

Summary and Implications

The previous chapter set out the principles and key elements of good practice that should underpin the Government's, and other players', approach, to influence individual decisions about public health. This chapter develops them into a framework for policy development.

It provides a preliminary discussion of the main levers of government action – taxes, subsidies, service provision, regulation and information – and how they might be used to target each of the categories of market failure described in the previous chapter. It assesses the strengths and weaknesses of each, the issues to be addressed when developing particular measures, and considers some examples in the context of public health. Finally, it sets out the necessary limits to government intervention, which ensure that proposals are acceptable and respect individual freedoms and rights.

The Treasury should set out a similar framework for the use of economic instruments to tackle public health concerns as it recently did to tackle environmental problems. All government departments, in contributing towards the forthcoming Public Health White Paper, should use this framework to bring forward proposals for action that tackle the barriers to citizens choosing to be “fully engaged”.

The chapter does not set out a large raft of specific policy recommendations. Many ideas that have been around for a long time need to be properly assessed and implemented. Many of the proposals made in submissions to this Review are likely, if properly implemented, to take us further on the road towards a “fully engaged” society – such as a workplace smoking ban, further measures to tackle tobacco smuggling, action on salt and a marketing approach to public health programmes.

8.1 Much of the action required to safeguard and improve the health of society is outside the areas of policy typically seen as health-related. Factors such as income, workplace safety and stress, and the environment have major influences on people's health. Efforts by the Government to address poverty, stress and environmental damage should also have a strong influence on health outcomes, including such policies as:

- income – minimum wage, child tax credit and working tax credit;
- work and stress – working time regulations; and
- environment – regulations to improve the quality of air and water and the development of the environmental tax framework¹.

8.2 In addition, the Government needs to support individuals to choose healthier lifestyles, if the present increases in certain chronic diseases are to be addressed. Chapter 7 described how the Government, media, businesses and the voluntary and community sector all have roles and responsibilities to promote better population health in the UK. It set out the principles that should underpin policy-making. Building on those principles, this chapter sets out a more detailed framework for government intervention, examining both policy objectives and appropriate levers.

¹ *Tax and the Environment: Using Economic Instruments*, HM Treasury, 2002

HEALTH POLICY OBJECTIVES

8.3 Within health policy, there are a number of possible objectives to increase social welfare, including to:

- increase the health of society;
- reduce health inequalities in society; and
- increase the efficiency of the NHS.

8.4 These objectives commonly complement each other; increasing the health of society and its welfare are often seen as synonymous. However, sometimes the objectives must be traded off, such as:

- the introduction of a drug that is effective but less cost-effective than average would increase the health of society but reduce the efficiency of the NHS;
- a policy that reduces the consumption of a pleasurable but hazardous activity (for example, drinking) may reduce some aspects of social welfare whilst increasing health; and
- the provision of untargeted health information will usually increase the state of the nation's health, but the generally better educated middle-classes are likely to benefit more, increasing health inequalities.

8.5 The policy objectives must be considered, as these will affect the selection of the type of lever used and the degree to which government is prepared to intervene. Political judgment must be used to resolve conflicting objectives. These conflicts need to be recognised and investigated, and any judgments should be explicitly and transparently made.

SELECTING SUITABLE LEVERS

8.6 One of the principles set out in Chapter 7 is that particular failures should be tackled directly using the most appropriate policy instrument. For example possible policy responses to the main economic, or market, failures may be as follows:

- negative externalities – taxes that allow negative externalities to be incorporated in prices;
- positive externalities – depending on the type of externalities, it may be appropriate to promote these through subsidies, such as through public spending or tax credits;
- under-provision of public goods – voluntary agreements or other forms of collective provision. Public information schemes may also have features of public goods; and
- information failures – government may have a role in providing information to aid decision-making.

8.7 Policy must be practically implemented without violating other government objectives. There may be cases where there are practical constraints to their use and the regulatory approach may have to be used as an alternative. Where regulation is enacted, it is important that it is both efficient and respects civil liberties.

8.8 Chapter 7 also described how equity is always an important consideration. England's existing health inequalities reflect economic and social failures, which have developed over a long period of time. These are very unlikely to be redressed through single policy objectives and matching interventions.

8.9 Where there are several failures – relating either to equity or efficiency – or if there are limits to the extent to which a single instrument can achieve a single objective, an integrated package of policy measures may be appropriate.

8.10 The remainder of this chapter discusses each of the main economic levers available to government: taxation, subsidies and service provision, providing information, and regulation. All but regulation have the power of choice in the hands of the consumer, but seek to help them make better choices by correcting market failure. It assesses how suitable these are in the context of public health, and discusses the design issues relevant to each, providing examples where appropriate.

POLICY INSTRUMENTS

Information

8.11 Chapter 7 described how information failures are complex in public health, and how information campaigns need to be correspondingly sophisticated. Information campaigns therefore need to be crafted carefully according to their target audience and the outcomes desired. They can be targeted specifically at those at risk, or to challenge specific misconceptions. For instance, recent anti-smoking campaigns have sought to highlight risks to health other than lung cancer. Attention needs to be paid to those groups with lower health literacy. They may benefit less from information campaigns, unless they are specifically considered and messages for them appropriately constructed. Public health advertising can be used to demonstrate health effects and to counteract the influence of adverts promoting harmful goods. In all cases, advertising campaigns must be designed carefully with the target audience in mind and with clear objectives that are coordinated with other efforts to communicate, particularly important for disadvantaged groups. The monitoring of their effectiveness against their objectives should be rigorous as they can be expensive and their impact can vary greatly.

8.12 Those who advertise goods and services that have adverse health impacts do considerable market research and target their intended audience carefully, using the medium, format, language and presentation of message which they have found is most likely to generate behavioural change. Public health information, if targeted in any less sophisticated manner, will not be equally successful.

8.13 In addition to public health campaigns, health professionals have a role in ensuring that citizens are more fully informed about: the effects on their health of their current lifestyles; of particular risks that they face; and alternative, less harmful, products and lifestyle choices they could make. There remains scope for health professionals to play this role at the key stages when people present themselves to surgeries (such as when registering with a new practice, or during pregnancy and children's early years). It will be possible to link the Electronic Patient Report and records from registration at surgeries to allow health profiling of local areas by both disease and risk factor.

8.14 Individually targeted information based on risk assessments might increasingly become possible with enhanced information systems. Genetic profiling needs to be continually considered as in future it might identify the particular degree of behavioural change required in an individual in order to reduce his or her own personal risk.

8.15 The NHS might also be able to improve its targeting of preventative interventions if it had better data on groups and individuals likely to be at risk – by building up local databases for instance, rather than relying solely on national data².

Taxes

8.16 Taxes can influence people's buying decisions, while still allowing individuals to decide whether and how much to consume. In particular, taxes are generally the most efficient way of correcting negative externalities in economic terms. By setting the tax at the level of the externality, and raising the prices of goods, individuals are forced to take into account wider social costs in deciding whether and how much to consume, given their available resources.

8.17 Taxes should therefore provide incentives for consumers either to lower consumption or to switch to less damaging products, thereby reducing demand for harmful goods to the socially optimal level³. Furthermore, the suppliers of harmful products will have an incentive to produce less damaging goods, either through switching product mixes or investing in new technology.

8.18 When setting the rate of a tax, the level of the externality is important (see box 8.1). Economic theory indicates that the tax should be set at the value of the externality (the underlying principles are discussed in more detail in Annex E), as:

- consumers will be fully charged for the costs to the rest of society that they are causing; and
- their consumption will fall to a level that causes the greatest increase in the overall welfare of society.

8.19 The externality should be measurable, it should be feasible to implement the tax in practice and where possible 'cliff edge' taxes (those where step-changes mean that different rates apply to similar cases, causing distortions in behaviour) should be avoided.

² Before a system can work effectively, there are technical and data protection issues to resolve.

³ A level of consumption that is socially optimal is where the net benefits lost by the consumer are greater than those gained by the rest of society if reduced further. An optimal level is often not zero.

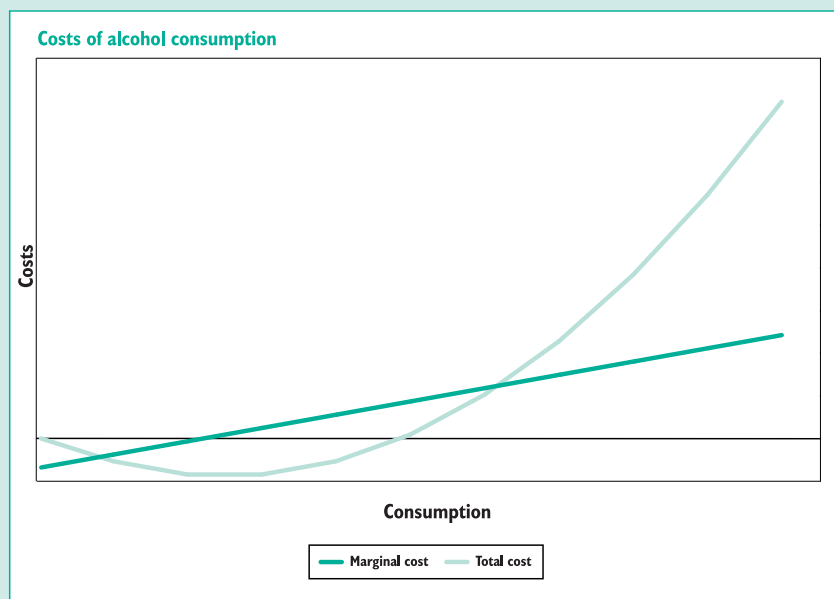
Box 8.1 Externalities, taxes and subsidies

Economic theory states that when a tax or subsidy is to be used to correct an individual's incomplete appraisal of costs and benefits, its level should be equal to the value of the externality. A tax is used if the externality is negative and a subsidy if positive. By setting the tax or subsidy at the external value, the price of a good is made equal to its true social cost, and individuals will tend to consume only as much of a good that will benefit society as a whole (see Annex E for more details).

While the economic principles of such an approach are clear, in practice, a range of issues need to be considered by policymakers:

- **Multiple externalities** – the consumption of some goods can cause a wide range of externalities. For example, walking or cycling to work will improve a person's health, reducing external health costs, but may also reduce road traffic and thus produce further positive externalities. Policy-makers from a range of Departments, such as DH and DEFRA, need to co-ordinate their research and policies.
- **Non-market costs and benefits** – some externalities are very difficult to value because they are not priced by markets. For instance, it is relatively easy to value the extra cost a disease may impose on the NHS, as firm price information is available. However, there is no fixed price for the discomfort caused to passive smokers from cigarette smoke.
- **Variable externalities** – the value of some externalities can vary depending on the situation in which a good is consumed. For example, the externality of alcohol consumption depends critically on the amount consumed – small amounts of alcohol can be beneficial, while large amounts damage health (see the chart below). Ideally when introducing a tax, it should be set at the value of the last unit of the good consumed – called the marginal cost. Therefore, for example, the tax on a heavy drinker could be greater than someone only having a glass of wine during a meal.

The external health cost of alcohol consumption.



It is not always possible to resolve these issues – a variable alcohol tax cannot be practically introduced. In these cases, the value of a tax may be based more on judgement than economic theory. In practice, this need not be a problem, but care must be exercised that the effects of the tax on society in general and specific segments is not negative.

8.20 Some goods have negative externalities that extend beyond health costs and must also be considered when setting a tax. For example, not only is alcohol abuse linked to poor health, but it can also have wider consequences – with links to the social and personal costs of crime, disorder and various anti-social behaviours.

8.21 Such an approach adopts a policy objective of maximising overall social welfare. The benefits to the consumer of a good, and its costs, are valued on an equivalent basis. For example, the improvement in taste when salt is added to food is considered to be as valid as attempting to reduce the associated health costs. Consequently, setting tax merely at the level of the externality may not produce all the potential population health benefits, nor provide the greatest social welfare, given that tastes and preferences are subject to evolution. Such a policy may not be fully effective in promoting public health. This is a particular problem for goods where price rises only have moderate effect on demand (see box 8.2).

8.22 Where greater falls in consumption will result in further improvement in health outcomes, it is often argued that taxes should be set at a rate above the external cost. However, while there can be more gains to population health, the fall in the individual's utility is likely to be higher. From an economic perspective, it could be argued that higher levels of tax (over and above the cost of the externality) would reduce the welfare of society. Consumers may therefore claim that they are being forced to pay more than the additional costs they cause.

8.23 However, setting tax rates above the external cost could still be justified on public health grounds, and possibly on the grounds of improving social welfare over time. The formation of tastes is complex, and as tastes and preferences change over time, so must the nature of individual and social welfare. For instance, public health specialists may judge that the value consumers place on salt is less important than the cost of associated diseases⁴, and that over time consumers would not miss significant reductions in their overall salt intake. In fact, sodium levels in bread did fall by 22 per cent between 1998 and 2001, with no obvious sign of consumer displeasure, and possibly the reverse⁵.

8.24 If government chooses to tax above the external cost, it should be explicit about its intentions. It should set out explicitly why and how higher tax rates will improve public health, and overall social welfare in the long run; and it should always consider the limits to government intervention discussed below.

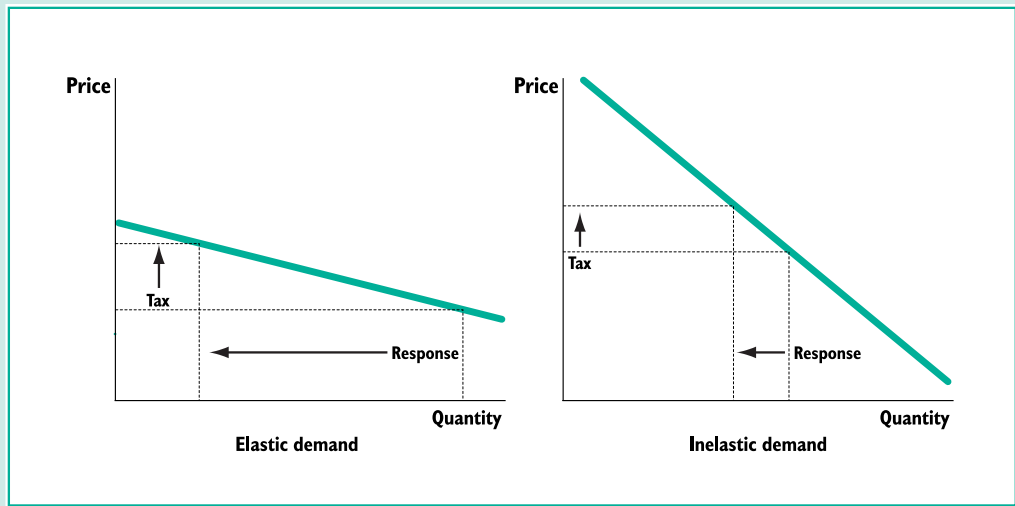
⁴ It could be suggested that given the lack of information possessed by consumers about either the salt content of some foods and its dangers, they may be incorrectly valuing its benefits more than the costs. However, economists would argue that the appropriate policy response would be to provide information to consumers as opposed to using a tax.

⁵ Food Standards Agency's report of work carried out during the summer of 2001

Box 8.2 Demand inelasticity: the effect of taxes and subsidies

Taxes and subsidies encourage changes in the behaviour of consumers by changing the price of a good. By increasing the price, taxes generally lead to a reduction in the demand for a good, while subsidies reduce prices and increase demand.

Though the basic relationship between price and demand is understood, increasing price reduces demand, the extent that a price change impacts on demand, called ‘elasticity’ by economists, varies significantly between goods. For goods described as elastic, a price change will cause a significant response in demand – either through reductions, or by switching demand to other products. On the other hand, demand for inelastic goods is much less responsive.



In general, it is much easier to use taxes or subsidies to promote a change in consumption of goods with elastic demand, as smaller price changes are required to shift consumption behaviour⁶. A relatively small tax is more acceptable to society, and small subsidies are less expensive to the taxpayer. On the other hand, to change the consumption of an inelastic good, high taxes and subsidies are necessary.

One policy option when confronted with an inelastic good is to develop strategies that increase its elasticity. For example, cigarettes tend to be inelastic as smokers are addicted to nicotine. By providing a substitute in the form of nicotine replacement therapy, smokers should be more likely to quit, increasing the elasticity of cigarettes and the effectiveness of taxing tobacco⁷.

8.25 The Government can decide that for some goods, there is no appropriate level of consumption due to the harm that is inflicted either to the individual or others. In these cases, a tax policy is unlikely to be effective, as it will not result in a zero level of consumption, and it is usually more efficient to regulate and ban a product.

8.26 Finally, policy-makers must consider the practical implications of introducing a health tax. A tax would only be suitable if it could be collected efficiently with little evasion or fraud, and with few further distortions. Of course, any system will also have to be lawful. A substantial body of the law governing VAT and excise duties is set at EU

⁶ A corollary is that taxing inelastic goods is more effective when the objective is to raise revenue as opposed to changing buying behaviour. When taxes are levied on elastic goods, the reduction in demand reduces the potential revenue that can be collected. Because the demand for inelastic goods remains relatively unchanged, revenue will be higher. It is therefore no surprise that customs taxes are levied on goods with inelastic demand – tobacco, alcohol and fuel.

⁷ Another factor reducing the effectiveness of taxing tobacco is the tax avoidance either through legal cross-border shopping or illegal smuggling. Action to reduce smuggling can improve the effectiveness of tax in reducing smoking as well as boosting the tax revenue to the Government.

level, which places constraints domestically on the development of these taxes to meet health objectives.

Box 8.3 VAT and foodstuffs

Detailed rules on VAT are available from HM Customs and Excise website. Briefly, the basic position relating to VAT and food is as follows:

Food supplied in the course of catering, including hot take-away food, is standard-rated.

Most food of a kind used for human consumption is zero-rated, except the following which are also standard rated:

- ice cream, similar products, and mixes for making them;
- confectionery, apart from cakes and some biscuits;
- alcoholic and other beverages;
- potato crisps, roasted or salted nuts and some other savoury snack products; and
- products for home brewing and wine making.

8.27 Collecting and enforcing a tax can be expensive, not just for the government but also for businesses required to keep records to show compliance. Where these costs are a significant proportion of the expected tax take, it is likely that they will outweigh the overall benefits of the policy, rendering it impractical. Furthermore, taxes need to be enforceable to be effective.

8.28 There is a wide range of other issues to consider when designing a tax system, including:

- Should the consumption or the production of a good be taxed?
- Should the product or the unhealthy ingredient be taxed?
- How should the tax be calculated – as a percentage of sale price, a flat rate based on the volume sold, or in some other way?

Box 8.4 Dietary based taxes: Salt and fat, the pros and cons?

Changes in diet can affect chances of developing serious diseases later in life. For example, changes in intake of saturated fats (relative to polyunsaturated fats) in the diet are important determinants of changes in cholesterol levels and risks of heart disease. A high intake of salt (sodium compounds) also affects the likelihood of developing high blood pressure and therefore increases the risk of heart disease and stroke.

One proposal put forward is to alter consumption patterns by extending specific taxes to ingredients or foodstuffs that contain harmful ingredients, while subsidising healthier products by removing any taxes. This would be because the relative prices of healthy and unhealthy foods do not reflect externalities. But the impact might increase inequalities and it may not be possible, in practice, to compensate lower income groups, who could be affected disproportionately and unfairly.

Although the impact on any individual of a 'fat tax' is likely to be modest, over time and across the whole population, the health gains may be significant. In one specific proposal, it was estimated that if cholesterol were to be standard-rated for VAT, around 900-1200 lives would be saved per annum⁸. Taxation in areas such as this would need to carefully consider the problems associated with 'cliff-edge' taxation. An additional consideration is that externalities often lend themselves to specific taxes not VAT, as externalities are rarely related to price.

Whether benefits would materialise in practice depends on a number of factors. First, the impact on health may be modest or hard to predict because:

- there is not usually a simple relationship between one type of food and health outcomes, such as the risk of heart disease; and
- consumers and producers would find ways to avoid new taxes in ways that do not necessarily promote healthier behaviour.

These issues might be partly resolved by:

- designing the tax or subsidy to focus on harmful ingredients rather than by taxes on end products (which are relatively blunt instruments);
- looking for ingredients which have healthy substitutes⁹; and
- developing specific taxes, which are based on quantities of harmful ingredients, rather than *ad valorem* taxes, which are based on values that include price and quantity.

There are also practical and political issues to consider:

- political commitments not to increase tax on foodstuffs;
- administrative costs of collection and compliance; and
- legislative burden.

Finally, a tax would need to be considered alongside other potential options to ensure that it was the most cost-effective instrument to use.

⁸ Exploring a fiscal food policy: the case of diet and ischaemic heart disease, M Marshall, BMJ, 2000

Subsidies and service provision

8.29 Where the Government wants to promote a particular good or activity, subsidies can be appropriate. In general, subsidies work in the same way as taxes, except that they can be used to encourage positive externalities, rather than to mitigate the cost of negative externalities. For example, in the absence of a tax on unhealthy foods, healthy foods could be subsidised.

8.30 In common with the use of health taxes, economic theory indicates that a subsidy should be set at a level similar to the positive externality. If the subsidy is set at a rate below this level, the supply of a beneficial good will remain below the correct level; higher levels of supply will boost the welfare of society further. Subsidies set above this level will cause an over-supply of the good; a reduction in supply would increase social welfare.

8.31 It may be decided that a level of supply higher than is economically optimal would benefit public health further, and could be justified, in the same way as decisions to set health taxes at levels greater than the negative externalities. However, this may not be an efficient use of taxpayers' money.

8.32 There is a range of possible methods by which a subsidy could be introduced including payments, tax rebates and holidays, discounts, as well as the direct provision of healthy goods (such as fresh fruit to school children under the School Fruit Scheme initiative). The method used will depend on its cost relative to its benefits, and the extent to which the scheme is open to fraud. As with tax, it is important that subsidies are properly targeted to influence behaviour as intended.

8.33 As well as subsidising consumption, the Government can decide to provide services directly at a reduced or zero cost.

Box 8.5 Gyms and subsidies

Given the positive externalities associated with physical exercise, it could be argued that gyms should be subsidised. Though there is a case for government intervention to support physical activity, a simple gym subsidy is likely to be ineffective and inequitable as:

- subsidising gym fees, which are typically charged on a monthly basis and are not related to the amount of exercise undertaken, could encourage gym membership without actually encouraging exercise¹⁰;
- much of the subsidy would go to people who are already going to a gym or are likely to do so – the people who tend to be healthier. This is an example of “deadweight”; and
- gym membership is more prevalent in the more healthy middle-classes, and gyms are not found in all locations, so the subsidy will tend to assist certain healthier sections of society more, increasing health inequalities.

⁹ Goods that have healthy substitutes, such as full-fat milk, have low price elasticities – a small change in price will cause a significant change in consumption – improving the effectiveness of a tax-based policy.

¹⁰ Membership of a gym does not necessarily mean an individual is exercising regularly.

Regulation and deregulation

8.34 While the policy levers above rely on influencing an individual's behaviour through either providing information or varying a good's price, regulation explicitly directs behaviour. Though this approach is less flexible, as there is less freedom for people to choose their level of consumption, it can be used when:

- a tax, subsidy or information policy mechanism cannot be practically implemented or costs too much; or
- a specific level of consumption is required – for example, society has decided that no level of consumption of a good is acceptable or the costs of the externality are vast; or
- to reinforce the provision of information or promote a change in attitude, as discussed earlier.

8.35 Regulation can be a more cost-effective means of correcting a market failure. There is no transparent cost on the consumer of a tax¹¹, and the Government can avoid implementing a new revenue collection scheme. However, there can be hidden costs that must be identified when a regulation is considered, such as the compliance costs of industry¹² and the reduction in enjoyment or utility for the consumer.

8.36 As well as determining whether new regulation would benefit society through a regulatory impact assessment, the Government again needs to consider how such a regulation will affect civil liberties (discussed in more detail below). The use of voluntary codes does allow this problem to be tempered, but these codes may not go as far as required and can be difficult to enforce.

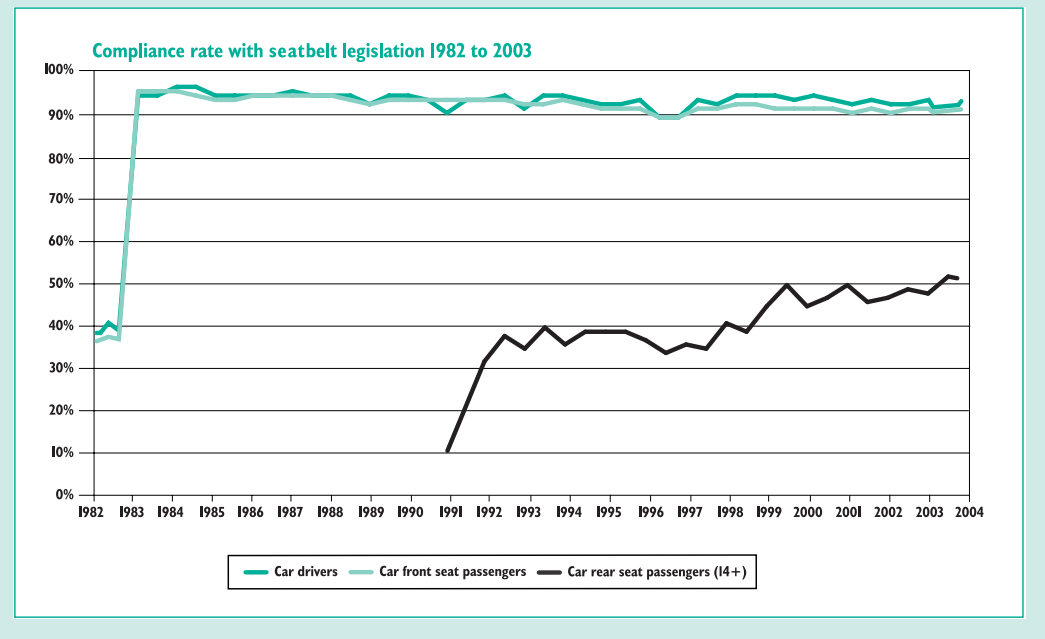
8.37 In addition to the immediate protection afforded from regulations, they can also be used to lead to a change in taste and attitudes. In a case such as the use of seat belts (see box 8.6), regulation followed after a period of encouragement to comply, which began to shift attitudes. Regulation further promoted a change in attitude, such that society no longer sees the change as an imposition.

¹¹ At a society level, a tax is not a cost as the revenue raised can be recycled in the economy and either used by Government to fund services or returned to society by reducing other taxes, though this does not reduce its negative impact on consumers. The cost at society level is the cost of administration.

¹² The inclusion of lost sales or profits due to a regulation as a compliance cost to industry can be justified. However, care is required when determining the scale of any cost. Losses can be mitigated by an industry by reallocating resources, either within a company or across the economy, reducing the overall economic cost.

Box 8.6 UK Safety belt legislation

Before UK safety belt legislation was passed in 1983, only a minority of drivers wore safety belts. Virtually immediately afterwards, the vast majority complied and continue to do so. The Department for Transport estimates that the wearing of seat belts in the front seat saves over 2,200 lives every year. By contrast, the take up of rear seat belt wearing has been slower; but steady progress has been made since 1996.



8.38 New laws or regulation can have an impact on motivations for behaviour change. The banning of smoking in public places, for example across all of California, has been linked to real falls in smoking. The forthcoming legislation to make almost all public places and workplaces entirely smoke free in Ireland will provide further data. If successfully implemented, smoking there in public areas, such as bars and clubs, which importantly are also working environments for many, will no longer be the social norm. That in turn is likely to affect the wider acceptability of smoking among young people. The importance of social approval varies with different behaviours. Changes in social norms can help break addictions, as can pharmacological treatments. Tackling both the social context and the individual's own behaviour (including addiction) may therefore achieve much more than dealing with these separately. Co-ordinated strategies are generally more likely to be cost-effective and result in better outcomes.

8.39 Regulations used to lead, or reflect, social trends tend to be much more successful than those that go against the grain. People are much more likely to abide by such restrictions, whereas laws are difficult to enforce if there is no such widespread acceptance. Furthermore, if attitudes move against a behaviour such as drink-driving, disapproval from one's peers can often be a more powerful restraint than the fear of being caught.

Voluntary Agreements

8.40 Partnership approaches have developed in public health that encourage individuals to take on more responsibility for behavioural change. GP-patient contracts are an example of this. They outline the respective responsibilities of obese and overweight patients and their doctors in achieving weight loss. Another is exercise on prescription, with individuals being able to present vouchers at local sports facilities to ensure that they exercise. Such interventions rely on individual motivation, and do not compromise liberty. However, they do place an obligation on the part of the patient to undertake certain behavioural changes and this can have a more powerful effect than the mere provision of information. An additional benefit of such agreements is that they may help to build a broader social consensus about healthy lifestyles and behaviours.

8.41 The evidence of success of such schemes related to exercise is mixed. However, they would appear to be more likely to be successful if they are informal, unsupervised and home based (rather than at the leisure centre) and involve frequent professional contact¹³, though the value-for-money of such approaches needs to be assessed.

LIMITS TO GOVERNMENT INTERVENTION

8.42 Interventions to improve public health have the potential to reduce significantly personal freedoms. This is most clear when government acts explicitly to prevent or restrict individuals from behaving in certain ways, or from consuming particular goods.

8.43 In general, if the freedom to be curtailed or limited is a significant one and valued highly by the individual, the state would need strong reasons to impose its will over the individual on public health grounds. Usually, there should at least be a strong consensus, preferably public but certainly professional, that the public health measure is necessary to prevent harm to others. Government can of course legitimately intervene when one person's freedom to act would infringe others' human rights – for example, a person with a highly infectious disease may need to be quarantined without consent. In other cases, however, the mere fact of social or professional consensus may not provide sufficient justification for action.

8.44 Ideally, individual consent provides the strongest foundation for government action. However, in cases where it is only the individual's health that is at issue, the question of intervention without consent poses challenges. Nevertheless, there are examples where such measures have been enacted and have become accepted (see box 8.6 on safety belts). First, individuals may already prefer not to be free to choose, and may accept restrictions. Second, they may come to accept the reasons behind the restrictions and no longer see them as an imposition. Nevertheless, it is important to recognise that measures should be justifiable in the public interest and to individuals as a reasonable restriction of their freedom.

¹³ *Randomised Controlled Trials of Physical Activity Promotion in Free Living Populations*, M Hillsdon, *Journal of Epidemiology and Community Health*, 1995

8.45 Where evidence on what works is uncertain or non-existent, measures should be introduced on a pilot basis first and fully evaluated before roll-out. Pilot studies can be used to test not just the evidence of what works and what does not, but also the acceptability of a particular public health measure. Review points should be built in to test expectations of growing consensus. In some cases, public attitudes may be initially hostile, but also may reasonably be expected to change over time once a health measure has been introduced. However, such a change can never be guaranteed, and decisions should be reviewed to ensure that a reasonable consensus has developed. Measures may need to be modified or withdrawn as a consequence, and government should be prepared to accept this as part of the policy development process.

8.46 Finally, decisions about whether or not to proceed with a particular public health measure may be devolved. Devolved and regional assemblies and local authorities may be better placed to judge whether a particular public health measure is important and enforceable, and how to introduce it successfully.

8.47 HM Treasury should produce a framework for the use of economic instruments to guide government interventions in relation to public health, similar to the publication “*Tax and the Environment: Using Economic Instruments*”¹⁴.

¹⁴ *Tax and the Environment: Using Economic Instruments*, HM Treasury, 2002

Table 8.1 Summary of economic and social failures and illustrative examples of policy instruments

Socio-economic failures	Provision of Information	Taxation	Subsidies and service provision	Regulation
Information failure:				
(1) Complex information	Simplified, accurate, branded advertising (e.g. 5 a day).		Local information on physical activity opportunities (e.g. stair prompts).	Information on calorie and nutritional content of food.
(2) Communication of risk	Cigarette pack advertising – e.g. ‘smokers die early’.		Potentially, genetic profiling to assess an individual’s risk.	
(3) Advertising of unhealthy products	Voluntary agreements with manufacturers on marketing and labelling.	Taxes on the promotion of ‘unhealthy’ foods, (but definitional problems).		Voluntary codes and advertising bans.
Incomplete appraisal of costs and benefits				
(1) Positive externalities		Removal of tax anomalies (e.g. in VAT). Tax credits (effectively a subsidy).	Benefits in kind (e.g. School Fruit Scheme, although requires evaluation).	
(2) Negative externalities	Advertising and information.	Taxes on smoking and alcohol.		Smoking bans in public spaces.
(3) Public goods	Promoting preventative health research in charities, community events (e.g. fun runs, swimathons, etc.)		School playing fields, community and recreational spaces. Government preventative health research.	Regulations or voluntary codes (e.g. making spare capacity – such as school playing fields – available to wider community).
Social context failures (shifting social norms)	Advertising (e.g. currently, to wear rear seat belts).	Taxation of smoking (over and above the costs of the externality).	Provision of cycle lanes	Safety belts and drink driving laws. Banning traffic from town centres.
Health inequalities	Targeted information for health ‘illiterate’.		GP preventative services for at risk groups. Improving market access.	

