

Chapter 1

Introduction



Introduction

1.1 Health matters to everyone: to ourselves, our families and our communities. Many people like to be healthy as part of their idea of what constitutes a 'good life'. As well as the efforts that individuals make, many states have in place policies, aimed at a range of stakeholders, that seek to promote health through a variety of strategies and programmes. State-directed initiatives that concern very personal behaviour, or that involve powerful industries, can give rise to many different types of tension. This Report deals with some of the ethical issues that arise from efforts to improve health at the population level. In Box 1.1 we set out the key definitions that we will be using for 'public health'.

Box 1.1: Public health and population health

The term 'public health' is often used in many different senses. In this Report, we distinguish it from the term 'population health' as follows:

Public health refers to "the science and art of preventing disease, prolonging life and promoting health through organised efforts of society" (see paragraph 1.6 and Box 1.4).

Population health is used to refer to the state of health of the members of a certain population.

1.2 Over the past 20 years or so, a comprehensive body of bioethical literature has evolved that addresses ethical conflicts at the *individual* level, for example in relation to end-of-life decisions, abortion or medical research. However, many of the established frameworks and principles in bioethics are of somewhat limited use when applied at the *population* level (see paragraphs 2.3, 2.10, 2.22–2.26). This Report seeks to contribute to the emerging field of 'population-level bioethics'.¹ It does not aim to formulate guidance on, for example, how to allocate resources in particular areas of public health, nor is it concerned with the organisational structure of public health services. Rather, we seek to offer in this Report an ethical framework for the scrutiny of public health policies. In this Chapter we introduce different factors that influence population health, comment on different ways in which the concept of 'public health' is used and how we understand it, and describe the overall structure of the Report.

Background

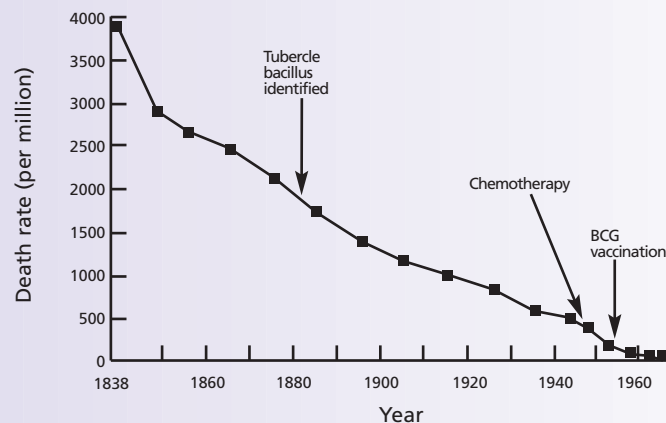
1.3 Over the years, improvements in the health of the population have been achieved by a wide range of measures. These have included those delivered within a healthcare context, such as vaccination programmes, and those delivered in other ways, such as in the workplace, home and general environment (see Box 1.2).² Historically, many of the most substantial advances in improving population health have been made through non-medical developments (see Figure 1.1). Clean air legislation and improved housing and sanitation considerably reduced morbidity and mortality in western European countries in the 19th and 20th Centuries. Similarly, a wide range of highly prescriptive health and safety regulations for public places, and especially the workplace, have helped reduce ill health and premature death.

¹ Wikler D and Brock D (2007) Population-level bioethics: mapping a new agenda, in *Ethics, Prevention, and Public Health*, Dawson A and Verweij M (Editors) (Oxford: Oxford University Press).

² Royal Institute of Public Health (2006) *150 years of public health milestones*, available at: http://www.riph.org.uk/pdf/celebrating_150yrs_june06.pdf.

Box 1.2: Some examples of health improvement measures introduced in the UK

- The first Clean Air Act was passed in 1956, following the London smog of 1952, in which 4,000 people died.³ This was the first piece of legislation to seek to control domestic, as well as industrial, sources of air pollution, and it is said to have contributed to improvements in air quality over subsequent decades.
- Britain has one of the best records on road safety in the world, with the number of deaths per person per kilometre travelled lower than in any other country. The number of road accident casualties peaked in the mid-1960s and has fallen gradually since. This decrease is attributed in no small part to road safety measures, such as laws prohibiting drink driving and requiring the use of seat belts.⁴
- The Industrial Revolution of the Victorian era saw a huge increase in the numbers of people living in urban areas. This created significant population health problems due to overcrowded living conditions and lack of running water.⁵ The Sanitary Act of 1866 forced local authorities to supply running water, provide for disposal of sewage and waste, made overcrowding illegal, and set up special hospitals for infectious diseases. Two further Public Health Acts were passed in 1872 and 1875.
- Coal-mining is a good example of a hazardous occupation that has been made safer by health and safety measures. A century ago, around one miner in a thousand would die each year as a result of a mining-related accident. In recent years, this has been less than one per year in total in Great Britain, with more than 5,500 people working as miners.⁶ Improvements in health have also been seen more recently in the quarry industry, in which the number of reportable injuries was reduced by 52% between 2000 and 2005, following a new health and safety campaign.⁷

Figure 1.1 Tuberculosis death rates in England and Wales, 1838–1970*

Deaths attributable to tuberculosis have declined over time. It is notable that the decline began before the agent responsible for the disease had been identified and before medical interventions were initiated. The reasons for the decline are disputed, but it is clear that factors other than medical interventions, for example, social and economic changes, played a role.

*Source: McKeown T (1979) *The Role of Medicine: Dream, mirage, or nemesis?* (Oxford: Basil Blackwell). Reproduced with permission.

Factors affecting population health

1.4 Many of the issues discussed in the context of public health arise from what some commentators call 'lifestyle diseases', such as obesity- and smoking-related conditions. Implicit in the use of this term is the idea that a disease is simply a result of individuals' choices about how to live their lives. Such a view is problematic as a person's health is influenced by a very wide range of factors. Attributing poor or good states of health simply to different 'lifestyle choices' (whether for specific individuals or particular social or ethnic subgroups of the population) ignores the role of several other important factors that have a substantial influence on health. These include: genetic background, social and economic living standards, the built environment, the availability of, and

³ Jochelson K (2005) *Nanny or Steward? The role of government in public health* (London: King's Fund); Giussani V, *The Clean Air Act 1956: An empirical investigation*, available at: http://www.uea.ac.uk/env/cserge/pub/wp/gec/gec_1994_20.pdf.

⁴ Jochelson K (2005) *Nanny or Steward? The role of government in public health* (London: King's Fund).

⁵ Baggott R (2000) *Public Health: Policy and politics* (Basingstoke: Palgrave Macmillan); Royal Institute of Public Health (2006) 150 years of public health milestones, available at: http://www.riph.org.uk/pdf/celebrating_150yrs_june06.pdf.

⁶ Health and Safety Executive, *Mining*, available at: <http://www.hse.gov.uk/mining/index.htm>.

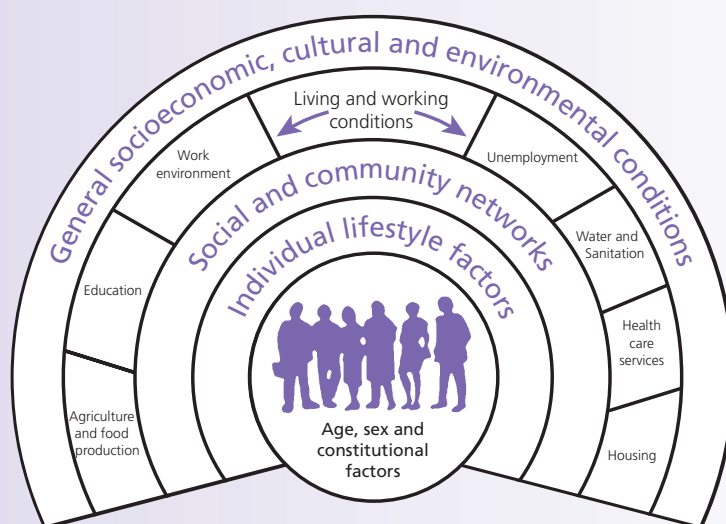
⁷ Health and Safety Executive, *Quarries – Programme of work*, available at: <http://www.hse.gov.uk/quarries/programme.htm>.

access to, preventative and curative health services, and the influence of commercial organisations such as the food and drink industries. In this Report, we have adopted the term ‘personal behaviour’ rather than ‘lifestyle choice’. Personal behaviour indisputably plays an important role, but is itself affected by external factors that are equally important in ethical and policy discussions.

- 1.5 The many factors affecting health create problems for public health professionals and policy makers, as it is often difficult to identify a single causal factor for a specific population health problem. Furthermore, some of the contributory factors may interact in complex ways, and one factor may modify others. Thus, it may be possible to establish that certain industry emissions can cause respiratory problems, but the exact effect on an individual’s health may vary, depending on proximity of work or home to the emission source, genetic predisposition, or personal behaviours, such as smoking (see Box 1.3).

Box 1.3: The main determinants of health*

A schematic overview, by Dahlgren and Whitehead, of the range of factors that can contribute causally, or in modifying form, to the variation in people’s health:⁸



*Originally published in: Dahlgren G and Whitehead M (1991) *Policies and Strategies to Promote Social Equity in Health* (Stockholm: Institute of Futures Studies); Reproduced from: Acheson D (1998) *Independent Inquiry into Inequalities in Health Report*, available at: <http://www.archive.official-documents.co.uk/document/doh/ih/ih.htm>. Reproduced with permission.

The concept of ‘public health’

- 1.6 Given the various contexts of, and approaches to, public health action, and the many factors affecting health that could be targeted, defining ‘public health’⁹ is not straightforward (see Box 1.4). The Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom defines it as: “The science and art of preventing disease, prolonging life and promoting health through organised efforts of society”.¹⁰ We use the concept in a similar way. In our interpretation

⁸ Note that the differing sizes of the sections in the diagram are not intended to represent their importance or other meaning, but a case-by-case assessment is needed of the relative weight of the different factors and the role of interactions between them. Note also that whereas the diagram uses the term ‘lifestyle factors’, in this Report, we have chosen to use instead the term ‘personal behaviour’ (see paragraph 1.4).

⁹ Similarly the concept of ‘health’ is far from clear: for example not everyone agrees with the World Health Organization’s concept of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity”; see: Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19–22 June 1946; signed on 22 July 1946 by the representatives of 61 States (Official Records of the World Health Organization, no. 2, p.100) and entered into force on 7 April 1948.

¹⁰ See Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom *What is Public Health?*, available at: http://www.fphm.org.uk/about_faculty/what_public_health/default.asp.

of the term, two notions are of special importance: first, the *preventative*¹¹ nature of public health interventions, and secondly, that these are to be achieved through *collective efforts*. In our view, this characterisation has clear implications for the state to enable, sustain and lead on such efforts (see paragraphs 1.11, 2.41–2.44).

Box 1.4: Public health: definitions

There are several different definitions of public health, including the following:

"The science and art of preventing disease, prolonging life and promoting health through organised efforts of society." *Faculty of Public Health of the Royal Colleges of Physicians of the United Kingdom*¹²

"The mission of public health is to 'fulfil society's interest in assuring conditions in which people can be healthy'." *Institute of Medicine, USA*¹³

"Public Health is the science of protecting and improving the health of communities through education, promotion of healthy lifestyles, and research for disease and injury prevention" *Association of Schools of Public Health, USA*¹⁴

"An art and a science; and also a movement dedicated to the equitable improvement of health and well-being (of communities with their full participation)." *World Federation of Public Health Associations*¹⁵

"The key functions of public health agencies are assessing community health needs and marshalling the resources for responding to them, developing health policy in response to specific community and national health needs, and assuring that conditions contributing to good health, including high-quality medical services, safe water supplies, good nutrition, unpolluted atmospheres and environments that offer opportunities for exercise and recreation are available to the individuals." *World Medical Association*¹⁶

"The science and the art of (1) preventing disease, (2) prolonging life, and (3) organized community efforts for (a) the sanitation of the environment, (b) the control of communicable infections, (c) the education of the individual in personal hygiene, (d) the organization of medical and nursing services for the early diagnosis and preventive treatment of disease, and (e) the development of the social machinery to ensure everyone a standard of living adequate for the maintenance of health, so organizing these benefits as to enable every citizen to realize his birthright of health and longevity." *CEA Winslow, former Chair of Department and Professor of Public Health, Yale University*¹⁷

- 1.7 There are similarities in the way that the term 'public health' is used with the use of other common terms such as 'public education', 'public highways' and 'public libraries'. As we discuss below, these are all underpinned by the concepts of 'public good' and 'public services'.

Public goods and public services

- 1.8 In economic terms, public goods are characterised by two principal properties: they are *non-rival* and *non-excludable*. So, for example, fresh air might be considered a public good because one person breathing it outdoors does not affect other people's ability to do so (non-rivalness), and because it is practically impossible to prevent everyone from doing so (non-excludability)¹⁸. Other examples are infrastructural arrangements such as cycle lanes or parks.¹⁹ The term 'public good' is also often used to denote what is better described as 'public services': resources or institutions that respond to important needs of members of the population, and that are managed by the state in a way that ensures that the needs are

¹¹ While 'preventing diseases' may be understood as suggesting a somewhat one-sided focus on prevention, we also recognise that preventing disease progression is an integral part of public health strategies, as are efficient curative services. However, in our view, the overall emphasis of public health initiatives is on preventative measures. It is worth pointing out that improved curative systems are often seen as more acceptable by the public than attempts at preventing poor health, which are more frequently seen as unnecessarily intrusive or paternalistic.

¹² See: http://www.fphm.org.uk/about_faculty/what_public_health/default.asp.

¹³ Institute of Medicine, Committee for the Study of the Future of Public Health, Division of Health Care Services (1988) *The Future of Public Health* (Washington, DC: National Academy Press).

¹⁴ See: <http://www.whatispublichealth.org/what/index.html>.

¹⁵ See: <http://www.wfpha.org/>.

¹⁶ World Medical Association (1995) *World Medical Association Statement on Health Promotion*, available at: <http://www.wma.net/e/policy/h7.htm>.

¹⁷ Winslow CEA (1920) The untilled field of public health *Modern Medicine* 2: 183–91.

¹⁸ Varian HR (1994) *Microeconomic Analysis* (New York: Norton).

¹⁹ It is widely agreed that the criteria of non-rivalness and non-excludability are not as clear-cut as they seem, and different goods may fulfil the criteria to different degrees. Thus, although there may be rivalry between different users of cycle lanes

addressed in a fair and effective manner. In this sense, public services are a facility or resource that is valuable to all citizens, although its availability is not necessarily unlimited or free of charge.

- 1.9 There are different reasons as to why certain public goods or services should be considered worthy of protection.²⁰ One is based on fairness considerations. For example, in the case of air, individuals (or, more often, industries) may not be too concerned about polluting it, perhaps thinking that their particular actions are of a small or unimportant nature. However, taking advantage of a good, while not contributing to its maintenance, can be a form of ‘free-riding’ (see also paragraph 4.17) that, if more widely adopted, would adversely affect the sustainability of the good in question. Moreover, the ‘costs’ of the unfair action may be incurred by people other than those who initiated it; economists often call such costs ‘externalities’. The period of rapid industrial expansion and associated uncurbed air-pollution that began in the first half of the 20th Century provides a clear illustration of this. Air pollution harmed many people who had no relationship with the industries that were the main cause, incurring significant health costs, but gaining no benefits (see Box 1.2).
- 1.10 Then there are services that society provides in order to ensure that everyone receives the benefits of them, such as education for children. Here, individuals may be able to meet the need, but there is no guarantee that they will do so. In recognition of the vulnerable status of children, and the importance of basic knowledge, most developed countries have in place a public education system. Such systems are often centred on a core curriculum and require education up to a certain age. Once such systems are in place they are usually monitored to ensure that they assist in furthering goals such as equality of opportunity and a sense of community.
- 1.11 An important part of the UK’s public health system is the National Health Service (NHS). The main reason for seeing such a system as a public service is that, like children’s education, the need it addresses is considered too important to be left to private suppliers alone:
- First, focusing on equity and fairness considerations, there is a risk that a fully privatised approach would increase inequalities. Although part-payment is required for some services, currently a wide range of core NHS services are provided ‘free at the point of need’ to all,²¹ irrespective of sex, age, risk-assessments or socio-economic status. Experiences from other countries indicate that highly privatised systems result in unequal access to healthcare services and increased health inequalities.²² As we set out in the next chapter (see paragraphs 2.27–2.32), the reduction of health inequalities must be one of the principal aims of public health policy. The provision of some form of public healthcare system – though not necessarily organised in the same way as the NHS – is therefore a public service of exceptional

and parks, and although it may be possible to exclude some users from access through, for example, entrance fees to parks, in principle it can make sense to see such goods as part of the package of non-rival, non-excludable public health goods.

²⁰ Public goods need not necessarily be provided only through public providers, such as governments: many private organisations play important roles in their delivery. In addition the voluntary sector, including churches and charities, contributes considerably to the recognition and maintenance of public goods. This variety in methods of organisation need not undermine the fact that the end result remains a public good that is available to all at a reasonable cost and there is in place an appropriate form of public accountability.

²¹ Note, however, that NHS services are not necessarily free for people who do not normally live in the country, including failed asylum seekers (although there are some situations in which their treatment would be free, for example emergency treatments and treatments of certain infectious diseases in order to protect the health of the wider population). Note also that NHS prescriptions and dental care are not free to everyone. Department of Health (1999) *HSC 1999/018 Overseas visitors’ eligibility to receive free primary care*, available at: http://www.dh.gov.uk/en/PublicationsAndStatistics/LettersAndCirculars/HealthServiceCirculars/DH_4004148; Department of Health (2004) *Implementing the overseas visitors hospital charging regulations: Guidance for NHS trust hospitals in England*, available at: http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4080313.

²² Mackintosh M (2003) *Health Care Commercialisation and the Embedding of Inequality* (RUIG/UNRISD Health Project Synthesis Paper), available at: [http://www.unrisd.org/80256B3C005BCCF9/\(httpAuxPages\)/4023556AA730F778C1256DE500649E48/\\$file/mackinto.pdf](http://www.unrisd.org/80256B3C005BCCF9/(httpAuxPages)/4023556AA730F778C1256DE500649E48/$file/mackinto.pdf).

value, complementing other strands of public health initiatives, such as provision of clean water, social housing and environmental protection. We also note that in ratifying the European Social Charter, the United Kingdom has recognised a 'right to health'. This, in effect, obliges states to provide effective healthcare structures for the population and to implement policies for the prevention of illness.²³ The Charter also requires states to ensure "that any person who is without adequate resources and who is unable to secure such resources either by his own efforts or from other sources be granted adequate assistance, and, in the case of sickness, the care necessitated by his condition".²⁴

- Secondly, a system such as the NHS may help to protect people from making bad choices for themselves over their healthcare. Were the healthcare system privatised, people might take 'health gambles' by buying insufficient or no health insurance, either to save money or because they are unable to afford it. Under the current system, the state collects mandatory contributions to the NHS through general taxation.²⁵ In this sense, the state might be said to 'force its citizens to be free',²⁶ stipulating that access to healthcare is an essential part of enjoying freedom, and some perceive this as an unjustified act of paternalism (see paragraphs 2.35–2.40). However, we start in this Report with the assumption that in maintaining the NHS as a publicly accountable system that provides resources and expertise to meet the basic health needs of all members of the public, the state fulfils an important part of its *stewardship* function.²⁷ The implications of the notion of *stewardship* will be expanded later in the Report (paragraphs 2.41–2.44, see also paragraph 2.39).

1.12 In summary, the collective efforts of all parts of society, including individuals, healthcare professionals, industries, urban planners, health policy and other policy makers and politicians, should contribute to generating and supporting measures that improve the health of all. The role of the government is to provide certain key services that should not be left to the market alone, and to establish the rules under which the different agents operate in a way that is compatible with promoting population health and reducing inequalities. The stewardship role of the state also implies, among other things, that it has good reasons to intervene where there is a risk that some agents will free-ride on important goods at the expense of others, or where only regulation can ensure that desirable goods or services are available. At the same time, the stewardship responsibility of the state does not absolve other parties, such as the commercial sector, from their responsibilities. We outline the implications of this web of responsibilities for public health in more detail in Chapters 2–7.

Outline of the Report

1.13 We begin by setting out in Chapter 2 a general structure for the consideration of ethical issues arising in public health by explaining the guiding principles that feature in what we

²³ Hunt P (2006) *Report of the Special Rapporteur of the Commission on Human Rights on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health* Sixty-second session of the United Nations Human Rights Commission, Agenda item 10, E/CN.4/2006/48, paragraph 4, available at: <http://daccess-ods.un.org/TMP/4598173.html>.

²⁴ *European Social Charter*, revised 1996, Part I Article 13, available at: <http://conventions.coe.int/treaty/en/Treaties/Html/163.htm>.

²⁵ Statistics collated by the Organisation for Economic Co-operation and Development (OECD) show that, in 2004, the amount of UK health expenditure that was publicly funded, either from taxation or from national insurance contributions, equated to US\$2,164 per person (in purchasing power parities), compared with an OECD average of US\$1,833 per person (note that the OECD only includes developed countries), OECD (2007) *OECD Factbook 2007: Economic, environmental and social statistics*, available at: <http://titania.sourceoecd.org/vl=2896985/cl=31/nw=1/rpsv/factbook/>.

²⁶ Rousseau famously argued that the Social Contract he proposed enabled the people of a state to be secured "against all personal dependence"; Rousseau JJ (1762) *Social Contract*, Book I, part 7, translated by Cole GDH; text available at: <http://www.constitution.org/jjr/socon.htm>.

²⁷ Saltman RB and Ferroussier-Davis O (2000) The concept of stewardship in health policy *Bulletin of the World Health Organization* 78(6): 732–9; Jochelson K (2005) *Nanny or Steward? The role of government in public health* (London: King's Fund).

call the 'stewardship model'. We develop this framework from discussions about different conceptions of the role of the state, and about the 'harm principle', established by the philosopher John Stuart Mill. We go on to identify a range of positive goals that public health programmes should seek to achieve under the stewardship model, as well as negative constraints that need to be considered. In establishing this framework we consider, among other things: conceptual and normative questions arising from seeking to reduce health inequalities; the concept of consent in population-level bioethics as opposed to individual-centred bioethics; issues raised by the recent emergence of corporate social responsibility; and the question of whether it is useful to establish an exhaustive list of principles that should feature in the stewardship model.

- 1.14 Chapter 3 concerns the policy process. In it we consider how certain elements of the ethical framework play out in a policy context. We first discuss conceptual and practical problems in relation to assessments of 'evidence', 'risk' and 'choice', and highlight the need for clarity of these concepts. We then return to the observations on health inequalities made in Chapter 2, and illustrate their bearing on policy and practice. We describe what we call the 'intervention ladder', a device for comparing different policy options according to their degree of intrusiveness. In the second part of the chapter we examine more closely which parties are, and should be, involved in the policy process, ranging from professional groups to the media.
- 1.15 There follow four chapters of case studies that aim to illustrate in more detail the stewardship model and other concepts introduced in Chapters 2 and 3. Chapter 4 concerns infectious diseases; obesity is considered in Chapter 5; alcohol and smoking in Chapter 6; and fluoridation of water in Chapter 7. In each chapter, we provide a brief outline of the scientific evidence relating to health impacts, referring the reader elsewhere for more comprehensive analyses of previous scientific or policy discussion.²⁸ In each chapter we comment on options for intervention, and on specific ethical and policy-related issues. Several conclusions and recommendations are made, aimed at various agencies, including industry and the government.
- 1.16 As many respondents to our consultation²⁹ observed, a range of other public health issues could have been included as case studies. Examples include mental health, breast-feeding, environmental pollution, radiation, additives in foods, or complementary therapies. The Working Party decided to focus on the specific cases mentioned above because they illustrate the ethical and policy-relevant tensions that arise in public health but have not always been explicitly recognised in government or other policy documents.³⁰
- 1.17 Finally, Chapter 8 draws together the central themes of the Report. We comment on a range of important over-arching and cross-cutting issues and reassess some of the principal assumptions made in Chapters 2 and 3.

²⁸ See Appendix 7 for a list of major recent reports.

²⁹ See Appendix 2 for a list of respondents and a summary of responses.

³⁰ For example, the White Paper *Choosing Health* emphasised individual choice, with little discussion of the range of factors that can enhance or reduce options for people, see paragraph 1.4 and paragraphs 3.20–3.21.