Ethoxy-4-hydroxy-t-	0.15	0.15	0.5
Eucalyptol-' 1,8-Epoxy-para-a=Lhane	Cineole	-	-	0.001
Eucalypnis oil and absolute'	*Eucalyptus globulus*	*0.15*	*0.15*	*0.5*
Eugcnol'		*0.15*	*0.15*	*0.5*
Eugenyl methyl ethee	4-Allyl veratrole	0.0001	-	0.0001
Famesol'		*0.15*	*0.15*	*-0.5*
Fennel and sweet oil'	*Foeniculum vulgare*	*0.15*	0.15	*0.5*
Fenugrcek extract. resin and absolute'	*Ttigonella foenum-graecum*	0.1	0.1	0.1
"Flouve extrace	*Anthoxanthum odoratum*	*0.15*	*0.5*	
Formic acid'	Methanoic acid	*0.15*	*0.15*	*0.5*
d-Fructose'	to.o	10.0	15.0	
Fruits, fresh, dried extracts and esters thereof - apple, apricot. banana. blackberry, blackcurrant, cherry, date. fig, grape, peach, pear. pineapple, plum, prune, raisin, raspberry, strawberry.'		4.0	4.0	4.0
2-Furan meame thiolformate'				
Furfuryl thiolformate -		-	0.001	
Furfurail	Furftiraidehyde	*0.15*	0.15	*0.5*
FurfurAl alcohoi2	Furfuryl alcohol	0.01	-	0.01
Furfuryl methyl sulphide 0.001			-	-
Gelbholz extract-' C.I. No 75240175660	*Morus rincturia*	-	0.1	-
Gentian root extract-'	*Gentiana lutea*	*0.15*	*0.15*	*0.5*
Geraniol-' octadien- I -ol	trans-3.7-Dimethyl-2,6-	*0.15*	*0.15*	*0.5*
Geranium rose oil' Geranium oil	*Pelargonium graveolens*	*0.15*	*0.15*	0.5
Geranyl acemte-	Geranyl ethanoatc	*0.15*	*0.15*	*0.5*
Geranyl acceone: undccadien-2-one	6,10-Dimethyl-5,9-	0.001	-	0.001
Geranyl butymtel	Geraniol bu=one	*0.15*	*0.15*	*0.5*
Geranyi formatc'	Geranyt methanoate	*0.15*	*0.15*	*0.5*
Geranyl isobutyratel	Germuol isobutanone	*0.15*	*0.15*	*0.5*
Geranyl phenylacetate	Geranyt alpha-toluate	*0.15*	*0.15*	*0.5*
Geranyl propionatc-'		*0.15*	*0.15*	*0.5*
Ginger oiF	*Zingiber officinale*	*0.15*	*0.15*	*0.5*
d-Glucose'		10.0	10.0	*15.0*
Glycerol'	Glycerine	10.0	10.0	*15.0*
Glycerol-1,2-diacetatc-' Diacetin		0.15	*0.15*	*0.5*
Glvccryl triarctate'	Triacetin	3.0	3.0	6.0
Glyoxai'		1.0	1.0	*1.5*
Tobs".o sheet or paper - no free mlidue)				
Guaiac gum extrace	*G4aiacum* spp	-	-	0.001
Guaiac wood oil'	*Gitaiacum spp*	*0.15*	*0.15*	*0.5*
Guaiacol'	2-Methoxyphenoi	*0.15*	*0.15*	0.5
Guaioi acetate' Guaiyl acetwe	Guaic acetate	*0.15*	*0.15*	*0.5*
Guar gum'	*Qanwpsis ietragonoloba Caamopsis psoraloides*	2.0	2.0	2.0
Gum tragacanth'	*Astragalus gumnufer*	1.0	1.0	1.0
"Hay' *Hierochlea alpina* Foin extract	*Lolium perene*	*0.15*	*0.15*	0.5

2,4-Heptadienal-'		0.001	-	0.001
gamma-Heptalactone'				
Heptan-4-olide		0.15	*0.15*	0.5
Heptaaoic acid'	OcnanEhic arid	0.002	-	0.002
2-Heptanone	Methyl mnyl ketone	0.003	0.003	0.003
4-Heptenal-'	n-Propylidene butyraidehyde	0.0001	-	0.0001
omega-6-Hexadecenlactone'	Ambrettolide	0.0001	-	0.0001
gamma-Hexalactone	Hexan-4-olide	0.001	-	0.003
3,4-Hexanedione'	Hexan-3.4-dione	0.0001	-	0.0001
Hexarioic acid-'	Caproic acid	*0.15*	0.15	*0.5*
cis-3-Hexcii-l-ol-	Leaf alcohol	0.002	-	0.002
cis-3-Hexenol				
Hexen-2-al'	cis- and trans-Hex-2-enal	0.001	-	0.001
Hex-2-enyl acetate	2-Hexenyl eehanoate	*0.15*	*0.15*	*0.5*
3-Hexenyl acetate	cis-3-Hexenyl ethoate	0.001	-	0.001
cis-Hex-3-envl acetate				
Hexyi acetate;	Hexyl ethanoate	0.15	*0.15*	*0.5*
Hexyl alcohol'	1-Hexanol	0.006	-	0.006
Hexyl phenyl acetate				
Phenyl acetic acid,		0.001	-	0.001
hexyl ester				
Honey'	*Apis mellifica*	1.0	1.0	4.0
Humic acid'		-	1.0	-
Hydrochloric acid'		0.15	0.15	*0.15*
for tobacco sheet or piper				
- no free residues)				
4-Hydroxy benzoic acid and/or		0.2	0.2	0.3
its ethyl, propyl esters				
or its sodium salt'				
4-Hydroxy butanoic acid				
1.4-Butyrolactone		*0.15*	0.15	0.5
lactone-'	ganuna-Butyrolacione			
Hydroxv citronelial-'				
7-Hydroxv-3,7-		*0.15*	*0.15*	*0.5*
dimethvioctanai				
Hydroxy citroncilol-				
3,7-Dimethyl octane-1,7-diol		*0.15*	*0.15*	0.5
2-Hydroxy isophorone				
2-Hydroxv-3,5.5-		0.003		0.003
trimethyl-2-cyclohexenone				
4(p-Hydroxyphenol)-	para-Hydmxybenzyi acetate	*0.15*	0.15	*0.5*
2-butanone				
4(4-hydroxyphenyi)				
butanone				
Hydroxypropyl cellulose'		1.5	*1.5*	*1.5*
ImmorEeile oil and				
Helichrysum		0.0001	-	0.0001
absolute	*angustifolium*			
"Indigotine	FD & C Blue No.2	0.03	0.01	-
Indole		0.0001	0.0001	0.001
alpha-lononc-'	alpha-Irisone	*0.15*	*0.15*	*0.5*
beta-lonone-'	beta-Irisone	*0.15*	*0.15*	*0.5*
Iron oxides'		2.0	2.0	2.0
alpha-Irone	6-Methylionone	0.15	*0.15*	*0.5*
Isoamyl alcohol'	Isopentyl alcohol	*0.15*	*0.15*	*0.5*
Isobomyl acetate	(IR, 2R)-Bom-2-yi-acetate	*0.15*	*0.15*	*0.5*
Isobutyl acetate	2-Mcthyl-l-propyl acetate	0.0001	-	0.0001

Isobutyl alcohop 2-Methyi propan- I -ol	Isobu=oi	*0.15*	*0.15*	0.5
IsobuEyl butyrate-		0.0001	-	0.0001
Isoburyi cinnamate'	Isoburvi isocinnamate	0.0001	-	0.0001
Isobutyl phenethyl alcohol'	Isobutyi benzyl carbinof 4-Methyl-l-phenvi-2-pentanol	0.0001	0.0001	0.0001
Isobutylphenyl acetate	lsobutyl(iso)phenyi acetate	*0.15*	*0.15*	*0.5*
Isobutvraidehyde'	2-Methyl propanal	0.0001	-	0.0001
Isoeugenal'	4-Prop- I -enylguaiacoi	*0.15*	0.15	*0.5*
isoeugenyl methvi ethee				
4-Propenyl veratrole		*0.15*	*0.15*	*0.5*
lsophorone-	Isoacetophorone	0.001	-	0.001
4-Keto dihydroisophorone'				
3,5,5,-(or 2,6,6-) Trimcthyl - 1,4-cyclohexanedione		0.001		0.001
4-Keto isophoranal	3,5,5-(or 2,6,6-) Trimethyl -2-cyclohcx-2-enc-1,4-dione	0.001		0.001
Isopropyi alcohol	2-Propanol		*Quantum satis*	
Isopropyl myristate	lsopropyl tetmdecanoate	0.001	0.001	0.001
lsopulcgol2	para-Menth-8-en-3-ol	*0.15*	*0.15*	*0.5*
Isovaleric acid'	3-Methylbutanoic acid	*0.15*	*0.15*	*0.5*
Jasmine absolute concrete and oil'	*Jasminum grandiflorum Jasmimum officinale*	*0.15*	*0.15*	*0.5*
Juniper berry oil"	*Juniperus communes*	0.02	0.02	0.02
Labdanum absolute. oleorcsin and oil-	*Cisw spp*	*0.15*	*0.15*	*0.5*
Lactic acid and/or its potassium and sodium sales'	2-Hydroxypropanoic acid	2.0	2.0	4.0
Lauric acid'	Dode=oic acid	0.01	-	0.01
Uvender absolute or oil'	*Lavandula* spp	0.15	*0.15*	*0.5*
UciEhin'	Phosphatidyl choline	0.25	0.25	0.1),1
Lemon oil and extract'	*Citrus linwn*	*0.15*	*0.15*	*0.5*
Lemongrass oil2	*Cambopogon citmrus* fleosus	*0.15*	*0.15*	*0.5*
Licorice root, fluid,	*Glycyrrhiza glabra* extract and powder'	4.04.0	4.0	
Limt oil-'	*Citrus auramifolia* (terpencicss) d-Limonene'	0.001	-	0.001
	d-para-Mentha-1,8-diene	0.0001	-	0.001
Linaloe wood oil-'	*Bursera spp 0.15*	0.15	*0.5*	
Linalool' Linalol	Linalyl alcohol	0.15	*0.15*	0.5
Linalool oxide	Linalyl oxide	0.001	-	0.001
Liaalyl acetate	Linalool acetate	*0.15*	*0.15*	*0.5*
Liaalyl butyrate	3,7-Dimethyl-1,6-octadien -3-yl-butyrate	0.001 -	0.001	
Linalyl fommte	Linalool fonmte	*0.15*	*0.15*	*0.5*
Liaalyl isobutymal 3,7-Dftncthyl-octa-1,6-dien-3-yl-isobutyrate		*0.15*	*0.15*	*0.5*
Liquid Paraffin BP'	Mineral oil, white	*0.5*	*0.5*	4.0
Locust bean g,='	*Ceratonia siliqua*	1.0	1.0	4.0
Longosa absolute and oil'				

Hedychium flaium	-		-	*0.5*
Lovage oil and extract' *Levisticum officinale*	0.1		0.1	0.1
Mace powder, extract and oil' *Myristica fragrans*	0.1		0.1	0.1
Magnesium acetate'	2.0		-	-
Magnesium carbonate'			2.0	- -
Magnesium chloride'	*5.0*		5.0	*5.0*
Magnesium citrate'	2.0		-	-
Magnesium hydroxide'	2.0			
Magnesium Intel'	2.0			
Magnesium oxide'	*5.0*		1.0	*5.0*
Magnesium phosphate'	2.0		-	-
Magnesium tartrate'	2.0		-	-
Malt and malt extract' *Hordeum spp*	2.02.0	4.0		
Malt syrup				
Maltol' 3-Hydroxy-2-methyl-4-pyrone	*0.15*		*0.15*	*0.5*
Maple syrup, extract and concentrated *Acer saccharum*	10.0		10.0	15-0
para-Mentha-1, 8-dien - 7-01' Pcrfllyi alcohol	0.15		0.15	*0.5*
Menthol' 2-Isopropyl-5-methyl-cycir:@;:xanol	2.0		2.0	2.0
Menthyi acetate' Menthol acetate para-Mcnth-3-yi-acemte	*0.15*		*0.15*	*0.5*
Mcuthyl isovalerate para-Menth-3-yi-isovalerate	0..15		0.15	*0.5*
Mercaptomenthanone' para-Mentha-8-thiol-3-one	-		-	0.001
para-Methoxy benzaldehyde' para-Anisaldehyde	*0.15*		0.15	*0.5*
ortho-Methoxy 2-Methoxv cinnamaldehyde cinnamaidehyde'	*0.15*		*0.15*	*0.5*
Para-Mcthoxy 4-Mcthoxy cinnamaldehyde cmnamaidehyde'	*0.15*		0.15	*0.5*
2-(or 5 or 6-) Methoxy -3-meEhyi pyrazinel	0.0001		-	0.0001
2-Methoxv-4-mcEhylphenol'4-Methyl. guaiacol	0.0 001		0.0001	
.-Methoxy-4-vinylphenoi'4-Hydroxv-3-methoxvstyrene 4-Vinyl guaiacol	0.0001			
1-(para-Methoxyphenyl) Anisyl methyl ketone -2-propanon&	*0.15*		*0.15*	*0.5*
4-Methoxyphenol acetone	-		0.001	
Methyl acetate, Methyl ethanoate	0.001			
4-Methyl acetophenone Methyl para-toivl ketone	*0.15*		*0.15*	*0.5*
Methyl aaisate- Methyl-4-metboxy bcoate Methyl-para-anisate	0.001		0.001	0.001
para-Methyl anisole-' ortho-Cresyl-para-methvl ether 4-MeEhoxytoluene	*0.15*		*0.15*	*0.5*

Methyl benzoate-'	Methvi benzenecarboxviate	*0.15*	*0.15*	0.5
alpha-Methyl benzyt acetate	i-Phenyi ethyl acetate	0.15	*0.15*	*0.5*
Aipha-Methyl benzyi alcohol'	alpha-Phenyl ethyl alcohol	*0.15*	*0.15*	*0.5*
	Styralyl alcohol			
2-Methyi butyraidehvde,	2-Mcthyl butanal		*0.15*	*0.15*	*0.5*
3-Methyl butyraldthyde- Isovaleraidehyde	3-Methyl bu=ai		*0.15*	0.15	*0.5*
2-,%4ethylbutyric acid'					
Methyl ethyl acetic acid			0.0001	-	0.0001
Mcthyl cellulose'			*5.0*	5.0	3.0
Me&yl cianamate	Methyl-3-phenylpropenoate		*0.15*	*0.15*	*0.5*
Methyl cyclopcntenolone'					
3-Methyl-2-	cyclopentene-2-ol-l-onc 2-Hydroxy-3-methyl cyclopent-2-ca-l-onc Methyl ethyl kceone'		0.005	*0.005*	0.03
2-Butanone			*0.15*	*0.15*	*0.5*
	5-Mcthyl ftwftuw-'				
5-Methyl-2-furaidehyde			0.01	-	0.01
6-Methyl-3,5-heptadianone'			0.001	-	0.001
6-Methyl-hepE-5-en-2-onc'	Methyl heptenone		*0.15*	*0.15*	*0.5*
2-Mcthyl heptanoic acid'					
	Methyl amyt acetic acid		0.0001	0.0001	0.0001
2-Methyl hexanoic acid'	2-Methyl caproic acid		0.002	-	0.002
Methyi hydroxy ethyl cellulose'		-	2.0	-	
Mcthyl hydroxy propyl cellulose'				-	5.0
Methyl isovalerate	Methyl isovaierianate		*0.15*	*0.15*	*0.5*
Methyl linaleate	Mcthyl-9,12 octadecadienoate		0.001	-	0.001
Methyl linolenatel	Methyl-9,12,15- octadecatrienoaee		0.001		0.001
Methyl mercaptaxi@	Methanethiol		-		0.001
2-Methyl-5-(methylthio) fura&Mcthyl-beEa-	5-Methyl thiosilvane				0.001
2-Acctonaphthonc naphttivlkctone	- Oranger crystals			0.002	
3-Methyl pentanoic acid'	3-Methyl valcric acid		0.001	-	0.6,,
Methyl phenyl acetate'	Methyl-alpha-toluate		*0.15*	*0.15*	*0.5*
2-Mcthyl pyrazine:	2-Mcthyl-1.4-diazine		0.001	-	0.001
5-Mcthyl quinoxaline'			0.0001	-	0.001
Methyl salicylate:	Methyi-ortho-hydroxybenzoate		*0.15*	*0.15*	*0.5*
Methyl suiphide	Diniethyl sulphide		0.0001	-	0.0001
2-Methyi undec=ai'	Methyl nonyl acetaidehyde		*0.15*	*0.15*	0.5
3-Methyl 1-cyciopeneadecanone-'	Muscone		0.0001	-	0.0001
3-Methyl-2-(2-pentenyl)	cis-lasmone -2-cyciopenten- I -one		0.001	0.001	0.001
Methyl-2-ocrynoate'	Methyl heptine carbonate		-	-	0.001
Methyl-2-pytTolvi ketone'	2-Aceryl pyffole		0.0001	0.0001	0.0001
2-Methyl-4-phenvi butyraidehyde'	2-Methyl-4-phenvl butanal		0.0001	-	0.0001
,Mimosa absolute:	*Acacia decurrens* var *dealbxa*		*0.15*	*0.15*	*0.5*

Mint oil, garden mint oil, wild mint oil-' (patdy dcmmthoiised)	*Mentha Wridis* *Mentha arvensi . s*	0.15	*0.15*	*0.5*
Molasses extract and tincmrel	*Saccharum officinarum*	10.0	10.0	*15.0*
Mullein flowew	*Verbascum spp*	*0.15*	*0.15*	*0.5*
Musk ambrette and/or Musk ketone		0.01	0.01	0.03
Musk pod extract'	*Fiber zibethicus* *Moschus moschiferus*	0.15	0.15	*0.5*
Myrcenc-	7-Methyl-3-methylene-1,6-octadiene	-	-	0.001
Myn-h oil, absolute	*Conuniphora spp* and rcsinoid'	*0.15*	*0.15*	*0.5*
beta-NaphEhyl ethyl ether4 Nemlin Ethyl-2-naphEhyl ether		*0.15*	*0.15*	*0.5*
beta-Naphthyl methyl 2-Methoxynaphthalene ether' Methyl-2-n2phthyl ether		*0.15*	0.15	*0.5*
Neroll cis-3.7-Dimethyl-2,6-octadien-l-ol		*0.15*	*0.15*	*0.5*
Nerali oil'	*Citms aurmuium*	*0.15*	*0.15*	*0.5*
Nerolidol' 3,7, 1 I-Trimethvi-1,6, 10-dodecatrien-3-ol		*0.15*	*0.15*	*0.5*
2,6-Nonadien-l-ol'	Cucumber oil	0.001	-	0.001
gnmma-Nonalactonc-	Nonan-4-olide	*0.15*	*0.15*	*0.5*
Nonanal'	Nonanaidehyde	*0.15*	*0.15*	*0.5*
Nonanoic acid-	Pelargonic acid	0.002	-	0.002
2-Nonenall 3-Hexyl-2-acrolein	2-Nonen-l-ai	0.001	-	0.001
Nutmeg and oil-'	*Myristica fragrans*	*0.15*	*0.15*	o.5
Oak bark extr=1	*Quercus spp*	0.001	-	0.001
Oak moss absolute'	*Evemia prunastti*	0.001	-	0.001..
delta-Octalactonel	Octan-5-olide	0.001	-	0.001
gamma-Octalactonel	Octan4-olide	0.01	-	0.01
Octanoic acid'	Caprylic acid	0.002	-	0.002
1-0c=oi'-	Octyl alcohol	-	-	0.001
2-Octanone	Methyl hexyl ketone	0.001	-	0.001
I-Octen-3-ol-'	Amyl vinyl carbinoi	-	-	0.001
2-Octcnal-'	2-Amyl acroiein	0.0001	-	0.0001
Olibanum oil, resinoid and absolute'	*Boswellia canifii*	0.001	0.001	0.001
Olive oil'	*Olea europea*	*0.5*	0.5	4.0
Opopanax oil and gul&	*Opopanax chromium* *Commiphora erythraea*	0.15	*0.15*	0.5
Orange leaf absolute and blossoms water'	*Citnu aurantium*	0.001	-	0.001
Orange od and extract' (whether or not tcrpenciess)	*Citrus aurantium*	*0.15*	*0.15*	*0.5*
Orange peel oil and extrace, bitter and sweet-' (whether or not tcrpenciess)	*Citrus sinensis* *Citrus bigaradia* *Citrus aurantium*	*0.15*	*0.15*	*0.5*
Orris root, concrete, oil and extract'	*Iris florentina*	0.15	0.15	*0.5*
Palmarosa oil'	*C5vnbopogon marrini*	*0.15*	*0.15*	*0.5*
Palmitia acid'		-	1.0	-
Parsley seed oil-'	*Petroselinum spp*	*0.15*	*0.15*	*0.5*
Patchouii oil and absolute-	*Pogostemon spp*	0.15	*0.15*	*0.5*
"Patent Blue V' C.I. No. 42051	Acid Blue 3	*0.05*	-	-

Peach kernel oil'	*Prumis persica*	*0.15*	*0.15*	*0.5*
Pectin'		2.0	2.0	2.0
Pent-3-en-4-olide5-MeEnyl-2-(3H)-furanone omega-Pentadecalactone'		0.001	0.001	0.001
Cyclopentadecanolide Pentadecan-15-olide		0.15	*0.15*	0.5
2,3- Pentanedione Pentane-2.3-dione	Acetvi propionvl	0.001	0.001	0.001
Pepper oil, black and white-'	*Piper nigrum*	0.001	-	0.001
Peppermint oil'	*Mentha piperita*	2.0	2.0	2.0
Petitgrain oil and absolute;	*Citrus aurantium*	0.15	0.15	*0.5*
PheneEhyi acetate-'	Benzyi carbinyl acetate	*0.15*	*0.15*	*0.5*
Phenethvi alcohol'	2-PhcnyicEhanol	*0.15*	*0.15*	*0.5*
Phenethyl isobutyrate'	2-Phenylethvi isobutyrate	*0.15*	*0.15*	*0.5*
Phenethyl isovalcrate-	2-Phenylethyl-3-isovaleratc	*0.15*	*0.15*	*0.5*
Phcnethyl phenylacetate	2-Phenylethyl phenylacetate	*0.15*	*0.15*	*0.5*
Phenethyl vaieratel	2-Phcnyl ethyl valeraic	*0.15*	*0.15*	*0.5*
Phenyl acetaidehyde'	Benqlcarboxyaldehyde	*0.15*	*0.15*	*0.5*
Phenyl acetic acid'	Benzencacctic acid	*0.15*	*0.15*	*0.5*
4-Phenyl-3-buten-2-one' 4-Phenyl but-3-enone	Benzylidene acetone	*0.15*	*0.15*	*0.5*
3-Phenyl propionaidehyde-' 3-Phcnyl pmpionic acid'	Hydrocinnamaidehyde	-	-	0.001
Hydrocinnamic acid	0.002	0.002	0.002	
3-Phenyt-l-propanol'	Hydrocinaaniic alcohol	*0.15*	*0.15*	*0.5*
3-Phenyl propan-l-ol onho-Phosphoric acid'		2.0	2.0	2.0
Pine needle oil. dwarf'	*Pinus mugo Abies sibirica*	*0.15*	*0.15*	*0.5*
Pigment Red 1841	C.I. No. 12487	-	0.1	-
Pigment Yellow 131	C.I. No. 21 100	-	0.1	
alpha-Pinenel (3.1.1)-2-heptenc Pin-2-ene	2,6,6-Trimethylbicvclo	*0.15*	*0.15*	*0.5*
Pipemnail	Heliotropine	*0.15*	*0.15*	*0.5*
Pipsissewa leaf extract-'	*Chinzaphila umbellate*	0.002	0.002	0.002
"Ponceau 4R' C.I. No. 16255	*0.05*	0.01		
Potassium carbonate'		5.0	*5.0*	*5.0*
Potassium and/or sodium chloride'		*5.0*	*5.0*	*5.0*
Potassium hydroxide' sheet		0.5	*0.5*	*0.5*
paper (no fimc residues		2.0	-	-
Potassium phosphate'	Phosphoric acid, potassium salts	2.0		-
Propenyl gu2edwll 3-Propenyl-6-ethoxy phenol	Vanitmpe	-	-	*0.005*
Propionic acid and/or its sodium salts'	Methyl acetic acid	*0.5*	*0.5*	1.0
n-Propyl acetate-'	Propyl ethanoate	0.0001	0.0001	0.0001
n -Propyl alcohol	Propan-l-oi	*Quantum satis*		
Propyl butyrate-'		0.0001	-	0.0001
Propyl phenyt acetate	Propyi-alpha-toluate	*0.15*	*0.15*	*0.5*
Pmpylene glycoll	1,2-Propanediol	6.0	6.0	6.0
Pyroligneous acid extrace Wood vinegar	*Car ' va alba*	0.001	-	0.001
Pyruvic acid'	Pyroracemic acid 2-Oxopropionic acid	-	-	0.001
Quebracho bark extract'	*Asptdospemia quebracho*	*0.15*	0.15	*0.5*

	blanco			
Reaction products'	Known and specified mixture of amino acids and reducing suears heated under pressure. Toasting flavours.	2.0	-	2.0
Rhodinol-'	3,7-Dimthyi-(6 or 7) octen- I -ol	*0.15*	*0.15*	*0.5*
Rhodinyl acetate'	Rhodinyl ethanoate Dimethyl-(7)octen- I -yi acetate	0.15	*0.15*	*0.5*
Rose watee	*Rosa centifolia*	0.15	0.15	0-5
Rose oil and absolute	*Rosa spp*	*0.15*	*0.15*	0.5
Rosemary oil and absolute' *Rosmarinus officinali*		0.001	-	0.001
Rum ethee	Ethyl oxyhydratc	*0.15*	*0.15*	*0.5*
Saccharin and/or its sodium salt'		0.1	0.1	0.1
Saffron'	*Crocus sativus*	*0.15*	*0.15*	*0.5*
Sage, sage oil and leoresial	*SalWa offidnalis SWWA lavandulaefoua*	*0.15*	*0.15*	*0.5*
Salicylaldchydel	onho- Hydroxybenzaidehyde	0.0001	-	0.002
Sandalwood oil, yellow'	*Santalum album*	*0.15*	*0.15*	*0.5*
Shellac'		*0.5*	*0.5*	*0.5*
Silicic acid'	Sec aluminosilicatcs	*5.0*	-	-
Sodium alginate'	Algin	*0.5*	*0.5*	*0.5*
Sodium bicarbonate'		0.0001	0.0001	0.0001
Sodium bisuipbzc'	Sodium hydrogen sulphate	*5.0*	*5.0*	*5.0*
Sodium carbonate'		2.0	-	-
Sodium hydroxide'				
sheet		*0.5*	*0.5*	*0.5*
paper (no free residue)		2.0	-	-
Sodium phosphate'	Sodium ortbo-phosphate Phosphoric acid, sodium salts	2.0	-	-
Sorbic acid and/or its potassium and sodium salt'		*0.5*	*0.5*	1.0
Sorbitoll	Hexanthexoi	8.0	8.0	8.0
Speamiint oil' *Mentha viridis*	*Meyuha spicata*	*0.15*	*0.15*	*0.5*
Spike lavender oil'	*Lavandula Ixifolia*	*0.15*	*0.15*	*0.5*
Spiranoi-'	Dihydro-6-hydroxy-thcaspirane 6-Hydroxydihydro theaspirane	0.001	-	0.001
Spirits, distilled	Whisky, brandy, rum		*Quantum satis*	
Star anise oil'	*Illicium verum*	0.1	0.1	0.1
Starch'	Corn. maize. potato. cationic Starch'	2.0	-	-
	Tapioca	-	0.03	-
StyrAx gum and extract,	*Liquidm&r spp* and oil' Storax	*0.15*	*0.15*	0.5
Sucrose and White sugar, inven, raw or sucrose syrup' brown sugar, golden syrup and n)ol"Sunsct Yellow FCF'		10.0	10.0	*15.0*
Food yellow No.3		0.01	0.01	-
Tamannd extract' *Tamarzndus indica*		0.1	0.1	0.1

Tannic acid'-		-		0.001	
Tarragon oil'					
Artemisia dracunculus		*0.15*		0.15	*0.5*
Tartaric acid and its		2.0		2.0	4.0
potassium and sodium					
salts'					
"Tanrazine Yellow-'					
C.I. No. 19140		0.14		-	-
FD&C Yellow No.5					
Tea, absolute and resinoid'					
Ihea sinensis		*0 .15*		*0.15*	*0.5*
Terpiiil		*0.D515*	*0.5*		
(alpha-, beta- and gamma)					
Terpinyl acemtel					
para-Menth-l-en-8-yi		*0.15*		*0.15*	*0.5*
acetate mixture of					
alpha-, bem- and					
ganuna-isomers					
4,6,7-Tetrahydro-3,6					
ofuran		*0.15*		*0.15*	*0.5*
-dimethylbenzoftiran@					
Tetrahydro-4-methyl-2-					
Rose oxide		0.001		0.001	0.001
(2-methylpropcn-1-yi) pyran-'					
2.3.5,6-Tetra-methyl		0.001		0.001	0.001
pyrazinel					
Tbiabendazole-					
(2-(Thiazol-4-vil)		0.03		0.03	0.03
3ezimidazole					
Thyme oil. white and					
lkvmus *Vulgate*		*0.15*		*0.15*	*0.5*
red'					
'Mymoil					
3-para-Cymenol		-		-	0.001
Titanium dioxide'		2.0		2.0	2.0
Tobacco extracts'					
Nicoliana tabacum		*Quantum satis*			
(as fljivour *wW* &ram niatefilk					
- wbjmt to prim appmvai)					
Tolu balsam gum and					
Myrotylon balsamum		*0.15*		0.15	*0.5*
extmce					
Tolualdehydes'					
mixed 2.3,4-Methyl	*0.15*	*0.15*		*0.5*	
(ortho-, meta- and para-)					
benzaldehydes					
Tolylaidehydes					
para-Tolyi-3-methyl					
buryrate-para-Cresyl isovalerate	0.001	0.001		0.001	
Tolyl phenylacetate'					
para-Cresyl phenyl -		-		0.001	
acetate					
,,Tonka bean and extract'					
Dipteryx adorata		*0.15*		*0.15*	*0.5*
2,2,2-Trichloro- I -phenvi					
Rostoi		0.0001		0.0001	0.0001
ethyl acetate-					
Triethyi citrate					
Citric acid, triethyl ester		0.01		-	0.01
Triethylene glycol'					
2.2-Ethylene dioxyethanol		2.0		2.0	4.0
2,2,6-Trimethyl		0.001		0.001	
cyclohexanonel					
2,3,5-Trimethyl pyrazine'		0.0001		-	0.001

Tuberose absolute and oil *Polvanthes tuberosa*	*0.15*	*0.15*	*0.5*	
Turpentine oil' *Pinus spp*		*0.15*	*0.15*	*0.5*
gamma-Undw.aiactone; 4-Hydroxy undecenoic acid Undecan-4-olide		*0.15*	*0.15*	*0.5*
Undecanal' Aldehyde C- II (undecylic)		0.001	0.001	0.001
Ureal		2.0	-	-
Valerian root powder. *Valeriana officinalis* extract and oil'		*0.15*	*0.15*	*0.5*
Valeric acid- Pentanoic acid oamina-Valeroiactone		*0.15*	*0.15*	*0.5*
4-Hvdroxypentanoic acid		0.002	0.002	0.004
Vanilla beans or pods, *Vanilla* spp or extract and oleamsin'		0.1	0.1	0.1
Vmfillin, 4-Hydroxy-3-methoxy benzaidehyde		0.3	0.3	0.3
Veratraidehydel 3,4-Dimethoxybenzaidehyde		*0.15*	*0.15*	*0.5*
Vetiver oil' *Vetiveria zzzanioides*		0.15	*0.15*	*0.5*
Violet oil and absolute*Viola odoriua*		*0.15*	*0.15*	*0.5*
Violet leaf absolute'*Viola odorata*		*0.15*	*0.15*	*0.5*
Wheat extract and absolute *Tilticum spp*		-	-	*0.5*
Wine and wine sherry ,Woodruff extract, *Asperula odorata*	*Quantum satis*	0.15	*0.15*	*0.5*
Ylang ylang oil and absolute	*CwLanga odorata*	*0.15*	*0.15*	*0.5*

Appendix B: Chemical Profile of Tobacco Smoke

Butadiene
"Acute exposure in humans results in irritation of the eyes, nasal passages, throat and lungs, and causes neurological effects such as blurred vision, fatigue, headache and vertigo. Epidemiological studies have reported a possible association between exposure and cardiovascular diseases. It is a probable human carcinogen of medium carcinogenic hazard."
US EPA

Acetaldehyde
"The primary acute effect of inhalation exposure to acetaldehyde is irritation of the eyes, skin and respiratory tract in humans. Erythema, coughing, pulmonary edema and necrosis may also occur."
US EPA

Acetone
"Workers exposed to acetone vapours experienced transient eye and nose irritation."
US EPA

Acrolein
"Acrolein is extremely toxic to humans. The acute and chronic effects of acrolein in humans consist mainly of effects on the lung, such as upper respiratory tract irritation and congestion and eye irritation."
US EPA

Acrylonitrile
Acute exposure via inhalation "has been observed to cause low-grade anaemia, cyanosis, leukocytosis, kidney irritation, mild jaundice and irregular breathing, with symptoms that include mucous membrane irritation, headaches, dizziness, nausea, feelings of apprehension and nervous irritability. [It is a] probable human carcinogen of medium carcinogenic hazard."
US EPA

Ammonia
"Ammonia can increase susceptibility to viral illness and aggravate chronic respiratory conditions."
Health Canada.

Aromatic amines - 4-amino-biphenyl
"Acute inhalation exposure produces headaches, lethargy, cyanosis, urinary burning and hematuria in humans ..[it] is a known human bladder carcinogen."
US EPA

Benzene
"A substance declared toxic or carcinogenic to human health under the Canadian Environmental Protection Act (CEPA)."

Like cadmium, benzene is listed by the International Agency for Research on Cancer as a Group 1 carcinogen. It causes leukaemia, and can also cause aplastic anaemia, a condition where the bone marrow fails to produce new blood cells.

Benzene is a commonly used industrial chemical. It is a constituent of gasoline and is used as a solvent.

Concern about the health risks from benzene exposure has resulted in efforts to reduce the benzene content of gasoline. But although gasoline is the major source of benzene emissions to the air (over 80%), it is responsible for less than 20% of the benzene that people breathe. Cigarettes are the source of over 40% of human exposure to benzene.
Health Canada

Benzo[a]pyrene
"There are multiple animal studies in many species demonstrating BAP to be carcinogenic following administration by numerous routes." US EPA

Butyraldehyde
"Human health effects associated with breathing or otherwise consuming small amounts of butyraldehyde over long periods of time are not known… limited evidence shows that butyraldehyde may cause changes in cells important to the reproductive system of animals."
US EPA

Cadmium
"Cadmium is much more dangerous by inhalation than by ingestion. Repeated or long-term exposure to cadmium, even at relatively low concentrations, may result in kidney damage and an increased risk of cancer of the lung and of the prostate."

Cadmium is listed by the International Agency for Research on Cancer (IARC) in its top level of carcinogens.

Cadmium also harms kidneys (it is nephrotoxic). When kidneys are damaged by cadmium they excrete such substances as proteins that should be retained by the body.

Although cadmium is found in water, food and air, smoking cigarettes leads to large increases in human exposure to this toxic element. Blood cadmium levels in people smoking 20 or more cigarettes per day are 4 times higher than non-smokers.

Like lead, cadmium has a long half-life in the body, in excess of 10 years.

Cadmium is excreted in breast milk. The milk of smoking mothers can contain twice as much cadmium as that of non-smokers.
US EPA

Carbon Monoxide
"Acute effects are due to the formation of carboxyhemoglobin in the blood, which inhibits oxygen intake. At moderate concentrations, angina, impaired vision and reduced brain function may result."
Carbon monoxide harms the ability of blood to carry oxygen to human tissues by combining with haemoglobin in the blood to form carboxyhemoglobin.

Carbon monoxide exposure can result in damage to the lining of blood vessels and to the smooth muscle in the walls of blood vessels. It can contribute to hardening of the arteries. This is likely one of the ways in which smoking contributes to the increased risk of heart disease.

Because it reduces the oxygen supply to neurons, carbon monoxide is a neurotoxicant.

Carbon monoxide is produced by almost any burning material, and governments have already moved to reduce carbon monoxide pollution by regulating emissions from automobiles, power plants, factories and other sources. Although tobacco smoke is a relatively small source of carbon monoxide emissions to the atmosphere, it is the major source of carbon monoxide exposure to smokers.

Non-smokers typically have carboxyhemoglobin levels near 1%. The same levels in smokers are much higher - ranging from 2% to 15%. Levels in smokers are affected by both how they smoke and how much they smoke
US EPA

Catechol
"Increased the carcinogenic effects of benzo[a]pyrene on the skin in mice when applied together dermally."
US EPA

Crotonaldehyde
"A possible human carcinogen."
US EPA

Formaldehyde
"Formaldehyde "causes acute eye burning and irritates mucous membranes and the respiratory tract. EPA has determined formaldehyde to be a probable human carcinogen."
US EPA

Hydrogen Cyanide
"It is among the most toxic chemicals found in tobacco smoke. Short-term exposure can lead to headaches, dizziness, nausea and vomiting."
Health Canada

Lead
"Lead is a highly toxic metal. Lead is capable of causing serious damage to the brain, kidneys, nervous system and red blood cells. Children are particularly vulnerable because lead is more easily absorbed into growing bodies and the tissues of small children are sensitive to its effects. Lead exposure in children can result in delays in physical development, lower IQ levels, shortened attention spans and increased behavioural problems."
US EPA

M,p and o-cresol
"Possible human carcinogen … based on an increased incidence of skin papilomas in mice."
US EPA

Mercury
"Adults exposed to metallic mercury vapour may develop shakiness (tremors), memory loss and kidney disease."
US Department of Health and Human Services

Methyl Ethyl Ketone
"Exposure to methyl ethyl ketone in humans, via inhalation, results in irritation to the eyes, nose and throat and central nervous system depression."
US EPA

Nickel
"Inhalation exposure to nickel compounds can increase susceptibility to respiratory infections."
US Department of Health and Human Services

Nitric oxide
"Produces short term effects on airway activity. High concentrations can lead to acute lung dysfunction. Special risks exist for chronic bronchitis, emphysema and asthma in children under two years old. Chronic effects are not well established."
US EPA

p-Hydroquinone
"Exposure to hydroquinone dust has resulted in eye injuries, which varied from mild irritation and staining of conjunctivae and cornea, to changes in the thickness and a curvature of the cornea, loss of corneal luster and impaired vision."
US EPA

Phenol
"Phenol is highly irritating to the skin, eyes and mucous membranes in humans."
US EPA

Propionaldehyde
"Exposure to high levels of propionaldehyde caused anaesthesia and liver damage via inhalation exposure."
US EPA

Quinoline
"Acute inhalation exposure to quinoline vapours irritates the eyes, nose and throat and may cause headaches, dizziness and nausea in humans. EPA has classified quinoline as a group 3 possible human carcinogen."
US EPA

Selenium
"Hydrogen selenide is the most acutely toxic selenium compound. Acute exposure to hydrogen selenide by

inhalation results primarily in respiratory effects, such as irritation of the mucous membranes, pulmonary edema, severe bronchitis and bronchial pneumonia."
US EPA

Styrene
"Chronic exposure to styrene in humans results in effects on the central nervous system such as headache, fatigue, weakness and depression; peripheral neuropathy and minor effects on some kidney enzyme functions and on the blood."
US EPA

Toluene
"Central nervous system depression has been reported to occur in chronic abusers exposed to high levels of toluene. Symptoms include ataxia, tremors, cerebral atrophy, nystagmus (involuntary eye movements) and impaired speech, hearing and vision. Chronic inhalation exposure of humans to toluene also causes irritation of the upper respiratory tract, eye irritation, sore throats, nausea, skin conditions, dizziness, headaches and difficulty with sleep."
US EPA

Appendix C: Tobacco Control Legislation

1. **The Tobacco Products (Control of Advertising, Sponsorship & Sales Promotion) Act, 1978**

This Act gives the Minister for Health wide-ranging powers to control all aspects of the advertising, sponsorship and sales promotion of tobacco products. Under the Act, the Minister has the power to make regulations to control and regulate:-

- advertising of tobacco products,
- sponsorship, and
- any other activities which are intended or are likely to promote the sales of tobacco products.

These controls can extend to:-

- prohibiting particular kinds of advertising of tobacco products;
- prohibiting particular kinds of sponsorship;
- controlling the form, content and frequency of advertising for tobacco products;
- restricting expenditure on advertising and sponsorship;
- requiring health warnings on ads., packages, containers;
- prohibiting low-cost selling of tobacco products through sales promotion devices such as low prices, discounts, gift vouchers or coupons.

2. **The Tobacco (Control of Advertising, Sponsorship & Sales Promotion) Regulations, 1991**

These Regulations replace Regulations made in 1979 and 1986 and extend greatly the Minister's powers in implementing the 1978 Act. The Regulations also take account of various changes at E.U. level and tighten up certain provisions. The general effect of the 1991 Regulations is:

- to restrict the advertising media which may be used for tobacco advertising;
- to limit the content of advertising of tobacco products;
- to require that advertisements for, and packages of, tobacco products display in rotation a number of prescribed health warnings;
- to limit the form which advertising associated with sponsored events may take, and
- to prohibit the use of coupons, gifts, cut-price offers and sales promotion in relation to tobacco products.

3. **Tobacco (Health Promotion and Protection) Act, 1988**

The Tobacco (Health Promotion and Protection) Act, 1988 provides for the prohibition and restriction on the consumption of tobacco products in designated areas and facilities, the restriction on the sale of tobacco products to persons under the age of 16 years and bans the sale etc.of oral smokeless tobaccos.

Specifically the Act provides for the following:-

- the prohibition or restriction on smoking on aircraft, trains, public service vehicles, health premises, schools, cinemas, theatres and the public offices of buildings which belong to or are in the occupation of the State or a body established under an Act of the Oireachtas or in any other area designated by the Minister;
- the restriction on the sale of tobacco products to a person under the age of 16 years, including the appropriate location of vending machines;

- ♦ the restriction on the sale of cigarettes otherwise than in packets of ten or more cigarettes;
- ♦ the control, prohibition or restriction on the use of specified constituents of tobacco products and the banning of the sale, importation, manufacture etc. of oral smokeless tobaccos (penalties up to a maximum of £ 10,000).

4.**Tobacco (Health Promotion and Protection) Regulations, 1990**
These Regulations gave effect to a number of the provisions of the 1988 Act.

5.**European Communities (Tar Yield of Cigarettes) Regulations, 1991**
These Regulations set maximum tar yield figures for cigarettes and became operational with effect from 31/12/92.

6. **Tobacco Products (Control of Advertising, Sponsorship and Sales Promotion) (Amendment) Regulations, 1994.**
These Regulations require that packages of tobacco products, other than cigarettes, display in rotation, a number of health warnings. They came into effect on 1 March, 1994.

7. Tobacco (Health Promotion and Protection) Regulations 1995
The Regulations extends the 1990 Regulations by a prohibition on smoking in:-

- pre-schools
- creches
- play-groups
- day-nurseries
- other services which cater for pre-school children
- classrooms, lecture theatres or recreation rooms in third-level colleges
- kitchens and food preparation areas in retail premises in which food is stored or prepared for human consumption
- the retail, storage and food preparation areas in butchers' premises
- studios in T.V. stations during live transmission or recordings of programmes for subsequent transmission
- the auditorium of a premises used for the playing of snooker for public entertainment
- playing and circulation areas in Bridge and Bingo halls
- amusement arcades and centres, including ten-pin bowling centres
- child care centres [subject to specific facilities for staff to smoke].
- hospitals [subject to specific facilities for staff and patients to smoke]
- long-stay geriatric homes [subject to specific facilities for staff and patients to smoke]
- maternity homes [subject to specific facilities for staff and patients to smoke]
- mental handicap centres [subject to specific facilities for staff and patients to smoke]
- physical handicap centres [subject to specific facilities for staff and patients to smoke]
- other health premises, including Health Centres and pharmacies [subject to specific facilities for staff to smoke]
- public areas in Banks, Building Societies and other retail financial agencies
- public areas in hairdressing salons/barber shops
- taxis and hackney cabs
- aircraft and passenger ferries [a minimum of two-thirds of the seating.]

Appendix D: Indicative Budget for a Standard Year

Actions	Indicative Cost £(000)
Tier 1: Better Communications and Education:	
A Public Relations Programme:	500
A Sponsorship Programme:	2,000
Improved Public Knowledge of Tobacco Control Laws:	250
Tobacco Information and Resource Centre:	750
Clinical Research:	250
An Enhanced Health Education Programme:	2,000
Diploma in Tobacco and Health:	150
Integrating into Third Level Curricula:	100
Sub total	**6,000**
Tier 2: More Help for Smokers to Quit	
NRT:	3,000
Counselling	500
Specialist Clinics	3,000
Sub total	**6,500**
Tier 3: Tougher Regulation of the Tobacco industry	
Fiscal Policy:.	50
CPI:	10
Subtotal	**60**
Tier 4: Further Protection for Non smokers	
Tobacco Free Workplace:	35
Subtotal	**35**
Tier 5: Better Compliance with the Law	
Proactive Inspection Programme:	3,500
Enhanced Powers:	25
Sub Total	**3,525**
Tier 6: Extending Ownership	
Voluntary Community Action	2,000
Conferences for Local Community Leaders:	100
An Intern Programme:	500
Subtotal	**2,600**
Tier 7. International Co-operation	
European Union:	100
Framework Convention on Tobacco Control (FCTC):	100
Sub total	**200**
Managing the Programme	
Tobacco Free Council	100
Office of Tobacco Control	600
Subtotal	**700**
Grand Total	**19,610**