



HEALTH IS GLOBAL

PROPOSALS FOR A UK GOVERNMENT-WIDE STRATEGY

A report from the UK's Chief Medical Adviser
Sir Liam Donaldson

‘What happens abroad has never mattered more for our security and prosperity. In an age of rapid global change, the task for Government is to seek to understand and influence the world for the benefit of our people and all people.’¹

Prime Minister Tony Blair

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ABBREVIATIONS

CMH	Commission on Macroeconomics and Health
CSDH	Commission on Social Determinants of Health
DALY	Disability-adjusted life year
DDA	Doha Development Agenda
Defra	Department for Environment, Food and Rural Affairs
DfES	Department for Education and Skills
DFID	Department for International Development
DH	Department of Health
DTI	Department of Trade and Industry
EC	European Commission
ECDC	European Centre for Disease Prevention and Control
EU	European Union
FAO	Food and Agriculture Organization
FCO	Foreign and Commonwealth Office
FSA	Food Standards Agency
G8	Group of Eight (major industrialised nations)
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GAVI	Global Alliance for Vaccines and Immunization
GDP	Gross Domestic Product
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
GHSI	Global Health Security Initiative
GNP	Gross National Product
HIPC	Heavily indebted poor countries
HMT	HM Treasury

HO	Home Office
HPA	Health Protection Agency
MDG	Millennium Development Goals
MDR-TB	Multi-drug resistant tuberculosis
MOD	Ministry of Defence
MRC	Medical Research Council
NGO	Non-governmental organisation
OECD	Organisation for Economic Co-operation and Development
OIE	World Organisation for Animal Health
OSI	Office for Science and Innovation
PCRUI	Post-Conflict Reconstruction Unit
PSA	Public Service Agreement
R&D	Research and development
RCN	Royal College of Nursing
SARS	Severe acute respiratory syndrome
STI	Sexually transmitted infection
TB	Tuberculosis
TRIPS	Trade-Related Aspects of Intellectual Property Rights
UN	United Nations
UNICEF	United Nations Children's Fund
UKT&I	UK Trade and Investment
WHO	World Health Organization
WTO	World Trade Organization



FOREWORD

In today's globalised world, we can no longer consider the health of the UK in isolation. Globalisation has intensified human interaction, bringing countries closer together and making national borders more porous. The barriers of time and geography that traditionally separated people and nations have been reduced, leading to an intensification of international trade, travel and communications. These trends are not new but their increase could affect the health of everyone, everywhere. Poverty and ill health in one country threatens the prosperity and wellbeing of populations in all countries. People everywhere have a right to the highest attainable standard of health. Protecting and promoting health is a duty of our global citizenship.

Chronic diseases such as obesity, diabetes, mental ill health, and alcohol- and tobacco-related illness – once deemed the preserve of industrialised nations – are now worldwide problems. The dramatic increase in the incidence of HIV/AIDS and tuberculosis in some countries, and the emergence of avian influenza in Asia, could pose major threats to the health of the UK population. It may be a cliché, but it is true that infectious diseases do not respect borders. Just as diseases cross borders, so can narcotics, unhealthy lifestyles and chemical and biological pollutants.

Global health issues are complex, interdependent and, more often than not, influenced by actions or circumstances in countries other than those directly affected. The determinants of global health include poverty, conflict, violence, climate change and environmental degradation, illegal drug trafficking and the effects of international trade. These are cross-border problems. Solutions require cooperative action.

However, globalisation also provides immense opportunities for improving global health. Opportunities for developing and sharing knowledge and research are unprecedented. There is now a large number of public-private partnerships dedicated to global health issues – with more resources available than ever before.

With globalisation, international governance structures have proliferated. While these offer new shared benefits, they also mean that decisions directly affecting the UK population and UK resources are often made at the international level. An active and strategic engagement in these fora is essential for the protection and promotion of the safety of our population – and the way we most effectively conduct our global health business.

To address challenges to global health and ensure that the UK harnesses the opportunities of globalisation, we need to develop a UK government-wide strategy to work effectively with our international and domestic partners.

There is much to build on. Since 1997 we have had three White Papers on international development, the last of which was published in 2006. There is the White Paper from the Foreign and Commonwealth Office on international priorities – many of which have linkages to global health. The Office for Science and Innovation has published *Infectious Diseases: Preparing for the Future*. Recent G8 communiqués all highlight

global health issues. The Prime Minister's Commission for Africa gives the UK a leading role to end poverty and tackle health inequality in Africa, tackle HIV and AIDS, and meet the 2015 Millennium Development Goal Targets. DFID is currently revising its 2000 Target Strategy Paper for Health. Our EU engagement provides numerous opportunities to drive the global health agenda forward. These and other frameworks highlight the importance of a multi-sector approach to achieving health outcomes. And we know this from our own experience in the UK.

The UK's contribution to improving global health reflects this multi-sector approach too. Tackling communicable diseases, chronic diseases, animal health, bioterrorism, conflict and post-conflict healthcare, climate change and health worker migration is a multi-faceted and complex task. DH, DFID, FCO, DTI, Defra and many other government departments and their agencies all have contributions to make. If the UK is to maximise its impact on the international stage these inputs need to be effectively coordinated.

The case for the UK to influence others is strong. DH and its devolved administrations, the NHS and arm's length bodies – such as the Health Protection Agency – have international standing and many countries have health systems originally modelled on that of the UK. DFID is widely respected as a development agency. The FCO influences at the highest levels internationally. And many departments, divisions and individuals in other government departments have international credibility.

Health is Global: Proposals for a UK government-wide strategy makes the case for concerted action on global health and for developing a global health strategy, one that will benefit the health of the UK population and those in the rest of the world. The report provides a framework for developing a strategy, and provides the basis for a public debate on what current global health priorities are, what the UK should focus on, and what the global health strategy should look like.

Over the first part of 2007 a government-wide steering group will lead the process of developing the strategy. This group will consult widely, both within government and outside. I look forward to the debate ahead and moving from the proposals set out in this report to the development of a robust UK government global health strategy.



Sir Liam Donaldson, Chief Medical Adviser

THE REPORT IN OUTLINE

This report provides the rationale for a UK global health strategy. A coherent strategic framework is essential if the UK is to maximise its impact on global health. The report outlines the need for an international approach if we are to protect the health of the UK population, reduce global poverty and harness the opportunities of globalisation. In today's world, neither global nor domestic health problems can be solved by one country acting alone; concerted partnership is necessary at both national and international level.

This report is not in itself a strategy document. It sets the scene and raises a number of questions. It will be used over the coming months as a basis for engaging with partners across government and beyond to develop, together, a coherent and effective UK global health strategy.

The report builds on the 2005 UK G8 and EU Presidencies. Global health featured strongly in both.

Chapter 1 looks at the objectives of a global health strategy.

Chapter 2 provides a brief overview of the current state of the world's health. It looks at the burden of communicable and non-communicable disease. It also describes key determinants of health, focusing in particular on climate change, health inequalities and inequity both within and between countries. Chapter 2 also highlights the importance of health systems and research.

Chapter 3 examines the implications of globalisation on human health. The chapter concludes that trade and investment, travel, migration and communication all have positive and negative effects on human health.

Chapter 4 explains why we need to take action on global health. The report gives five reasons why it is important for the UK to engage with the global health agenda:

- It is necessary for making our world more secure, protecting the health of the UK population and contributing to safeguarding our domestic investment in health and the economy.
- It is central to our efforts on sustainable development.
- Health is a valuable commodity to trade in.
- Health is a global public good.
- Health is a human right.

A key challenge for the strategy will be to navigate an economically and ethically acceptable path through these diverse and sometimes conflicting areas.

Chapter 5 provides a framework for taking the strategy forward. The range and extent of global health problems is such that we need to prioritise areas for action and ensure the most effective use of our available resources. As a starting point, Chapter 5 identifies four broad areas:

- health and foreign policy
- health and development
- health and the UK economy
- global threats to UK health

Chapter 6 describes how government needs to work with domestic and international partners. It is essential that the government provides an environment that enables those with the right skills to work on global issues.

1

INTRODUCTION

1.1 WHAT IS THE OBJECTIVE OF A UK GLOBAL HEALTH STRATEGY?

If the UK is to protect the health of its population, harness the benefits of globalisation and maximise its contribution to international health and development, it needs to have a clear, coherent and coordinated approach to the many issues that influence global health.

A UK global health strategy can provide such a framework – with government departments working even more effectively together and more closely with non-governmental agencies. Many parts of government already have strategies that contribute to improving global health. Developing an overarching framework provides the opportunity for these departments to see what everyone else is doing, where they fit in and identify areas where they can better contribute to the work of others. Where government departments, agencies and devolved administrations have not articulated their contribution to international health and have something to offer, the development of a government-wide strategy may provide an opportunity for them to consider what they might do.

A global health strategy will bring together into one place all UK international health activities and factors that influence global health. Lead agencies can be clearly identified. Developing a strategy will enable departments and agencies to understand better each other's priorities – and this enables approaches that minimise conflict of interests.

Agreeing global health priorities and articulating objectives means we can influence more effectively at domestic, European and international level. In emphasising our global interdependence, the strategy can act as a global call for action to address the problems that none of us can tackle alone.

A UK government global health strategy will need to build on existing national and international frameworks. It will need to support agencies and partnerships with international mandates and promote principles of best practice in areas such as health protection, development and trade. The strategy will look to add value and not to duplicate.



1.2 UNPRECEDENTED SUPPORT FOR GLOBAL HEALTH

Recent years have witnessed an international social movement that promotes health as a shared global value. The pool of resources for addressing global health issues is greater than ever before.

Recent G8 and EU Presidencies have highlighted global health. The UK's 2005 Presidencies of both bodies were milestones. Tackling poverty in Africa and climate change were key themes in our G8 Presidency and are crucial if we are to improve global health. We highlighted the importance of investing in health systems – working in partnership with governments of developing countries. We now have a timetable to get to the 0.7% Gross National Income spend on development by 2013. We stepped up our funding to the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), the Global Alliance for Vaccines and Immunization (GAVI) and the Polio Eradication Initiative. *Active Diplomacy for a Changing World*, the Foreign and Commonwealth Office's (FCO's) recent White Paper outlining UK international priorities, specifically builds on the UK G8 Presidency.

The 2006 St Petersburg Summit reiterated Gleneagles' conclusion that climate change needs an urgent global response. The recent Stern Review on the economics of climate change highlights the linkage between climate change and ill health.² The G8 agreed on the need to accelerate discussions on a post-2012 framework that includes the US, China and India.

Peacekeeping, post-conflict response, nuclear safety, non-proliferation, counter-terrorism, weapons of mass destruction and intellectual property rights are all examples of issues that the G8 is working together on that have an impact on health. All impact or have the potential to impact on the health of the UK population or the health sector.

Three of the eight Millennium Development Goals (MDGs) relate directly to health, but health is also an important contributor to several of the other goals. The Department for International Development (DFID) leads for the UK on the MDGs but many other government departments can make an impact on the health-related ones – the Department of Health (DH) and the NHS especially – and examples are given in Annex A.



The United Nations (UN) Millennium Review Summit looked at progress towards the 2015 MDG targets. It concluded that at the present rate we are not on track to meet many of the targets.

The Prime Minister's Commission for Africa Report³ highlighted the need to invest in health, education, water and sanitation, and treatment for HIV and AIDS. The report provides a framework for action in each of these areas.

Health inequalities and improving patient safety were both central to the UK's EU Presidency. Tackling health inequalities is a priority for the UK Government. We are, for example, the driving force in the World Alliance for Patient Safety – now with its 10 areas for action⁴ – and the World Health Organization (WHO) Commission on Social Determinants of Health (CSDH).

The health-related work of our EU Presidency also aimed to strengthen the EU's voice on global health (particularly on tobacco, food, alcohol, HIV/AIDS, pandemic influenza preparedness, health inequalities and patient safety) and encourage better working with key global players such as WHO.

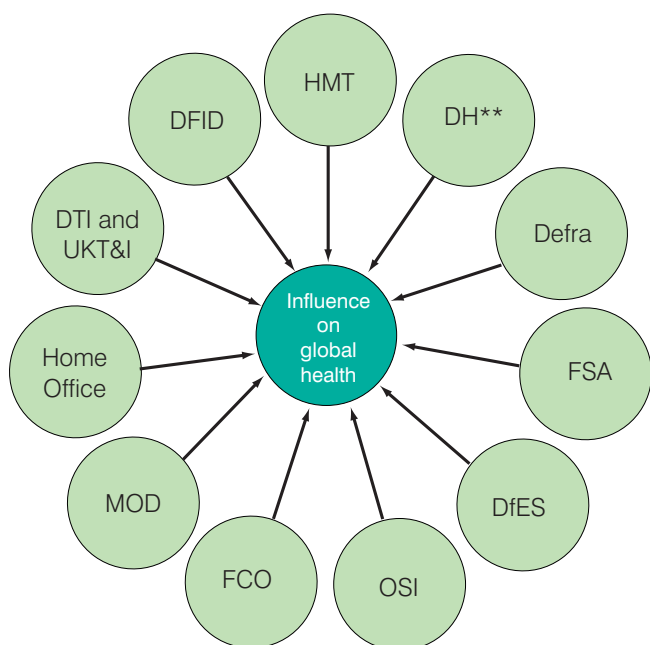
1.3 WHY IS THE DEPARTMENT OF HEALTH IN A GOOD POSITION TO TAKE THE LEAD?

Many government departments have a role in improving global health. There are good examples of cross-government working but, inevitably, most departments see global health from a specific angle – for example development, security or trade. Although DH, with the devolved administrations, has a particular interest in the health of the UK population, it is uniquely positioned to lead the development of a joined-up UK government global health strategy. Many of the individual policy departments in DH have significant strands of international work, and most of these require working across government (eg vaccine-preventable disease, pandemic response, tobacco control, patient safety, health inequalities, obesity and HIV/AIDS).

Many DH objectives and targets agreed under its 2005–08 Public Service Agreement (PSA)⁵ require cooperative international solutions (for example, reducing adult smoking rates and halting the year-on-year rise in obesity among children under 11*), as does DH's overall strategic objective: to improve the health and increase the life expectancy of the UK population. Furthermore, these international solutions require the input of many domestic government departments.

The 2004 White Paper, *Choosing Health: Making Healthier Choices Easier*,⁶ identified six national public health priorities for 2005–08 with associated targets. DH has responsibility for these. All have a global dimension. In each case, action at global level will support delivery of these domestic targets.

Figure 1: Examples of government departments and agencies that influence global health



**Includes devolved administrations, the NHS and arm's length bodies.

* Promoting widespread ratification of the WHO Framework Convention on Tobacco Control (already ratified in the UK) and the development of effective protocols to tackle issues such as illicit trade and cross-border advertising is essential to achieving the target of reducing tobacco-related illness in the UK. UK implementation of the WHO Global Strategies on Diet, Physical Activity and Health and on Non-Communicable Diseases will support the PSA target of curbing rising levels of obesity in the UK.



There are other reasons why DH is well positioned to take a lead. As a member state, the UK participates fully in WHO activities and DH has lead responsibility for national relations with WHO. Of course, discharging its responsibilities effectively means that DH must work very closely with DFID, FCO and DTI/ the Patent Office. Over the next year, DH and DFID will be developing a joint strategy for UK engagement with WHO.

DH has considerable influence in setting EU and EC health policy and strategy, and there is increasing interest in the global aspects of these.

1.4 WHO WILL THE UK GLOBAL HEALTH STRATEGY BE FOR?

The strategy will have a number of audiences. It will encourage the development of more coherent policy between government departments and agencies whose work has implications for global health. It will help cross-government working and guide the development of policy in individual departments. For example, it will help the Department of Health,

the NHS and partner agencies such as the Health Protection Agency (HPA) and their counterparts in the devolved administrations, to prioritise actions to improve global health.

In addition, we anticipate that developing a strategy will stimulate thinking among others with an interest in improving global health: non-governmental organisations (NGOs), the private sector, independent foundations, professional organisations and multilateral organisations such as the EU, WHO and the World Trade Organization (WTO). We believe that a cross-sector approach will be of particular interest.

Table 1: The UK's six public health priorities – national health challenges are global health challenges

UK	Global	UK–global linkage
1. Tackling health inequalities		
Life expectancy for males in Manchester is almost nine years less than in East Dorset ⁷	Life expectancy in Sierra Leone is less than half that in Japan ⁸	Opportunities for exchange of best practice (eg CSDH)
2. Reducing the number of smokers		
Smoking is the greatest preventable cause of illness and premature death in England ⁹	Tobacco is the second major cause of death in the world ¹⁰	Tobacco is a multinational business with global marketing strategies; illicit trade of tobacco products is also a global issue
3. Tackling obesity		
Nearly a quarter of the population of England is clinically obese ¹¹	One billion adults worldwide are overweight, 300 million of which are clinically obese	Food retailing and marketing is a multinational business
4. Improving sexual health		
Rates of the major sexually transmitted infections (STIs) and HIV are rising in the UK ¹²	Worldwide, WHO estimates that at least 340 million new cases of STIs occur annually ¹³	Increased travel and migration can contribute to the spread of STIs; global action on STIs could help reduce such spread
5. Improving mental health		
One in six people in England are suffering with a mental disorder at any time ¹⁴	450 million people worldwide are affected by mental, neurological or behavioural problems at any time ¹⁵	Conflict and poverty worldwide are major contributors to mental health problems. There are opportunities for lesson learning, particularly in refugee communities
6. Reducing alcohol-related harm		
15,000–22,000 deaths and 150,000 hospital admissions annually are attributed to alcohol misuse in England ¹⁶	76.3 million people worldwide have diagnosable alcohol-use disorders ¹⁷	The retailing and marketing of alcohol is a global business, requiring action at global as well as national level. There are opportunities for lesson learning

2

GLOBAL HEALTH TODAY

2.1 WHAT IS GLOBAL HEALTH?

There has been a paradigm shift from international to global health. The US Office of Global Health Affairs points out that while 'international' is literally defined in terms of national borders, 'globalised' encompasses the entire world. Our globalised world means that countries share many of the same health problems, though perhaps of different magnitudes. The result is that 'global health' becomes more aligned with current realities and more relevant to each country: engaging globally in health means working together to share solutions to common problems.¹⁸

The US Institute of Medicine in 1997 defined global health as 'health problems, issues and concerns that transcend national boundaries, may be influenced by circumstances or experiences in other countries, and are best addressed by cooperative actions and solutions'.¹⁹

Most domestic health issues require international solutions. Globalisation has meant a greater convergence of individual countries' health problems – and mutual dependence for generating solutions.

International cooperation to protect public health was first recognised in the 19th century, when European epidemics of cholera led to the first International Sanitary Conference in 1851. One hundred years later, WHO's member states adopted the International Sanitary Regulations (recently updated to the International Health Regulations*) to monitor and control serious infectious diseases. In 2003, 115 countries (including the UK) ratified the WHO Framework Convention on Tobacco Control. Its implementation will result over time in a much healthier world.

The need for concerted action to address global problems such as environmental degradation – in particular climate change – is increasingly recognised by the international community. Countries all over the world collaborated on the UN Framework Convention on Climate Change and the Kyoto Protocol.

The international health architecture – the structure and working of organisations that influence global health – is increasingly complex. The UK is a key driver for wider UN reform as well as harmonisation and rationalisation of other global health agencies. The Chancellor of

* The revision of WHO's International Health Regulations (IHRs) recognised the increasing interdependence of countries with regard to health issues. Previously, they focused on a limited number of named infectious diseases but the revised regulations are aimed at preventing the international spread of health threats (including new and emerging infectious diseases and chemical and radioactive contamination). The revised IHRs were adopted by WHO in 2005 and are due to come into force in June 2007. In May 2006, the World Health Assembly passed a resolution urging voluntary early compliance with the IHR provisions relevant to avian and pandemic influenza. The Department of Health is currently working on implementation.



the Exchequer was one of the 15 members of the UN High-level Panel on System-wide Coherence in areas of development, humanitarian assistance and environment that reported to the UN Secretary-General in November 2006. We have considerable influence over specialist health and development agencies like WHO, the European Centre for Disease Prevention and Control (ECDC), the World Bank, the WTO, the Organisation for Economic Co-operation and Development (OECD) and the EU. The UK is one of the biggest donors to WHO – core and voluntary contributions from DH and DFID total around £100 million.

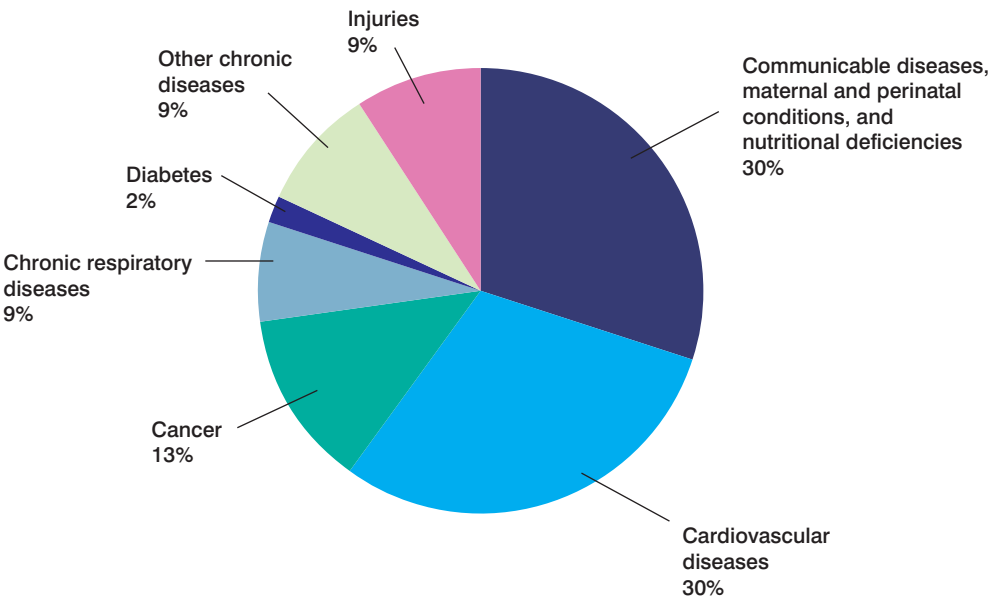
2.2 THE STATE OF THE WORLD'S HEALTH

2.2.1 Mortality

WHO collates mortality figures by age, gender and underlying cause of death. Data at a global level show that while communicable diseases, maternal and perinatal conditions along with nutritional deficiencies account for about a third of deaths, the impact of chronic diseases is considerably greater (see Figure 2).

The World Health Report 2003 estimated the leading causes of death in the world among those of working age.²⁰ HIV/AIDS was top with ischaemic heart disease second (see Table 2).

Figure 2: Estimated main causes of mortality, worldwide, all ages, 2005



Source: WHO and Public Health Agency of Canada (2005) *Preventing Chronic Diseases: a vital investment*.

Table 2: The eight leading causes of death worldwide (15–59 years)

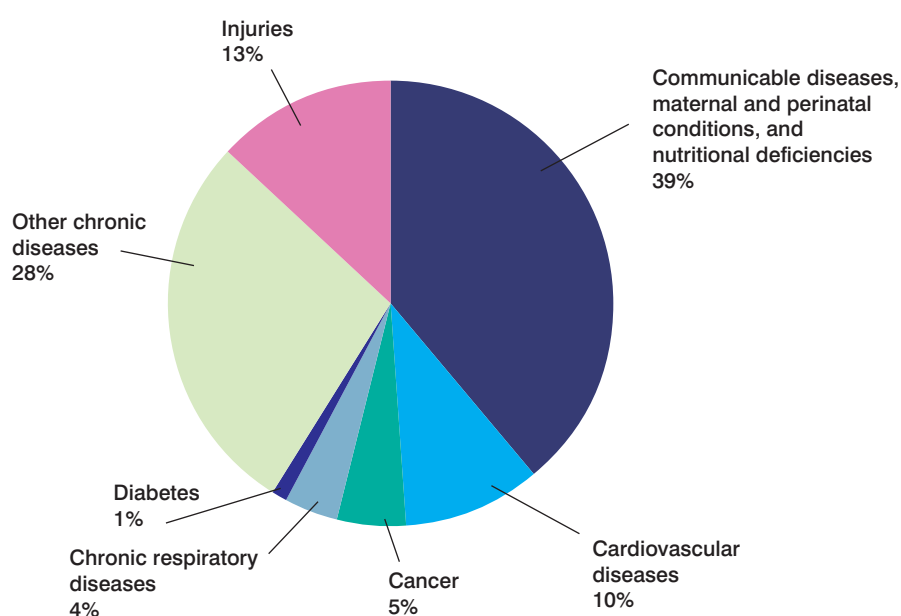
Rank	Cause	Deaths (000s)
1	HIV/AIDS	2,279
2	Ischaemic heart disease	1,332
3	Tuberculosis	1,036
4	Road traffic injuries	814
5	Cerebrovascular disease	783
6	Self-inflicted injuries	672
7	Violence	473
8	Cirrhosis of the liver	382

2.2.2 Ill health

Chronic diseases cause most ill health globally, and injuries are another significant cause of ill health. Figure 3 shows the estimated global burden of disease.

The World Health Report 2003 also estimated the leading causes of global disease burden among those of working age and they are shown in Table 3.

Figure 3: Estimated main causes of global burden of disease (DALYs*), worldwide, all ages, 2005



Source: WHO and Public Health Agency of Canada (2005) *Preventing Chronic Diseases: a vital investment*.

Table 3: The eight leading causes of global disease burden (15–59 years)

Rank	Cause	DALYs (000s)
1	HIV/AIDS	68,661
2	Unipolar depressive disorders	57,843
3	Tuberculosis	28,380
4	Road traffic injuries	27,264
5	Ischaemic heart disease	26,155
6	Alcohol-use disorders	19,567
7	Adult-onset hearing loss	19,486
8	Violence	18,962

* A DALY is a disability-adjusted life year. A DALY can be thought of as one lost healthy year of life.

2.2.3 Geographic distribution of disease

Patterns of disease vary across the world (see Figure 4). In poor countries and among poor populations within middle-income countries, communicable diseases and maternal, perinatal and nutrition-related conditions account for most ill health. Deaths in children under five are still predominantly caused by a few preventable or readily treated diseases such as pneumonia, diarrhoea, measles and malaria. Half of child deaths are associated with underlying malnutrition and, with the exception of gains in micronutrient malnutrition, there has been little overall progress in tackling malnutrition.

In middle and high-income countries, population growth is stabilising and the major impact from readily treatable communicable diseases has been contained. Non-communicable diseases (cardiovascular disease, mental illness and cancers) and injuries account for most of the disease burden.

Africa has by far the highest burden of disease and this reflects the particularly high levels of communicable disease and maternal and neonatal mortality. Non-communicable diseases are important in all regions. They cause 54% of mortality in low and middle-income countries. The leading cause of death in all regions, apart from sub-Saharan Africa,

is cardiovascular disease, but the burden from non-communicable disease in Africa is growing. Many countries therefore have the double jeopardy of communicable and non-communicable disease 'epidemics'.

Projections to 2030 suggest that rates of communicable disease will fall and non-communicable diseases will rise as a proportion of the burden of disease (see Figure 5). The rate of increase will depend on how effectively proven strategies such as reducing smoking and improving diet are implemented.

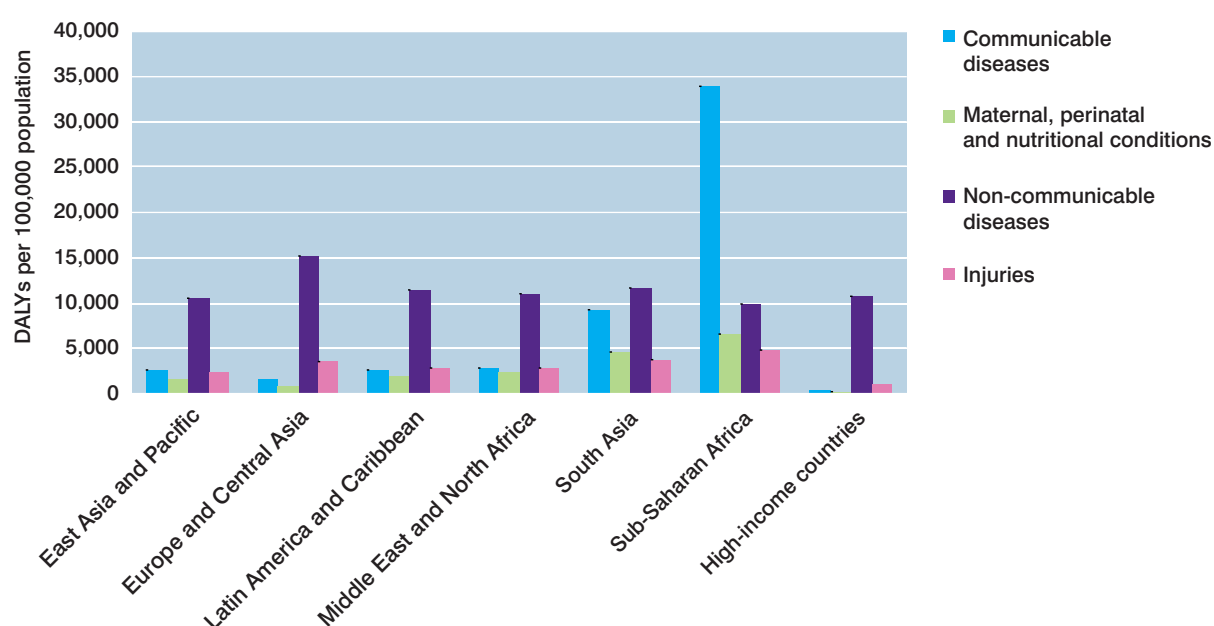
2.2.4 Communicable disease

Killer diseases

Five diseases – diarrhoea, pneumonia, malaria, measles and AIDS – account for over 50% of all child deaths. Pneumonia is the leading killer, accounting for two million childhood deaths each year. This is the tip of the iceberg – an estimated 11 to 20 million children per year are hospitalised for pneumonia.

HIV is one of the greatest threats to eradicating poverty, sustainable development and achieving the MDGs. In sub-Saharan Africa, it is the leading cause of death and the World Bank has predicted

Figure 4: Burden of disease in DALYs per 100,000 population due to four broad disease categories by region



Source: WHO global burden of disease data for 2002. Disease burden is measured in DALYs lost.

that, unless action is taken, parts of Africa will face 'economic collapse'.²¹ Europe too faces a serious threat from HIV, particularly in some of the new EU member states and neighbouring countries in Eastern Europe. In Western Europe, infection rates are continuing to rise, although deaths from AIDS have fallen.

Diarrhoeal disease is a major cause of morbidity and mortality, particularly in developing countries. Severe outbreaks are often associated with mass population movements. Clean drinking water, adequate soap and water for washing and safe food are crucial in preventing diarrhoeal disease. Properly used oral rehydration provides effective treatment.

Immunisation programmes have underpinned much of the gains made in childhood survival over the last few decades in developed and developing countries. Smallpox, which had previously affected 10 million people per year, claimed its last victim in 1978. Polio is expected by 2008 to become the second disease to be eradicated.

Sexually transmitted infections

Globally, STIs are a major cause of acute illness, infertility, long-term disability and death. They place a major burden on health systems. The presence of untreated STIs increases the risk of acquiring and transmitting HIV – a growing problem in sub-Saharan Africa and the former Soviet Union.

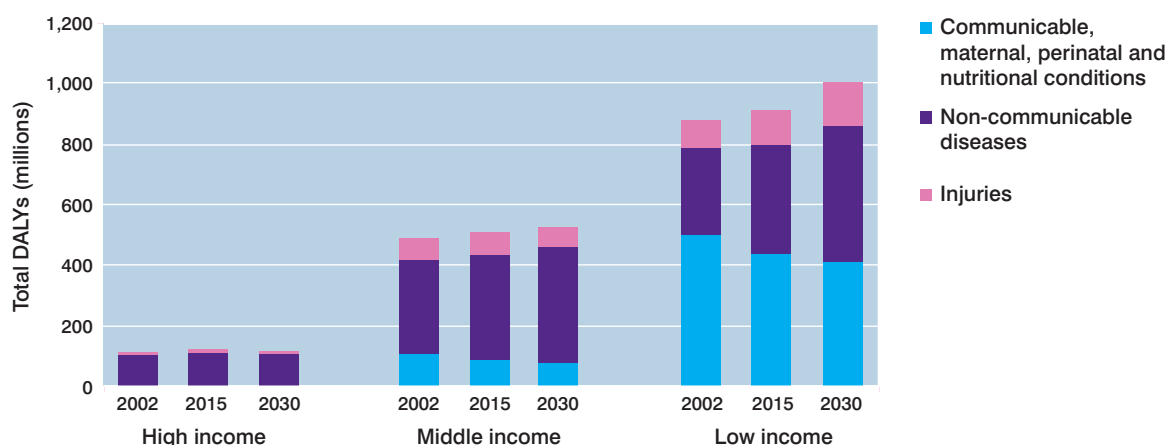
New and emerging infectious diseases

Since the 1970s, there have been at least 30 new or emerging infectious diseases. Most have not shown rapid global spread, but some have. Severe acute respiratory syndrome (SARS) was one example where there was rapid global spread. Between March and July 2003, there were 8,000 cases of SARS in 26 countries and 774 people died.²² In Canada, SARS was estimated to have cost the economy C\$1.5 billion in 2003.²³ The global economic impact of SARS was estimated at US\$30 billion.

During the four years 2003–06, avian influenza (A/H5N1) has infected over 250 people in 10 countries and over 150 have died.²⁴ This virus could mutate and cause a human pandemic. While there has not been a pandemic since 1968 another one is inevitable, whether or not it arises from H5N1. Estimates are that the next pandemic will kill between 2 million and 50 million people worldwide and over 50,000 in the UK.²⁵ Socioeconomic disruption will be massive.

The Office of Science and Innovation (OSI) 2006 report on the Foresight Project, *Infectious Diseases: Preparing for the Future*, comprehensively outlines the threat of infectious diseases today and in the future. It considers the ways that we can respond – by developing systems to detect, identify and monitor new and emerging infections. The report outlines key choices for policymakers in the UK, Europe and the rest of the world.

Figure 5: Projected burden of disease by income and major causes, 2002–30



Source: Mathers CD and Loncar D (2005) *Updated projections of global mortality and burden of disease*, WHO.



The majority of new and emerging infections are zoonoses (diseases and infections that spread from animals to humans). Poverty and climate change have significant effects on animal husbandry. It is thus essential that those tackling human health work closely with those trying to improve animal health.

It is also essential to promote the rational use of medicines in order to prevent antimicrobial resistance in both animals and humans.

2.2.5 Maternal and reproductive health

Globally, in the last 20 years, there has been little progress in reducing maternal deaths and improving women's sexual and reproductive health and rights. WHO has estimated that sexual and reproductive health conditions account for 17.8% of all DALYs lost for women and girls of reproductive age (15 to 44 years). Sexual and reproductive health conditions represent nearly one-third (31.8%) of all DALYs lost – approximately half of this is as a result of STIs and HIV.

2.2.6 Chronic diseases

Preventing Chronic Diseases: a vital investment highlighted the global burden of heart disease, stroke, cancer, chronic respiratory diseases and diabetes.²⁶ This is a problem throughout the world. Chronic diseases are the leading cause of death in the UK but four out of five chronic disease deaths worldwide are now in low and middle-income countries. Until recently, the impact and profile of chronic diseases has generally not been sufficiently appreciated.

The economic impact of chronic diseases is very significant. Because of them, between 2005 and 2015, the UK will lose some US\$40 billion in national income, India nearly US\$250 billion and China US\$550 billion. Chronic diseases mean long-term care, which has profound implications for health services.

Common, modifiable risk factors underlie the major chronic diseases. These risk factors explain the vast majority of chronic disease deaths at all ages, in men and women, and in all parts of the world. They include unhealthy diet, physical inactivity and tobacco use. There are significant inter-relationships between different chronic conditions – for example, obesity increases the risk of developing type 2 diabetes, and diabetes increases the risk of heart attacks, stroke, blindness and kidney failure. Some 80% of premature heart disease, stroke and diabetes can be prevented.

Each year at least 4.9 million people die as a result of tobacco use; 2.6 million die as a result of being overweight; 4.4 million die as a result of raised total cholesterol levels; and 7.1 million die as a result of raised blood pressure. Tackling these issues requires action at local, national and international level. The UK has ratified the WHO Framework Convention on Tobacco Control and aims to be an influential voice in the negotiations on the protocols to that Convention – the first being on cross-border advertising and illicit trade.

2.2.7 Mental health

Worldwide depressive disorders are the fourth leading cause of disease burden and are second among the 15–59 age group. In terms of morbidity, by 2020 mental health disorders will rank second to heart disease.²⁷

Social unrest, conflicts, displacements and natural disasters all increase mental illness.



Resources for mental health lag even further behind other areas. Mental health budgets in most middle and low-income countries are less than 1% of total health expenditure.

The impact of mental illness in social and economic terms is very high and, therefore, addressing mental health is essential to human development and poverty reduction.

2.2.8 Violence, conflict and road traffic injuries

Violence, including child abuse, youth violence, partner abuse, abuse of the elderly, sexual violence and self-directed violence places a massive burden on national economies, costing countries billions of

pounds every year in healthcare, law enforcement and lost productivity. Conflict can lead to malnutrition, famine and disease. Conflict is associated with mental illness, injury, and physical and sexual abuse. It destroys health systems. War destroys economic development. With conflict comes the risk of bioterrorism, drug and human trafficking, and migration. Conflict in one country can rapidly threaten the health, security and prosperity of other countries. While road traffic injuries are decreasing in developed countries, they are rising sharply in the developing world. By 2020, they will be the third biggest cause of global disease burden. Again, road traffic injuries cause significant economic loss and a big drain on healthcare.

Table 4: Health and disease – the global, European and UK picture

	Worldwide	Europe/UK
HIV/AIDS	- In 2005, between 36 and 45 million people were living with HIV – two-thirds of them in sub-Saharan Africa²⁸ - One in 12 adults in Africa have HIV - In Africa, the number of people on antiretroviral therapy more than doubled in 2005 alone, with roughly one in six people who needed treatment receiving antiretroviral drugs by December 2005 - HIV has reduced life expectancy in Botswana, Lesotho, Swaziland and Zimbabwe by more than 20 years - The annual growth rate of GDP in African countries will be reduced by 0.3–1.5% as a direct result of AIDS²⁹	- Eastern Europe has some of the highest infection rates in the world, primarily in Estonia, Latvia, Russia and the Ukraine: HIV infections in Russia jumped from 530,000 in 2001 to 860,000 in 2003³⁰ - Russia and the Ukraine have the highest growth of HIV in the world. Without proper control, the World Bank says that 5.4 million Russians will be infected with HIV by 2020 – 3.7% of the population - About one in 1,000 adults in the UK are living with HIV/AIDS
Tuberculosis (TB)	- There were nine million new cases of TB in 2004 with about 1.7 million deaths - South-east Asia accounts for 33% of global cases, but the incidence in sub-Saharan Africa (350 cases per 100,000 population) is twice that of south-east Asia - The highest mortality per capita is in Africa where, in some countries, HIV has led to a tripling of TB incidence since 1990. Every day, 1,500 people die of TB in Africa³¹	- In the UK, TB incidence has increased by 25% over the last 10 years, with around 350 deaths annually³² - Nearly two-thirds of TB cases in the UK are in people who were born abroad - Multi-drug resistant TB (MDR-TB) is emerging as a major problem, particularly in former Soviet Union countries where drug resistance in new patients can be as high as 14%³³
Malaria	- Three billion people live under threat from malaria, which kills a million people every year, most of them children under five³⁴ - Malaria kills more children in Africa than any other infectious disease³⁵ - In 2003, around 350–500 million people worldwide became ill with malaria - Virtual cessation of malaria prevention activities in the 1990s led to a re-emergence of malaria epidemics in the central Asian republics	- Since the early 1970s, reported numbers of cases in which malaria has been imported into Europe have increased 10-fold to more than 15,000 cases in 2000.³⁶ This is not the pattern seen in the UK - Climate change could extend the malarial zone, putting millions more people at risk
Diarrhoeal disease	- Diarrhoea causes 4% of all deaths - Gastrointestinal infections kill around 2.2 million each year, mostly children in developing countries	- Traveller's diarrhoea occurs in 30–50% of those travelling from a developed country to a developing country - In 2004, there were over 42,000 laboratory reports of <i>Campylobacter</i> and over 8,000 laboratory reports of <i>Salmonella enteritides</i> in the UK

	Worldwide	Europe/UK
Heart disease	In China or India alone, there are more deaths attributed to cardiovascular disease than in all the other industrialised countries combined	- In England, 275,000 people every year have a heart attack - Cardiovascular disease accounted for more than half of all deaths in Europe in 2002
Obesity	- One billion people are overweight 300 million are clinically obese	- The prevalence of obesity has tripled in many European countries, including England, since the 1980s - It is estimated that by 2020, in England at least one-third of adults, one-third of girls and one-fifth of boys will be obese
Diabetes mellitus	Worldwide, around 177 million people have diabetes. This is predicted to increase to at least 300 million by 2025. There are likely to be four million deaths per year related to diabetes and its complications – 9% of the global total. Life expectancy is reduced by more than 20 years for someone with type 1 diabetes. In type 2 diabetes, which is preventable in two-thirds of people who have it, life expectancy is reduced by up to 10 years	There are an estimated 2.35 million people with diabetes in England. This is predicted to grow to more than 2.5 million by 2010, 9% of which will be due to an increase in obesity
Smoking	Tobacco is the second major cause of death in the world, killing about five million people every year. If current smoking patterns continue, it will kill around 10 million people every year by 2020. Tobacco use is obstructing development: in 1994, it was estimated that the use of tobacco resulted in an annual global net loss of US\$200,000 million, a third of which was in developing countries³⁷	- Smoking is the main preventable cause of premature death in the UK, killing more than 106,000 people a year - Smoking costs the NHS between £1.4 and £1.7 billion every year
Sexually transmitted infections (STIs)	- In 2000, unsafe sex was the fifth most important cause of attributable mortality worldwide, and the most important cause in Africa³⁸ - In 1999, WHO estimated that annually, worldwide, 340 million new cases of curable STIs occur in adults aged 15–49 years³⁹ - In developing countries, STIs and their complications are amongst the top five disease categories for which adults seek healthcare	- In some European countries, rising rates of STIs are causing concern – the incidence of chlamydia increased seven-fold in Belarus between 1996 and 2003, and that of syphilis more than 20-fold in Russia between 1990 and 2002 - In the UK, despite declines in the incidence of some STIs since the 1980s, new diagnoses have risen continually since 1995 - Between 1998 and 2004, syphilis rates in UK males rose by 1,520%

Table 4: Health and disease – the global, European and UK picture (*continued*)

	Worldwide	Europe/UK
Maternal health	- The maternal mortality ratio (deaths per 100,000 live births) is 830 in Africa, 330 in Asia and 190 in Latin America - Pregnancy ends in death for 600,000 women each year worldwide – 80% of these deaths are preventable 30 times this number suffer permanent disability as a result of pregnancy and childbirth - Six million babies are stillborn or die in the first week of life each year	- The maternal mortality ratio in developed countries is 24 - Improved maternal mortality ratio is the result of health education, skilled care, emergency obstetric care, transport and referral systems
Mental health	450 million people worldwide are affected by mental, neurological or behavioural problems at any time - Neuropsychiatric disorders are estimated to account for 12.3% of the total global burden of disease; by 2020, it will be 15% - About 900,000 people commit suicide every year - In industrialised nations, mental disorders account for more than 20% of all health service costs 76 million people worldwide have diagnosable alcohol problems. Alcohol is responsible for 1.8 million deaths every year⁴⁰	- Of the 10 countries with the highest rates of suicide in the world, nine are in the EU⁴¹ - In the UK, up to one in six people suffer from a mental disorder at any one time, and up to a quarter of GP consultations are to do with mental health - Over 5,000 adults commit suicide in the UK every year - The social and economic costs of mental ill health to England are estimated at £77 billion every year – more than the costs of crime⁴² - In Europe, alcohol-related causes were responsible for 63,000 deaths of young people aged 15–29 years in 2002⁴³ - In England, 15,000–22,000 deaths and 150,000 hospital admissions are associated with alcohol misuse every year - Up to 17 million working days are lost every year in England due to alcohol-related absence

	Worldwide	Europe/UK
Violence, conflict and road traffic injuries ⁴⁴	• Every year, 1.6 million people worldwide lose their lives to violence (including suicide) • Violence is among the leading causes of death of people aged 15–44 years worldwide • Child abuse is a global problem affecting all countries • The highest rates of conflict-related deaths are found in Africa. Famine related to armed conflicts or genocide is estimated to have killed 40 million people in the 20th century • Sexual violence in war is common: during the Bosnia and Herzegovina conflict, 10,000–60,000 women were raped, and in the Rwandan genocide, up to 500,000 became infected with HIV • In 2002, nearly 1.2 million people died worldwide from road traffic accidents • 90% of road traffic injury deaths occur in low and middle-income countries and primarily affect the wage earners • By 2020, road traffic deaths are predicted to increase by 83% in low and middle-income countries	• In Europe every year, 2.4 million people are injured or disabled from road traffic accidents • Injuries are the leading cause of death of children aged 1–14 years in Europe • The British Crime Survey says that more than one in four women have experienced domestic violence • In England and Wales, two women are killed every week by a current or former partner⁴⁵

2.3 DETERMINANTS OF HEALTH

Poverty, food, security, environment, education, water and sanitation, social exclusion and discrimination, poor housing, unhealthy early childhood conditions and low occupational status are all important determinants of health. Substantial inequalities exist within and between countries. Education, particularly of women, is fundamental to improving the health of women and children.

The links between poverty and health are well known. Poverty sustains ill health and ill health prevents people from leading economically productive lives. Poverty also creates instability and conflict, threatening international security. Eliminating poverty is the overarching objective of the MDGs. The divide between rich and poor is not only global but also national, and is closely associated with global and national health inequalities.

In 2005, the WHO Director-General launched the WHO Commission on Social Determinants of Health (CSDH) to draw the attention of governments, civil society, international organisations and donors to pragmatic ways of creating better social conditions for health, especially for the world's most vulnerable people. The CSDH will conclude its work in 2008. The UK is a major supporter of the Commission.*



* CSDH goals are to: (i) support health policy change in countries by assembling and promoting effective, evidence-based models and practices that address the social determinants of health; (ii) support countries in placing health equity as a shared goal to which many government departments and sectors of society contribute; (iii) help build a sustainable global movement for action on health equity and social determinants, linking governments, international organisations, research institutions, civil society and communities.

Table 5: Health determinants – the global, European and UK picture

Worldwide	Europe/UK
- One in five people (two-thirds of them women) live in abject poverty⁴⁶ 2.8 billion people live on less than US\$2 a day⁴⁷ - More than 115 million children of primary school age (of which more than 80% are in developing countries) are not in school⁴⁸ - In 2000, 1.1 billion people did not have reasonable access to safe drinking water and 2.4 billion people lived without basic sanitation. This led to 1.7 million deaths - More than 800 million people worldwide have insufficient food; more than 25% of children in developing countries are malnourished 640 million children in developing countries live without adequate shelter⁴⁹ - A baby girl born in Japan in 2003 can expect to live for about 85 years. A girl born at the same time in Sierra Leone has a life expectancy of 39 years - A South African girl born in poor circumstances in 2000 can expect to live to 50 years; a South African boy born in better social and economic circumstances could live to 68 years – and a Swedish boy born in average circumstances could expect to live to 80 years⁵⁰ - There are 316 infant deaths (in the first year of life) per 1,000 live births in Sierra Leone, compared with seven in the UK - Of the approximately 10.5 million children under five years of age who died in 2002, 98% lived in developing countries - One in 12 adults in Africa are living with HIV/AIDS compared with about one in 1,000 adults in the UK - More than 500,000 women die annually of pregnancy-related causes, 99% of them in developing countries	- Since 1990, poverty has sharply increased in low and middle-income countries in Europe - In Russia, 29 million people live below the poverty line - Based on a 2002 report, Oxfam estimates that just under one in four people in the UK – or nearly 13 million people – live in poverty. This includes nearly one in three children (almost four million)⁵¹ - A person born in Ukraine in 2004 has a life expectancy of 66 years, whereas someone born in Sweden can expect to live over 80 years - In the last 30 years, mortality from cardiovascular disease has gone down in Western Europe but up in the Commonwealth of Independent States⁵² - The incidence and prevalence of diabetes is greater in areas of higher deprivation, and mortality rates from diabetes are higher in people from lower socioeconomic groups - Males living in Manchester have a life expectancy almost eight and a half years less than males in East Dorset - Death rates from circulatory disease are over 25% higher in the North West than in the South East of England - Lung cancer incidence in England's most deprived areas is twice that of the most affluent areas

2.4 HEALTH SYSTEMS AND SPENDING ON HEALTHCARE

The health and wellbeing of populations depend critically on the performance of the health systems that serve them. Yet the health systems of many poor countries are overburdened and on the brink of collapse. This means large numbers of preventable deaths and disabilities, unnecessary suffering, injustice, inequality and denial of individuals’ basic right to the highest attainable standard of health. There are huge differences in expenditure on healthcare between rich and poor countries (see Table 6).⁵³

Such disparities contribute to the migration of healthcare workers from developing to developed countries, further affecting health systems. Africa accounts for 25% of the global burden of disease but only about 2% of global health spending. Around 270 million children worldwide – the majority in developing countries – have no access to healthcare.

Despite the burgeoning economies of India and China, health systems are not advancing as quickly as they should. Investment in systems, services and public health are crucial if these countries are to maximise their economic potential, maximise the benefit of their increased wealth and reduce inequalities.

2.5 HEALTH RESEARCH

An article in the *Lancet* explains: ‘The state of human health in much of the developing world continues to decline at a time when the world’s fund of biomedical knowledge continues to expand. This challenge offers new opportunities for promoting international cooperation in biomedical research of relevance to developing countries.’⁵⁴

The lack of affordable medical interventions for diseases that predominantly affect developing countries compromises the right to the highest attainable standard of health and maintains the poverty–disease cycle. Diseases that occur almost exclusively in poor countries, such as African sleeping sickness and river blindness, do not attract sufficient research and development (R&D), and new treatment developments are usually accidental or fortuitous. This has led to a research disparity known as the ‘10/90 gap’ in which only 10% of global health research spend is devoted to diseases or conditions that account for 90% of the global burden of disease.

Concerns also exist about ethical standards in research in developing countries; around a quarter of all human research studies in developing countries do not undergo ethical review in their own country.⁵⁵

Table 6: National income and health spend

National income	Per capita income (US\$)	National income spent on health (average)	Health spend (US\$ per capita)
High	>8,000	8%	1,000–4,000
Middle	1,000–7,999	3–7%	75–550
Low	<1,000	1–3%	2–50

2.6 THE ENVIRONMENT AND HEALTH

Climate change, environmental pollution and the degradation of natural resources have a significant impact on the pattern of disease and pose a significant risk to global health.⁵⁶ Climate change on a global scale is perhaps the biggest hazard to health. Heat waves, drought, flooding, increased exposure to dirty water, disasters and displacement of populations, and the impact of environmental degradation all have significant impact on physical and mental health. The causes of climate change, like its effects, are shared by many countries and require shared solutions.

Degradation of ecosystems and the unsustainable consumption of the world's natural resources are increasingly affecting health. Development therefore

has to be sustainable. Environmental pollution threatens the lives and wellbeing of millions of people all over the world, particularly in countries where pollution controls are not stringent. The commercial activities of some countries may contribute to the pollution and degradation of the environment in others.

Children are at particular risk from biological, chemical and physical pollution. In June 2004, the *Children's Environment and Health Action Plan for Europe* was agreed.* In 2006, governments across the world agreed the Strategic Approach to International Chemicals Management as an outcome to the 2002 Johannesburg World Summit on Sustainable Development. The Department for Environment, Food and Rural Affairs (Defra) leads on implementing this for the UK.

Table 7: The impact of environmental change on global, European and UK health

Worldwide	Europe/UK
- One-third of the world's population already faces water stress (scarcity/poor quality water); by 2025, this will be two-thirds - With a global temperature increase of 2–3°C, several hundred million more people could be at risk of vector-borne diseases, such as dengue fever - WHO estimated that, in 2000, climate change was responsible for 154,000 deaths - Indoor air pollution is responsible for over 1.6 million deaths - The 2005 <i>Millennium Ecosystem Assessment Synthesis Report</i> says that 60% of life-supporting resources in the world's ecosystem (eg fresh water, clean air) are being degraded or used unsustainably⁵⁷ 1.7 million deaths are caused by unsafe water, hygiene and sanitation; 99.8% are in developing countries and 90% are of children - The UN Environment Programme estimates that, worldwide, 150 million tonnes of hazardous waste are produced every year	- Hazardous waste is primarily produced in the industrialised world. Exporting such waste from its country of origin for disposal can be a health hazard, as can its disposal (eg dismantling obsolete ships containing asbestos or lead) - In Europe, the heat wave in 2003 led to 27,000 deaths, including around 2,000 extra deaths in England and Wales and 15,000 in northern France⁵⁸ - In the UK, by the 2050s, heat-related deaths could increase to around 2,800 cases per year with an extra 5,000 cases of skin cancer - Up to 13,000 deaths of children in Europe are attributable to outdoor air pollution with particulate matter - The EC estimates that, every year, air pollution kills 370,000 people in Europe and costs the EU economy more than £290 billion

* WHO Fourth Ministerial Conference on the Environment and Health.

3

GLOBALISATION AND HEALTH

3.1 WHAT IS GLOBALISATION?

Globalisation has been defined as the processes that are intensifying human interaction by reducing the barriers of time, space and ideas which have separated people and nations in a number of spheres of action, including economic, health and environment, social and cultural, knowledge and technology, and political and institutional.

Globalisation is not new. The processes of globalisation have been affecting human health for thousands of years.* However, trade and investment, travel, migration and communications have all accelerated globalisation.

Technology has enabled information, people and goods to travel much faster and further than before, putting more people in touch, both physically and through various communications media. Trade liberalisation led to the removal of trade barriers causing a significant increase in foreign trade and investment. This 'liberalisation' of trade can include a trend towards privatisation and deregulation.

3.2 HOW DO THE PROCESSES OF GLOBALISATION AFFECT GLOBAL HEALTH?

While the processes of globalisation present many potential benefits for human health – the sharing of medical research and the pooling of financial resources for solving shared health problems, for example – they also pose significant risks. An aim of the global health strategy will be to identify and make the most of the opportunities and manage the threats associated with globalisation.

The complex relationship between the processes of globalisation and global health has important policy implications. By improving our understanding of the health implications of globalisation, we can better understand the importance of other policy domains to human health.

3.3 TRADE AND FOREIGN DIRECT INVESTMENT

Trade liberalisation since the end of World War II has seen the average industrial tariffs of developed countries fall from 40% to less than 5% through eight rounds of multilateral liberalisation. This means that many countries have witnessed a dramatic increase in the role of foreign

* Following the introduction of leprosy into Europe in 350 BCE, the disease was subsequently spread by the Romans to most of the continent. The arrival of Christopher Columbus in the Americas in 1492 heralded the introduction of measles, typhoid and smallpox to the New World. Trading routes between central Asia and Europe during the 14th century are believed to have led to the outbreak of bubonic plague.



investment and international trade in their national economies. We have witnessed, for example, a more than 25-fold increase in world trade exports since 1950. Foreign Direct Investment (FDI) flows have increased dramatically over the past quarter of a century, with especially rapid growth in the 1990s. The world stock of outward investment is almost 20 times as large as 25 years ago, growing from \$564 billion in 1980 to \$10.7 trillion in 2005.

3.3.1 Benefits of increased trade and foreign investment to health

Poverty reduction

The increase in international trade and foreign investment has fuelled economic development, particularly in middle-income countries, thereby lifting millions out of the vicious cycle of poverty and disease. China is a notable example; following its change in 1979 to a policy of openness to foreign investment, the World Bank estimates that the proportion of people in China living in poverty decreased by two-thirds between 1981 and 2001, representing over 400 million people. In December 2001, China joined the WTO, which has significantly opened its economy and brings it within the scope of international trade rules.

Improved global access to innovation

Developments and trade in information and communication technologies have considerable potential as a means of health improvement – for example, by enabling doctors in developing countries to be informed about, and trained in, advances in knowledge. In addition, such technologies can be used as a delivery mechanism for a wide variety of health services, including emergency advice and health education, in poor and remote locations.

Contribution to the UK and global economy

Increased trade in general, and healthcare trade in particular, supports the development of healthcare economies and may also act as a catalyst for partnership in health and other fields, and is of significant interest for the UK and other governments.

3.3.2 Threats from increased trade and foreign investment to health

Maintenance of poverty

The World Bank estimates that developed country agricultural policies, both tariffs and subsidies, could cost developing countries up to €75 billion a year, making it harder for developing countries to lift themselves out of poverty. This is why the UK's

long-term goal is the progressive abolition of all trade-distorting agricultural subsidies and all barriers to agricultural trade in the form of tariffs or quotas, as an important element of creating a more free and fair world trading system.

Multilateral trade rules established under the WTO can have an impact on the measures developing countries can take in order to ensure infectious disease control, food safety, tobacco control, protection of the environment, access to medicines and vaccines, health services, food security and, more recently, for regulating biotechnology, information technology and traditional medicine. However, WTO rules also contain a number of exceptions and flexibilities to ensure developing countries can take the measures they deem necessary. For example, the TRIPS flexibilities allow developing countries with insufficient manufacturing capacity in the pharmaceutical sector to make effective use of compulsory licensing provisions. The UK Government will continue to work to ensure that the needs of developing countries are taken into account in the development of WTO rules and in trade negotiations such as the Doha Development Agenda.

Occupational hazards

The movement of high-risk industries from countries with well-developed worker protection systems to those with weak, absent or corrupt systems can cause direct harm to the health and safety of workers. Many consumers in developed countries also gain financial benefits at the expense of damage to health or inequitable working conditions elsewhere. Often, companies in developed countries are party to this.

While the opening of markets has created more opportunities for women to work, it has also led to 'sweatshops' that threaten women's and children's health. As a result, women and girls in developing countries may have difficulty in accessing the education necessary to help them improve their employment prospects.

UNICEF estimates that 246 million children worldwide are engaged in child labour, of which 171 million are working in hazardous situations or conditions, such as mines or working with chemicals or pesticides.⁵⁹

The Department for Work and Pensions, Department for Transport and the Health and Safety Executive continue to work with the International Labour Organisation on occupational health risks and labour protection standards.



Increase in unhealthy produce

Increased trade in and marketing of alcohol and processed food high in sugar, fat and salt have contributed to a global rise in chronic diseases and a dramatic rise in obesity in the UK. Food, in the past locally produced, is now a global commodity, often produced in great quantity and travelling thousands of miles. The need for vigilance over its safety is more important than ever.

Contamination of animal feed with dioxin in Belgium resulted in effects on food products throughout Europe. Changing patterns of animal husbandry or farming in the context of the modern trading environment can also affect human health. Antibiotic abuse in animals is a major problem, with the greatest misuse probably in Asia. Widespread use of antibiotics in animal husbandry can lead to increased levels of antibiotic resistance in humans.

National veterinary services are crucial to the prevention, detection and monitoring of animal diseases, including diseases transmissible to humans. At a global level, the World Organisation for Animal Health (OIE) collects, analyses and disseminates scientific veterinary information; provides expertise and encourages international solidarity in the control of animal diseases; and encourages the safety of food of animal origin.

It also publishes health standards for international trade in animals and animal products. Encouraging countries to share information (eg on H5N1) is an important role for OIE.

Increase in sexually transmitted infections

In Africa and other developing countries, HIV and other STIs have travelled rapidly along trade and migrant labour routes. Rural agricultural areas situated along truck routes which are sources of migrant labour to urban areas are particularly at risk.⁶⁰

Disproportionate investment and ethical issues in health research

While there has been an increase in investment in health research, this has as a rule been market-driven and focused on finding solutions for diseases that primarily affect industrialised nations. This has led to the neglect of research into diseases that affect the developing world.

3.4 TRAVEL

The increasing mobility of goods, animals and people has implications for the spread of communicable and non-communicable diseases and underlines the need for international cooperation in surveillance, prevention and control.

International air travel illustrates this. Within four months of the global alert, SARS had affected more than 8,000 people in 26 countries across six continents, and had killed more than 700 people. The rise in international travel and migration has also contributed to the re-emergence of tuberculosis and the spread of HIV. Some 33,000 people had passed through three affected aircraft in the 2006 polonium-210 incident.

Increasing mobility of animals and animal products means an increased risk of zoonosis. The cross-government UK Zoonoses Group leads the UK response in this area. Anthrax, avian influenza, brucellosis and certain types of tuberculosis are all examples of zoonoses.

3.5 MIGRATION

The increase in migration associated with globalisation has significant effects on health. It has implications not only for the health of migrants themselves but also for the health systems of origin and destination countries.

3.5.1 Benefits of increased migration

Benefits to health systems in destination countries

Technological advances and rising expenditure on healthcare in countries such as the UK, the United States, Canada and Australia have increased the demand for human resources. The demand in the UK has been exacerbated by demographic change – in common with the UK population, the NHS workforce is ageing.

The UK is one of a number of industrialised nations (including the United States, Canada and Australia) whose health systems benefit from the migration of health workers, although such workers still form a small proportion of the NHS workforce. Equally, other industrialised nations benefit from UK health workers.

The benefits of migration are not just one way; staff from overseas have the opportunity to exchange knowledge and expertise with their UK counterparts, which may be useful to their country of origin in the future. Migration is not necessarily permanent; people may move from their country of origin to live abroad for a number of years, and then move again, either to a new country or to return to their country of origin. For example, many international medical graduates come to the UK for the purposes of postgraduate training and then leave the NHS.

The UK has a long history of participating in development initiatives or responding to disasters and emergencies in other countries. Many NHS employees have, for example, taken career breaks to work with local or international non-governmental agencies. DH has produced guidance to help staff working in trusts and primary care trusts respond to these opportunities.⁶¹

Economic benefits to source countries

A recent World Bank report emphasised the importance of remittances sent home by diaspora communities from high and middle-income countries to developing countries in poverty reduction.⁶² Remittances can form up to half of the recipient household's annual income. Studies show that low-income households spend remittances mostly on health, education, food and clothing.

Increased learning opportunities

The links formed by diaspora groups in the UK with developing countries are an important bridge between communities and represent an opportunity to share health-related knowledge and experiences.

Increased international pool of health professionals

The increasing mobility of human resources for health has created an international pool of trained health professionals. Enlargement of the EU, with its fundamental principle of the free movement of people, has increased the pool of health professionals able to easily migrate within its borders.

3.5.2 Threats from increased migration

Unequal distribution of the global workforce

In parts of sub-Saharan Africa, health worker shortages are so acute that they limit the potential to scale up programmes aimed at achieving the MDGs and the roll-out of AIDS treatment.⁶³

CASE STUDY: Ghana⁶⁴

It is estimated that over half of the doctors trained in Ghana have migrated. Yet Ghana is a country in desperate need of its doctors: one child in every 10 dies before the age of five, compared with one in every 150 in the UK. Between 1999 and 2004, the total number of doctors registered in the UK and trained in Ghana doubled from 143 to 293. In 1998/99, there were 40 new registrations of Ghanaian nurses in the UK. By 2003/04, an estimated cumulative total of 1,021 had registered.

The Ghana case study illustrates the problem but does not explain the causes. Causes may be those 'pushing' people to migrate and those 'pulling' them to other workforces. These factors need to be tackled at an international and national level. To help with this, in 1994 the World Health Assembly adopted a resolution to tackle the complex global human resources problem.* More recently, WHO's *World Health Report 2006: Working Together for Health* provided a global profile of health workers and detailed consideration of national and international workforce strategies. The report identifies a 10-year action plan to manage human resources for health more effectively.

No one should be removing the right of any health professional to choose where to work. If there are 'push' factors at work (eg war, forced migration, poor remuneration, unsafe working conditions or limited opportunities for professional development) then the root cause of these needs to be tackled.

Developed and developing countries need to work with one another to support the Commission for Africa recommendation that African nations need to train extra health workers. The UK has an important role

to play in this. The contribution that the NHS and its staff can make was highlighted in DH's *International Humanitarian and Health Work – Toolkit to Support Good Practice* issued to the NHS in 2003.

The UK is also currently the only developed country to implement and review systematic policies that explicitly prevent the targeting of developing countries in the international recruitment of healthcare professionals. The code of practice governs NHS recruitment of international healthcare professionals and is underpinned by the principle that developing nations that are experiencing shortages of healthcare staff should not be targeted for recruitment (Annex B). The Government, professional bodies and NGOs all in their various ways support the training of health professionals and development of institutions in poorer countries.

But we can do more. The Prime Minister asked Lord Crisp, former Chief Executive of the NHS, to consider how the UK's experience and expertise in delivering health services can be used to support the developing world. Lord Crisp looked at how the UK can assist poor countries in developing a more sustainable workforce.⁶⁵



* World Health Assembly Resolution 57.19 says member states will: (i) establish mechanisms to mitigate the adverse impact on developing countries of the loss of health personnel through migration, including means for the receiving countries to support the strengthening of health systems, in particular human resources development, in the countries of origin; (ii) frame and implement policies and strategies that could enhance effective retention of health personnel including, but not limited to, strengthening of human resources of health planning and management, and review of salaries and implementation of incentive schemes; and (iii) use government-to-government agreements to set up health personnel exchange programmes.

UK action alone will not tackle this problem. The healthcare market is a global network and push and pull factors operate in each and every country, developed or developing. An example of international action is the plan coming out of the International Council of Nurses' *The Global Nursing Shortage: Priority Areas for Intervention* 2006 report.⁶⁶ It identifies five priority areas for developed and developing countries to act on.*

Poor health of asylum seekers and inadequate provision of healthcare

Although many asylum seekers are healthy, some have complex and specific health needs. A health assessment and screening for tuberculosis are offered to identify and address the immediate healthcare needs of newly arrived asylum seekers. DH is also developing guidance for commissioners and providers of mental health services for asylum seekers, refugees and victims of torture – a commitment that comes out of the Delivering Race Equality in Mental Health Care strategy.

Asylum seekers can find it difficult to access NHS services appropriately due to a lack of knowledge of the UK healthcare system or for cultural or linguistic reasons. Many areas with large numbers of asylum seekers have set up dedicated asylum health teams or GP practices to work alongside mainstream health services. A fact sheet in 40 languages explains the UK health service to newly arrived asylum seekers.** The HPA recently published its first report on infectious diseases affecting migrants.⁶⁷

3.6 COMMUNICATIONS/INFORMATION SHARING

The communication revolution associated with globalisation offers many benefits for health. The ease and rapidity with which information can be shared all over the world increases global access to health-related knowledge and has seen the birth of numerous global partnerships and initiatives. But the reverse is also true. Global communication has meant it is ever easier to market and share products and behaviours that can have a detrimental effect on health (eg fast food, tobacco and alcohol).

3.6.1 Benefits of improved communications

Sharing expertise

Improved global communication has led to more opportunities to bring partners together to exchange ideas and work on global health initiatives and global public health goods. It has led to a more rapid uptake of developments in medical technology, pharmaceutical and vaccine research. Applications such as the internet and wireless communications may enable innovative approaches to healthcare delivery.

Sharing values

Improved communications and the growth of global institutions provide the opportunity to generate, disseminate, implement and monitor normative frameworks, standards and good practice guidance. There is now an increasing array of channels for communicating public health messages.

Sharing intelligence

Rapid sharing of information improves the public health response to natural and man-made disasters, emergencies and the prevention and control of communicable diseases. Rapid sharing of surveillance data allows for quicker recognition of outbreaks (eg food-borne diseases, Legionnaires' disease) and prompt action. Molecular epidemiology has been an important development to support infectious disease surveillance and is also used in tracking microbial resistance patterns. Many of these issues were discussed in detail in the Foresight Project. OIE has been particularly important in raising awareness of the risk posed by antimicrobial resistance.

3.6.2 Threats from improved communications

Marketing of unhealthy products and lifestyles

The global reach of advertising allows the rapid marketing of products and lifestyles. Energy-dense processed foods are, as a result, increasingly popular and contribute to the increase in chronic diseases such as diabetes and obesity. Differing standards in

*The five areas are: (i) macroeconomic and health sector funding policies; (ii) workforce policy and planning including regulation; (iii) positive practice environments and organisational performance; (iv) recruitment and retention, addressing in-country maldistribution and out migration; and (v) nursing leadership.

** Leaflets available at: www.dh.gov.uk/PublicationsAndStatistics/Publications/PublicationsPolicyAndGuidance/PublicationsPolicyAndGuidanceArticle/fs/en?CONTENT_ID=4122587&chk=w2Q1ZY

marketing regulations allow tobacco to be advertised more aggressively in some countries (eg some low-income countries, the former Soviet Union and China) than others (EU member states).

Accentuating inequalities

Access to health knowledge via the internet disproportionately benefits developed countries. In North America, over 60% of the population use the internet compared with less than 3% in Africa. However, in the last five years there has been significant scale up in access to the internet (Asia

150%, Africa/Latin America 250%). This suggests that the gap will narrow in the future.

Exposure to unregulated health information

More patients are diagnosing themselves via the internet and gaining access to drugs and diagnostics not licensed in their own country. Health information and products available via the internet are difficult to regulate; some information is of very high quality but this is not always the case. Poor-quality information and inappropriate treatment may pose a significant risk to patient safety.

Table 8: Travel and migration

	Worldwide	Europe/UK
Travel ⁶⁸	- In 2004, international arrivals worldwide reached 763 million; this is expected to rise to 1.56 billion by 2020 - The number of long-haul travellers is expected to reach 0.4 billion by 2020	- The number of overseas residents arriving in the UK doubled between 1984 and 2004 to 27.8 million⁶⁹ - The UK is sixth in the world for international tourist arrivals - UK residents made 64.2 million visits abroad in 2004; an increasing number of these are long-haul visits (with risk of tropical diseases)
Migration – population effects	Worldwide, one in 35 people are international migrants (185 million people in 2005), more than double that of 25 years ago⁷⁰	- Excluding European Economic Area nationals, 145,000 people were granted settlement in the UK in 2004 - In the UK, 51,000 illegal migrants had enforcement action initiated against them in 2004⁷¹ - By the end of 2004, the global number of refugees was estimated at 9.2 million; 0.3 million of these are in the UK⁷² - In 2004, over 40,000 people applied for asylum in the UK (32% less than in 2003). Some 43% were Africans. Applications were greatest from Iranians⁷³
Migration – effects on healthcare	- In 2005, remittances reached US\$167 billion. This exceeded development aid from all sources by 50% - Estimates for total remittances sent from the UK to all developing countries range from £463 million to £2.8 billion, with the most reliable estimate being £2.3 billion for 2001 (equivalent to 78% of official UK overseas development assistance)	- Between 2001 and 2004, about 9% of registered nurses left the NHS annually - UK doctors were the largest group of international medical graduates in Canada and Australia⁷⁴

4

WHY TAKE ACTION ON
GLOBAL HEALTH?

*'The UK, and its Overseas Territories, cannot be secure or prosperous in isolation. We need to support the aspirations of people around the world, including the most vulnerable... [and] tackle shared global challenges, in particular climate change, epidemic and chronic disease...'*⁷⁵

Foreign and Commonwealth Office

4.1 FIVE KEY REASONS

There are five key reasons why the UK needs to engage with the global health agenda:

- It is necessary for making our world more secure, protecting the health of the UK population and contributing to safeguarding our domestic investment in health and the economy.
- It is central to our efforts on sustainable development.
- Health is a valuable commodity to trade in.
- Health is a global public good.
- Health is a human right.

It pays to invest in health. We have seen in our own country a healthy and more productive population through improved water and sanitation, nutrition, immunisation, medicines, surgery, health education and antenatal care. We have developed a strong health system with an effective workforce. We need to protect this investment and build on it by working with others. There are opportunities to learn from others and share our successes with others.

But there are, of course, potential conflicts between the above. For example, there may be difficulty reconciling UK trade interests (including trade in health commodities) with sound development policy. A coherent UK global health strategy will need to navigate an economically and ethically acceptable path through these five areas.

4.2 MAKING OUR WORLD MORE SECURE

'... investments in health are central to creating peace and promoting prosperity through consolidated public systems'.

David Nabarro, WHO Representative of the Director-General, 11 April 2005

Improving health and healthcare helps to guard against states 'failing' which, amongst other problems, may give rise to or support terrorist networks and activities. Terrorist threats, such as the deliberate release of biological agents, radiation or chemicals, are now a major global concern. The economic implications of terrorism, especially since the events of 11 September 2001, have become very significant. Such threats are rooted in instability, poverty and inequalities, including health inequality.



The impact of conflict on health is well known. It causes not only physical injuries and death but also widespread mental distress, worsening of existing malnutrition (particularly among children) and outbreaks of communicable diseases. Conflicts in Rwanda, Sierra Leone, the Democratic Republic of Congo, Liberia, Afghanistan, Sudan, the former Yugoslavia and Iraq all provide examples of the devastating effects of conflict on health – both in the short and long term.

Nowadays, improving human ‘security’ also means tackling communicable diseases. Disease in one country is a threat to others. For example, AIDS is not only crippling economies but is also compromising the governance and military capacities of many African countries. This can quickly escalate, posing a threat to regional stability and threatening international peacekeepers, NGO fieldworkers and international military personnel.

OSI’s Foresight Project highlighted the threat of new infectious agents and their potential for epidemic spread. The report concluded that we need to step up our response to the threat of infectious diseases, integrating new and effective public health control measures within local cultural and governance systems.

WHO’s International Health Regulations are a good example of how concerted global action can provide the framework for national measures to address the threat. The UK is working with others to implement these in a way that avoids unnecessary interference with international traffic and trade.

Global health should not of course be seen solely in security terms. That would create a ‘security triage’ in which health issues that represent security threats are given automatic priority over others.

Supporting the health sector is sound development policy and is crucial in developing state legitimacy in both stable and fragile states. Lack of basic services breeds instability, poverty and inequalities – the sort of environment that encourages terrorism; illegal trafficking of tobacco, alcohol, drugs and people; and conflict.

Peace-building efforts are increasingly integrated into the provision of health services (eg in Afghanistan and Iraq) but there are risks. For example, if the military is associated with peacekeeping and service delivery, this can confuse local populations who are unclear on mandates. Health NGOs may also have concerns about the erosion of humanitarian space.

WHO’s Health as a Bridge to Peace initiative is a multidimensional policy and planning framework which supports health workers in delivering health programmes in conflict and post-conflict situations and at the same time contributes to peace building.

‘The role of physicians and other health workers in the preservation and promotion of peace is the most significant factor for the attainment of health for all.’

World Health Assembly Resolution 34.38, 1981

Following 11 September 2001, the G7 countries, European Commission and Mexico set up the Global Health Security Initiative (GHSI). The GHSI is an informal, international partnership of like-minded countries to strengthen global health preparedness and response to threats of chemical, biological, radiological or nuclear terrorism and pandemic influenza. WHO is a technical adviser to the GHSI.

Improving global health is at the heart of the UK’s foreign policy. The FCO has recently set out nine international strategic priorities for the UK in its White Paper, *Active Diplomacy for a Changing World*.⁷⁶ Five in particular are relevant to the global health agenda:

- making the world safer from global terrorism and weapons of mass destruction
- reducing the harm to the UK from international crime, including drug trafficking, people smuggling and money laundering
- preventing and resolving conflict through a strong international system
- promoting sustainable development and poverty reduction underpinned by human rights, democracy, good governance and protection of the environment
- ensuring the security and good governance of the UK’s overseas territories

Increasingly, there is a cross-government approach to conflict prevention and post-conflict action. The Africa Conflict Prevention Pool and the Global Conflict Prevention Pool are both managed by DFID, FCO and the Ministry of Defence (MOD). The DFID/FCO/MOD Post-Conflict Reconstruction Unit was launched in 2004 and aims to improve the UK’s response in post-conflict environments. The UK’s expertise in public health has the potential to contribute to this response.

Improving quality of life, encouraging sustainable development and minimising vulnerability to natural disasters (eg the 1995 volcanic eruption in Montserrat) are all core activities for a number of government departments including the FCO, DH, DFID and the Department for Education and Skills (DfES).

Food security is important for a safe world. Food security includes food safety but also includes continuity of food supply. At times, these may conflict as in the case of contaminated water supply, which may be required in some countries to be used to maintain animal and crop production and thus food supply.

4.3 ENHANCE OUR DEVELOPMENT EFFORTS

'... better health for the world's poor is not only an important goal in its own right, but can act as a major catalyst for economic development and poverty reduction'.

World Health Organization, 2002

The 2002 report of the WHO Commission on Macroeconomics and Health (CMH)⁷⁷ showed that investing in health makes sound economic sense. Countries with poor health have more difficulty in achieving sustained economic growth. The Commission estimated that, in developing countries, a basic healthcare package costing around US\$34 per person per year would save around eight million lives each year and that this would generate economic benefits of US\$360 billion.

Not investing in health is costly. In sub-Saharan Africa, losses due to HIV/AIDS are estimated to already be at least 12% of annual GNP. In Eastern Europe, 80% of those infected with HIV are young people of working age. Malaria is slowing African economic growth by up to 1.3% per year and costs Africa more than US\$12 billion annually. Tobacco use results in an annual global net loss of US\$200 billion, a third of which is in developing countries.

The CMH said that a 10% improvement in life expectancy is associated with economic growth of about 0.3% to 0.4% per year. The US\$300 million investment in global smallpox eradication returned more than US\$3 billion in economic benefits, according to the Global Forum for Health Research.

Controlling endemic malaria in Africa will raise GDP by 20% over 15 years. Improvements in health may have contributed to as much as one-third of the East Asian 'economic miracle'.

There are many other examples of successes in global health. Controlling TB in China, saving mothers' lives in Sri Lanka, preventing diarrhoeal deaths in Egypt, curbing tobacco use in Poland and preventing dental caries in Jamaica have all been well documented.⁷⁸

Recent G8 and G7 summits have all focused on development issues, and investing in health in particular. The Global Fund to Fight AIDS, Tuberculosis and Malaria, for example, came out of the G8 meeting in Genoa in 2001. G7 finance ministers, led by the UK, have highlighted that poor control of HIV and malaria undermines economic growth and poverty reduction. The meeting called for the acceleration of research on HIV/AIDS vaccines and reaffirmed commitment to the Global HIV Vaccine Enterprise. G7 finance ministers have focused on innovative financing mechanisms such as the US\$50 billion International Finance Facility, the International Finance Facility for Immunisation,* Advanced Market Commitments and the UNITAID international drug purchase facility.

At the 2005 Gleneagles Summit, an action plan was agreed to address HIV, AIDS, TB, malaria and polio in Africa, highlighting the importance of strengthening health systems. The 2006 Russian G8 Summit reaffirmed the importance of controlling infectious disease globally. Upping development spend, investing in health systems, funding the Global Fund to Fight AIDS, Tuberculosis and Malaria, supporting global TB and malaria control plans and funding polio eradication are all G8 priorities.

The MDGs are central to the UK's development objectives. At a global level, we are working to reform the international development system to deliver these objectives more effectively. The UK Government is committed to tackling poverty in the developing world by encouraging economic growth, investing in people and improving health (including through clean water and sanitation) and education. Trade is crucial for development. Increased trade can contribute to creating jobs. This can lead to a reduction in poverty, better health and opportunities for education.

* The International Finance Facility for Immunisation (IFFIm) will frontload donor government commitments through bonds issued on international capital markets to provide urgently needed cash funding for vaccine and immunisation services in the poorest countries with the highest disease burden. By making available an additional US\$4 billion for immunisation over the next ten years, the IFFIm could save the lives of five million children by 2015.



Health is central to the UK's three White Papers on eliminating world poverty⁷⁹ (see Annex C for selected commitments from the most recent of these). Later this year, DFID will publish a new health strategy that follows on from its 2000 Target Strategy Paper, *Better health for poor people*. DFID currently provides around £600 million each year to improve the health of poor people, with a particular focus on health systems and working through multilateral agencies and governments to support countries to deliver their own poverty reduction strategies. The UK will work with others to support the African heads of state pledge, taken in Abuja, Nigeria in 2001, that African countries move to spend 15% of their national income on health.

The UK's framework for tackling HIV and AIDS globally was set out in 2004.⁸⁰ Between 2005/06 and 2007/08, the UK will spend £1.5 billion on combating HIV/AIDS.

4.3.1 Debt reduction

The UK led the reform of the Heavily Indebted Poor Countries (HIPC) initiative, calling for released funds to be used for social expenditure, in particular on

health and education. This was extended with the Multilateral Debt Relief Initiative (MDRI) agreed during the UK G8 Presidency at Gleneagles in 2005, with all remaining International Monetary Fund (IMF), World Bank and African Development Bank debt held by heavily indebted poor countries to be written off. This will release a further \$50 billion for poverty-reduction expenditure including on improved health services.

The UK has cancelled its £1.2 billion of bilateral debts from poor countries⁸¹ and it is the second largest contributor to the HIPC Trust Fund and the World Bank which ensures that debt relief costs to the international financing institutions are truly providing additional resources to the poorest countries. There remains concerns that there are limits to health and social spend under the terms of the International Monetary Fund restructuring loans.

4.4 HEALTH AS A COMMODITY

One of the priority areas in *Active Diplomacy for a Changing World* is the need to support UK economy and business through an open and expanding global economy.

Health services, research, pharmaceuticals and medical devices are international commodities and are an important part of the global and UK economies. Health commodities, as objects of trade, are open to regulation by international trade agreements.

The global healthcare industry is worth over US\$3.5 trillion annually.⁸² Pharmaceuticals are one of the UK's leading manufacturing sectors, bringing in a trade surplus of £3.7 billion in 2004. The value of UK pharmaceutical exports in 2004 was an estimated £12.3 billion. Exports of medical devices amount to £3.5 billion and healthcare services £1.5 billion annually. The UK was one of the top four world traders in pharmaceuticals between 2000 and 2003. And in 2005, UK-based GlaxoSmithKline was the world's second largest research-based pharmaceutical company.

Europe faces increasing trade competition from the US. For example, in 2002, Novartis moved its global R&D headquarters to the US. But there are also success stories, such as the £28 million 10-year medical imaging research agreement between Imperial College, London and GlaxoSmithKline. The UK is also a global leader in the biotechnology sector, which is the largest in Europe and second globally only to the US. UK companies account for an impressive 40% of biotechnology products in the European pipeline.

DH acts as the official sponsor to the UK healthcare industry and, working with the Department of Trade and Industry, UK Trade and Investment and others, supports its efforts to make the most of the opportunities offered by globalisation by identifying new international markets and attracting foreign investment. We can continue to use channels such as the Brazil, India and China Joint Economic and Trade Committees to promote international trade in the health sector and inward visits to demonstrate models of care, services and medical device technology.

The Healthcare Industries Task Force is a joint initiative between the Government and the healthcare products industry, which reported in 2004. It identified a number of priority countries on which UK Trade and Investment should concentrate its strategic activities and resources for the medical devices industry – the US, Germany, France, Japan, China and India – whilst maintaining support for healthcare exports in all overseas markets. The UK Government and industry is committed to taking this forward.

The commercial focus of the healthcare industry encourages innovation and new products that



can be of benefit to UK and other patients. DH, in collaboration with industry leaders, has developed a range of recommendations on medical device innovation, including international development. It is important, however, that globally there is equitable access to such benefits.

Diseases that primarily affect poorer countries have traditionally not attracted sufficient investment in research and development. The recognition of the need for a greater focus on the poorest people with the worst health status has given rise to an increasing number of public–private partnerships between commercial pharmaceutical and biotechnology companies as one means of addressing these needs. UK Government policy and plans to increase access to essential medicines in the developing world was set out in 2004.⁸³

4.4.1 The World Trade Organization

Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)

The TRIPS Agreement is designed to protect the rights of patent holders over knowledge systems or products including, for example, pharmaceuticals.

TRIPS strikes a good balance between the need to provide a return on the investment in research and development of new drugs and the need to secure access to medicines for poor people.

In light of this, the UK is committed to promoting investment in the development of new drugs whilst delivering on the mandate of the Doha Development Agenda (DDA), which recognises the role of international trade in alleviating poverty and promoting economic development, and committed members to placing the 'needs and interests' of developing nations 'at the heart' of the work programme adopted in Qatar in 2001. Accordingly, the ambitious overarching UK objective for the current DDA negotiations is to unlock the development potential of the DDA and help build a more competitive European economy.

The *WTO Agreements and Public Health: A joint study by the WHO and the WTO Secretariat*^{B4} emphasised that TRIPS should not prevent members from taking measures to protect public health and that, accordingly, it should be interpreted and implemented in a manner supportive of WTO members' right to protect public health and, in particular, to promote access to medicines for all.

In 2003, WTO members agreed that developing countries with insufficient manufacturing capacity in the pharmaceutical sector can make effective use of the compulsory licensing provisions contained in the TRIPS Agreement, and the agreement was amended in 2005. The UK argued strongly for this. These changes are designed to make it easier for poor countries to import cheaper generic medicines if they are unable to manufacture them themselves.

General Agreement on Trade in Services (GATS)

The General Agreement on Trade in Services is the first multilateral trade agreement to cover trade in services, and sets the rules for trade and investment in services for WTO's member states. It constitutes the legal framework through which the WTO members progressively liberalise trade in services including, where members wish, health-related services.

The UK considers public services to be excluded from GATS, both in respect of UK public services and those of other WTO members. In addition, the ability of the UK and other WTO members to maintain public health services is guaranteed by the fact that governments can choose in which sectors and to what extent to make commitments (the bottom-up approach).

The healthcare sector has not featured greatly in the current Doha Development Agenda round of WTO

trade negotiations. Very few WTO members have demonstrated any appetite for making commitments to opening their healthcare markets to foreign competition during the current trade round. Those (mainly developed countries – including the UK) that have taken commitments to open up markets to foreign service suppliers have limited those commitments to provision by the private sector.

In respect of public provision of health services, the then Secretary of State for Trade and Industry said in the House of Commons on 14 November 2001 that the UK had no intention of making any commitments that would call into question our ability to maintain public services such as health.

4.4.2 FOOD STANDARDS

As trade liberalisation increases, there are clear advantages for global public health in having uniform food standards. The Codex Alimentarius Commission, a Food and Agriculture Organization/WHO body, sets standards, codes of practice, guidelines and other recommendations for food quality and safety. The Food Standards Agency (FSA) leads on the Commission for the UK. The aim of Codex Alimentarius is to protect consumers from food-borne illness in both home-grown and imported food and to ensure fair trade practices in the food trade. The FSA also works with the EU on issues such as food labelling and health claims that manufacturers make about their food products.

4.5 HEALTH IS A GLOBAL PUBLIC GOOD

'Public goods' are goods that benefit society as a whole. The concept of 'national public goods', such as the maintenance of law and order, is not new. In an increasingly interdependent world, much more attention is being paid to 'global public goods'. They address issues in which the international community has a common interest, though some may be particularly important to certain countries.

Public health interventions, such as a cure for a disease, communicable disease control or the dissemination of research, are also global public goods. They address problems irrespective of national borders. The UK's contribution to the polio eradication initiative or the containment of the SARS outbreak in 2003 are examples of the UK contributing to global public health goods – shared protection of health worldwide. Regulatory frameworks such as the International Framework Convention on Tobacco Control and the revision of the International Health Regulations are also examples of global health goods.



A global health strategy can look at opportunities to build on existing global public goods, including the work that the International Task Force on Global Public Goods has been doing on infectious diseases and climate change, and ensure that the 'public good' benefits of, for example, the uptake of new vaccines are enjoyed as widely as possible.

4.6 HEALTH AS A HUMAN RIGHT

Health is a human rights issue. A number of international instruments that are binding on the UK make this clear including the UN Universal Declaration of Human Rights;* the UN International Covenant on Economic, Social and Cultural Rights;** the UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment; the UN Convention on Elimination of all forms of Discrimination Against Women; and the UN Convention on the Rights of the Child.

In 2002, the UN Commission on Human Rights created a Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health ('right to health').

The Rapporteur reports on the worldwide status of the right to health, making recommendations on measures to protect and promote this right, and promoting cooperation between relevant bodies.⁸⁵

These agreements mean that the UK Government has to ensure its population enjoys these rights but also that its domestic and foreign policies do not prevent others from the progressive benefit of them. This includes availability of healthcare, health promotion and protection, safe water, adequate sanitation and occupational and environmental conditions conducive to good health.

One of the FCO's international policy priorities is that sustainable development must be underpinned by human rights. One of the tasks of the UK global health strategy will be to ensure that UK foreign and domestic policies – for example on trade, aid and debt relief – fully support and do not diminish countries' abilities to promote and protect the right to the highest attainable standard of health and the underlying determinants of health.

* 'Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services.'

** 'The states party to the present covenant recognise the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.'

5

IDENTIFYING AREAS FOR ACTION

5.1 A FRAMEWORK FOR ACTION

To provide the focus for developing a global health strategy, four broad areas are proposed for action:

- health and foreign policy
- health and development
- health and the UK economy, including trade
- global threats to UK health

The key is to add value and, wherever possible, work with others – nationally and internationally. The UK should play to its strengths and build on existing strategies, including work that came out of the EU and G8 Presidencies. We should not duplicate. We will need to focus and prioritise, and get maximum value from our resources. Our efforts should be concentrated on:

- **global health risks that threaten the health of the UK population** (eg communicable diseases such as HIV, tuberculosis, SARS and pandemic influenza; food-borne disease; bioterrorism; and climate change)
- **global health solutions in which the UK has particular expertise** (eg global disease surveillance, workforce planning, standards and training)
- **global health opportunities that benefit the UK** (eg sharing health-related knowledge and learning lessons from other countries and, as a result, improving UK health and health services)
- **global health problems that UK action can help solve** (eg the work on an ethical code for international recruitment of healthcare professionals or work to support UN reform)



5.2 AREAS FOR ACTION

This report has described some of the actions the UK Government is already taking which can be related to the four areas outlined. This section sets out some questions to stimulate discussion and debate about future actions and strategic direction.

5.2.1 Health and foreign policy

- How can global health be more explicitly integrated into UK foreign policy?
- How can we raise awareness in foreign policy circles of the impact of non-communicable as well as communicable diseases, and the foreign policy levers to tackle them?
- How can we influence more systematically the G8 international foreign policy fora on global health issues to which they can add value?
- How can we develop a more systematic and rapid contribution of health expertise to conflict and post-conflict situations (eg the role of public health in the Post-Conflict Reconstruction Unit)?
- How do we best promote consideration of globalisation and global health in EU policies outside health (eg social, food security, economic regeneration, trade and market regulation)?

5.2.2 Health and development

- How can DH, the NHS and other government departments and agencies support DFID's goal of achieving the MDGs (Annex A)?
- How can we champion internationally coordinated action at EU and global levels to address the 'push and pull' factors leading to health staff migration?
- Is there more that DFID, DH and other government departments and agencies can do to improve their joint responses in relief and development?
- How can the UK work most effectively with developing countries on the emerging epidemics of chronic and non-communicable diseases?

5.2.3 Health and the UK economy, including trade

- How can we better examine the impacts of trade liberalisation on global health, including on affordable medicines and the delivery of healthcare throughout the world?

- How can we harness trade liberalisation in order to promote global health?
- How can we ensure that international trade rules take into account global health objectives?
- How can we achieve greater coherence between the UK's trade and health policies?

5.2.4 Global threats to UK health

- What can we do to predict and mitigate the health effects of climate change?
- How can DH, its agencies and the NHS best use their expertise (eg in epidemiology, toxicology and health protection) to inform the Government's international environmental policies?
- How can we best respond to the challenges outlined in the Foresight Project on infectious diseases?
- How can we continually improve the communication of health intelligence and horizon-scanning systems to monitor and predict new threats to global health?
- What more can we do to promote and protect the health of asylum seekers and immigrants?

5.3 HOW TO ACT: LEVERS FOR CHANGE

There are a number of levers to effect change. They include:

- UK resources for global health
- health research
- advocacy, technical assistance, policy dialogue and raising awareness

5.3.1 UK resources for global health

The UK and many others are committed to increasing development aid as a proportion of GDP. However, improving the impact of UK resources for global health comprises more than simply increasing overseas aid. The range of resources (both financial and services in kind) available from different governmental and non-governmental organisations in the UK, and their flows, need to be better understood.



5.3.2 Health research

A global health strategy needs to be underpinned by research, both in terms of understanding the problems that need addressing and the interventions required. The UK has a great deal to offer in this area. For example, OSI's Foresight Project highlights a number of areas in the field of infectious disease that require the generation of new knowledge.

High-quality agencies

Agencies such as the Wellcome Trust and the Medical Research Council have extensive experience of working with developing and developed country partners, with governmental and non-governmental agencies. In 2005, UK-based researchers in Oxford and London obtained US\$74.9 million, more than 17% of the total funding available, from the Grand Challenges in Global Health Initiative, which aims to address the diseases that cause millions of deaths each year in the world's poorest countries.

Contributing to new ways of doing business, developing norms and standards

The 2004 WHO Task Force on Health Systems Research highlighted the need for international

collaboration to overcome health system constraints to reaching the MDGs. The 2004 WHO Ministerial Summit on Health Research recognised the need to place more emphasis on turning knowledge into action to improve health, to undertake more research on health systems and to manage research better. World Health Assembly Resolution 58.35 (Ministerial Summit on Health Research) called for the establishment of a voluntary platform to link clinical trial registers to enhance access to information.

The UK has participated in developing international frameworks for conducting health research, including research conducted in developing countries. Examples include the Council of Europe's Additional Protocol to the Convention on Human Rights and Biomedicine concerning biomedical research and UNESCO's Universal Declaration on Bioethics and Human Rights. The effectiveness of these will need to be monitored.

The UK is a leader in ethical standards and regulations for health research. Both the Medical Research Council and the Wellcome Trust have guidance on ethical issues in research conducted in developing countries that they fund or sponsor.



We support international cooperation to establish systems for global registration of controlled trials of healthcare interventions on recognised public registers.

5.3.3 Advocacy, technical assistance, policy dialogue and raising awareness

As we develop the global health strategy, we will need to raise awareness in government, the private and voluntary sector, as well as with the public, about the importance of global health and the benefits of working together to tackle global health problems at national and international level. This needs to be done both in the UK but also elsewhere. We need to better publicise success stories and share good practice and policy.⁸⁶

The report has described earlier the contribution that UK policymakers, researchers and professionals can make to global health. Providing technical assistance or influencing policy is a real way to make an impact on global health.

The DfES paper, *Putting the World into World-Class Education, An International Strategy for Education, Skills and Children's Services*, highlights the need to instil a global dimension into the learning experience

of all children and young people. The paper emphasised that all who live in a global society need an understanding of certain key concepts, including those of social justice, as an element in both sustainable development and the improved welfare of all people. It highlights joint DFID–DfES work in this area.

We have an opportunity. Recent media attention on avian influenza and SARS has made the public aware of how vulnerable it is to diseases from other countries. Live 8 and Gleneagles have raised the profile of development issues to new heights. We must harness our collective energies and seize the opportunity to do our bit for global health.

5.4 QUESTIONS FOR CONSIDERATION

5.4.1 UK resources for global health

- What are global health resource needs and what are current resource flows?
- Does there need to be better coordination and focus among those in the UK (government and non-government) providing funding for global health?
- How do we move towards more predictable and sustainable funding?
- How can we continue to understand better the impact of budget support and upstream instruments on health in poor countries?
- What is the impact of new UK migration policies for overseas healthcare workers, especially in terms of remittances?
- What opportunities are there for tax incentives for research on affordable medicines?

5.4.2 Health research

- How can we develop UK Government initiatives, such as advance purchase funds, aimed at encouraging research into the diseases of the developing world?
- How can we build networks for sharing health knowledge and information in an appropriate form to meet the needs defined by research partners?
- How can we maximise the use of the UK's resources in biomedical research to contribute to global health?

- How can we maximise the contribution that the EU's research and development efforts in the health field make to global health?
- How can we best identify generic knowledge gaps across specific issue areas to which the UK can contribute?
- Should more be done to set up systems to facilitate lesson learning from knowledge generated in other countries?
- Do healthcare professionals who come into contact with refugees and asylum seekers, and with those who may have been victims of conflict or torture, have the skills and knowledge to assess their needs?
- What more can be done to raise public awareness of the relevance of global health issues to the UK?

5.4.3 Advocacy, technical assistance, policy dialogue and raising awareness

- Do we need to do more to ensure that global health issues feature prominently as part of the education/training of healthcare staff, both at the stage of initial qualification and during continuing professional development?



6

WORKING TOGETHER

Representatives from a number of government departments met at the end of 2006 to start formulating the direction of the global health strategy. The meeting agreed that a small number of the departments form a Steering Group to drive this work forward in the coming weeks and report in the first instance to the wider group when it reconvenes early in 2007. This will be followed by external consultation (with industry, academia, the professions, the NGO sector and partners abroad) on the criteria that should be used for determining a UK government global health strategy and the priorities that such a strategy should focus on.

The global health strategy will be developed as a collaborative venture. We have examples of good practice in collaborative work on global strategic health themes to draw on:

- A working group was set up by the Prime Minister in 2001, chaired by DFID Ministers and involving Ministers from DH, DTI and HM Treasury and representatives from the pharmaceutical industry, to look at access to essential medicines in the developing world.
- DFID, FCO and the MOD's Post-Conflict Reconstruction Unit is a response to issues that all three departments are involved in but that none can address alone.
- The UK strategy on HIV/AIDS built on inputs from across government and a wide range of stakeholders.
- Interministerial groups on strengthening capacity in developing countries.

The challenge is to build on these examples of good practice in a more strategic and coherent way, which recognises the complex links between the policy objectives of DH and other government departments and agencies and reflects these links in the formulation of policy on global health.

The role of public-private partnerships for health has increased and there has been a proliferation of alliances to tackle problems such as biosecurity, vaccine development and health inequity. There are now nearly 100 partnerships tackling global health issues. Examples include the Global Fund to Fight AIDS, Tuberculosis and Malaria, the Global Alliance for Vaccines and Immunization and the World Alliance for Patient Safety, the Global Forum for Health Research, the Global Environment Facility, the Stop TB and Roll Back Malaria partnerships and the Global Health Security Initiative. The UK is a major supporter of these.

There are new private sector collaborations in which industry is working with governments and international agencies to deliver health benefits. For example, the pharmaceutical industry is cooperating with WHO to facilitate access to essential medicines. The EC's Platform for Action on Diet, Physical Activity and Health and the success of the joint FSA/DH initiative in working with the food industry to effect change on product composition and labelling are good examples of this. GlaxoSmithKline's *Corporate Responsibility Report 2005*⁸⁷ outlines its support in areas such as access to medicines, research and development, humanitarian relief and the environment.

The UK has excellent relationships with many international organisations, NGOs, academia, industry and the health community. We will need to continue to build on these. We will need to draw on the expertise of international and national think tanks, policymakers and those delivering services on the ground. Partnerships must transcend traditional government, sector and national boundaries in order to make a real difference to global health and achieve the necessary national and international policy coherence.



ANNEX A

MILLENNIUM DEVELOPMENT GOALS AND TARGETS, WITH EXAMPLES OF POTENTIAL DH/NHS CONTRIBUTIONS

Goal 1: Eradicate extreme poverty and hunger

Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day

Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger

POTENTIAL DH/NHS CONTRIBUTION: Providing nutritional epidemiology skills, research into causes and treatment of malnutrition, and providing health economic advice that relates health to poverty

Goal 2: Achieve universal primary education

Target 3: Ensure that by 2015 children everywhere, boys and girls alike, will be able to complete a full course of primary schooling

Goal 3: Promote gender equality and empower women

Target 4: Eliminate gender disparity in primary and secondary education, preferably by 2005 and to all levels of education no later than 2015

Goal 4: Reduce child mortality

Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality ratio

POTENTIAL DH/NHS CONTRIBUTION: Providing clinicians to give technical advice, teaching and clinical services to developing countries and supporting basic research and product R&D, especially on vaccines

Goal 5: Improve maternal health

Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio

POTENTIAL DH/NHS CONTRIBUTION: Promotion of professional standards in midwifery and technical support in establishing laboratory facilities, including blood transfusion services

Goal 6: Combat HIV/AIDS, malaria and other diseases

Target 7: Have halted by 2015 and begun to reverse the spread of HIV/AIDS

Target 8: Have halted by 2015 and begun to reverse the incidence of malaria and other major diseases

POTENTIAL DH/NHS CONTRIBUTION: Technical support in the control and treatment of HIV/AIDS, malaria and tuberculosis

Goal 7: Ensure environmental sustainability

Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources

Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation

Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers

Goal 8: Develop a global partnership for development

Target 12: Develop further an open, rule-based, predictable, non-discriminatory trading and financial system

Target 13: Address the special needs of the least developed countries

Target 14: Address the special needs of landlocked countries and small island developing states

Target 15: Deal comprehensively with the debt problems of developing countries through national and international measures in order to make the debt sustainable in the long term

Target 16: In cooperation with developing countries, develop and implement strategies for decent and productive work for youth

Target 17: In cooperation with pharmaceutical companies, provide access to affordable, essential drugs in developing countries

Target 18: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

POTENTIAL DH/NHS CONTRIBUTION: Liaison between the UK pharmaceutical industry and international partners (eg through DH)

ANNEX B

THE CODE OF PRACTICE GOVERNING NHS RECRUITMENT OF INTERNATIONAL HEALTHCARE PROFESSIONALS

The current DH *Code of Practice for the international recruitment of healthcare professionals* was first introduced in 1999 and progressively tightened in 2001 and 2004. A central principle of the Code is that all recruitment agencies contracted by the NHS for permanent, temporary or locum staff are prohibited from actively recruiting health professionals from developing countries, unless the country has a special agreement with the UK. NHS organisations should follow the guiding principles of the Code in all their recruitment activities. In addition, DH has brokered a groundbreaking agreement for this Code to apply to major players in the independent healthcare sector. Where national contracts are signed to increase capacity in the NHS, compliance with the Code of Practice is a contractual obligation for all independent sector providers and recruitment agencies. The Recruitment Employers Confederation has also recently signed up to the Code on behalf of its members.

ANNEX C

SELECTED EXAMPLES OF COMMITMENTS MADE IN *ELIMINATING WORLD POVERTY: MAKING GOVERNANCE WORK FOR THE POOR* THAT HAVE THE POTENTIAL TO IMPROVE GLOBAL HEALTH

Building effective states and better governance

The UK will:

- support public sector reform and public financial management to help improve public services
- improve the effectiveness of our technical assistance
- help make public institutions more accountable, for example by strengthening parliamentary and regulatory oversight
- support independent organisations that monitor and track the performance of public services and organisations
- support the implementation of public expenditure financial accountability frameworks

Supporting good governance internationally

The UK will:

- publish an annual UK action plan to tackle corruption (eg to look at human trafficking)

Promoting peace and security

The UK will:

- ensure that the international response in post-conflict countries helps tackle poverty
- support initiatives to tackle social exclusion and radicalisation
- through the aid programme and UK conflict prevention pools, reduce the proliferation of small arms and light weapons

Reducing poverty through economic growth

The UK will:

- work closely with organisations like Business Action for Africa and the Commonwealth Business Council to identify ways to support development of the private sector
- work with others to seek that the Doha Development Agenda delivers gains for developing countries

- work with the private sector and other partners to seek ways that both developed and developing countries can benefit from migration and make it easier for people to send remittances to developing countries

Investing in people

The UK will:

- increase spending on education, health (including HIV and AIDS), water and sanitation and social protection
- make long-term commitments to partner countries through 10-year plans for expanding public services
- spend at least £8.5 billion on education between 2006 and 2015
- help partners solve their staffing crises by expanding links between the UK NHS and poor countries and exploring opportunities for health workers to return from the UK to their own countries, for extended periods, to help improve health services
- help partner governments abolish user fees for basic health and education services
- increase funding for a new generation of drugs and vaccines against the major killer diseases, particularly through new public-private partnerships and innovative technologies for cleaner water and sanitation
- quadruple its assistance to water and sanitation in Africa to £200 million by 2010/11

Managing climate change

The UK will:

- work for international agreement on a long-term stabilisation goal to avoid dangerous climate change
- work with the G8 and EU to develop and use clean energy technology in developing countries
- increase support for research on identifying and adapting to the impact of climate change

Reforming the international development system

The UK will:

- support the UN's work with the World Bank to help developing countries draw up long-term plans to achieve the MDGs
- push for a single, integrated UN humanitarian system
- develop clear arrangements for using military equipment and personnel in humanitarian crises
- continue to provide substantial support to NGOs and the Red Cross movement and the UK, for humanitarian assistance

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