

Tackling Health Inequalities

An All-Ireland Approach to Social Determinants

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Contents

Foreword	7
Preface	9
Introduction	11
Part One: Concepts, Definitions and Theories	13
What are Social Determinants of Health?	13
What are Health Inequalities?	15
Multiple causes	16
Measuring health inequalities	17
A life course perspective	18
Global issues	19
Working for Health Equity	19
Approaches and principles	20
Part Two: Health Inequalities in Ireland and Northern Ireland	23
All-Ireland Evidence	24
Ireland	24
Northern Ireland	25
The Context for Action in Ireland and Northern Ireland	26
Opportunities	26
Challenges	27

Part Three: Key Social Determinants of Health	29
1. Poverty and Inequality	29
Poverty in Northern Ireland and Ireland	30
Inequality	32
2. Social Exclusion and Discrimination	34
Gender	34
Ethnicity	35
Travellers	35
Asylum Seekers, refugees and low income migrant workers	35
Homelessness	35
Disability	35
Mental Health	36
Sexual Orientation	36
3. A Life Course Perspective	37
Pregnancy	37
Childhood	37
Older Age	38
4. Public Policies and Services	39
Health services	39
Education	41
Housing and accommodation	41
Transport	43
5. The Built Environment	45
6. Work and Employment	47
7. Community and Social Participation	49
8. Health Behaviours	51
Alcohol	51
Food	52
Smoking	53
9. Stress	55
References	57



Foreword

The social conditions in which people live and work can help create or destroy their health. Lack of income, inappropriate housing, unsafe workplaces and lack of access to health care systems are some of the social determinants of health leading to inequalities.

(World Health Organization [WHO], 2004)

Combat Poverty and the Institute of Public Health in Ireland (IPH) are pleased to jointly publish this all-Ireland report *Tackling Health Inequalities – A Social Determinants Approach*. Combat Poverty is a state advisory agency that develops and promotes evidence-based proposals and measures to combat poverty in Ireland. IPH promotes co-operation for public health across the island, with a focus on tackling health inequalities.

Our report shows how social, economic and environmental conditions play a major role in determining health in Ireland and Northern Ireland. For example, a recent study commissioned by Combat Poverty found almost half of those living in consistent poverty reported having a chronic illness (Layte et al 2007). Reducing poverty is key to improving the health of people currently living in poverty.

Our report aims to help key decision-makers in the areas of housing, education, transport, health and social policy to understand the important influence all their decisions have in determining people's opportunities for health.

Equitable access to high-quality health services is a shared strategic objective for Combat Poverty and IPH. Alongside this is our commitment to ensure that people have an adequate income, education and decent housing as without these people will continue to suffer poor health and quality of life and appalling inequalities in health.

Policies that tackle the structural causes of ill-health must be formulated and implemented on a cross-departmental basis. Support is needed to ensure those experiencing poverty and health inequalities are involved in the planning and implementation of these policies.

Each country faces its own unique set of challenges in addressing health inequalities. In Ireland and Northern Ireland we face particular issues in respect of income inequality, child poverty and fuel-poor housing.

Internationally, this report from IPH and Combat Poverty represents our contribution to a global movement working to show that public policy and services have a powerful influence in creating a social environment that is conducive to good health.

The World Health Organization Independent Commission on the Social Determinants of Health has been examining the international evidence-base since 2005 to equip us to adopt an effective social determinants approach to tackling health inequalities. The Commission's work and reports will guide thinking and understanding on how the social determinants of health operate and how they can be changed to improve health and reduce health inequalities within and between countries.

We hope this publication will facilitate better understanding of the role we all have to play in tackling health inequalities and creating a fairer society on the island of Ireland.



Kevin P. O'Kelly

**Kevin O Kelly,
Acting Director, Combat Poverty**



Jane Wilde

**Jane Wilde,
Chief Executive, Institute of Public Health in Ireland**

Preface

There are not natural disasters. There are natural phenomena that can become disasters depending on our set of social arrangements. This is an argument that has been put to the Commission on Social Determinants of Health. As an exemplar of that thesis, at the suggestion of David Satcher, one of our US Commissioners, the Commission on Social Determinants of Health held a workshop in New Orleans in 2007.

David Satcher's intention in inviting us to New Orleans was not to add to the criticism of the US government for the slow and inadequate response to Hurricane Katrina. His point was that Hurricane Katrina exposed the fault lines in American society. Before Hurricane Katrina the health and social statistics showed Louisiana to be among the least favoured of US states. The collapse of the levees led to flooding of areas lived in by people who were black and poor – overlapping characteristics in New Orleans – thus making matters dramatically worse.

As with natural phenomena that become disasters so it is with man-made disasters that cause as much havoc as natural phenomena can. This report highlights that the Troubles in Northern Ireland disproportionately affected the poor. Armed conflict and extreme natural phenomena are grisly demonstrations of the link between social processes and health inequalities. They illustrate a more general rule. The effects on health of social processes, in general, follow the social gradient: the lower the socioeconomic position the more health is affected by the social determinants of health.

This is one of the messages that comes through clearly from this report from the Institute of Public Health and Combat Poverty. The report contains an excellent review of the field of social determinants of health and has a welcome call for action. It says that: "policy commitments need to be championed, prioritised and resourced". As the report makes clear, formulating recommendations and promoting their uptake are necessary steps. The accounting will come from having good measurement systems to assess their impact on the distribution of health within Ireland.

It is this call for policy uptake and measurement that is especially welcome. It is one thing to know what to do; it is another to see that it is done. The Commission on Social Determinants of Health put in place a global process to assemble and review evidence and make recommendations. But who will take up those recommendations? We said that we wished to foster a global movement on the social determinants of health. A global movement is fine but it has to be acted on in specific places. This Irish report,

with its call for action, is wonderfully encouraging. It has the potential not only to reduce health inequities in Ireland, but also to serve as an exemplar of what can be done in a specific country.

The more countries that follow the Irish example, and produce and act on their reports, the more real will be the global movement on social determinants of health. It is the judgement of the Commission on Social Determinants of Health that this will have major impact on achieving a fairer distribution of health within countries and globally.



A handwritten signature of Michael Marmot in black ink, written in a cursive style.

Michael Marmot,
Chair of the Commission on Social Determinants of Health

Introduction

Health is not just the outcome of genetic or biological processes but is also influenced by the social and economic conditions in which we live. These influences have become known as the 'social determinants of health'. Inequalities in social conditions give rise to unequal and unjust health outcomes for different social groups.

In the past few decades a growing number of countries have made explicit policy commitments to greater health equity through addressing social determinants of health and their consequences. This concern with equity and social determinants of health is reflected in recent policy initiatives in both Ireland and Northern Ireland.

This publication provides an overview of what is meant by the term 'social determinants of health'; how these determinants are linked to inequality in health outcomes between different social groups; and what potential exists to do something positive about these inequalities.

The report draws on a range of national and international research, in particular work published by the World Health Organization (WHO) European Office and the early work of the WHO Commission on the Social Determinants of Health (CSDH) established in 2005 (to report by 2008). The WHO CSDH set out to help build a sustainable global movement for action on health equity and social determinants both within and between countries.

The report therefore links international thinking on these issues, to the situation here. It calls for more concerted efforts to address health inequalities and the social determinants of health on the island of Ireland and represents a commitment on the part of the Institute of Public Health in Ireland and the Combat Poverty Agency to become part of a global movement intent on achieving greater health equity. The report is structured into three main sections:

- **Part One** defines social determinants of health and health inequalities, describes how they are connected and outlines strategic approaches and guiding principles for addressing them that could provide a framework for action into the future.
- **Part Two** highlights some of what is known about the extent and nature of health inequalities on the island of Ireland. It outlines the policy contexts in Ireland and Northern Ireland for addressing health inequalities through a social

determinants approach, highlighting opportunities and challenges that currently exist.

- **Part Three** outlines some key social determinants of health on the island of Ireland and highlights policy issues considered relevant to addressing their consequences.

Part One: Concepts, Definitions and Theories

What are Social Determinants of Health?

'The social conditions in which people live powerfully influence their chances to be healthy. Indeed factors such as poverty, food insecurity, social exclusion and discrimination, poor housing, unhealthy early childhood conditions and low occupational status are important determinants of most diseases, deaths and health inequalities between and within countries'

(World Health Organization [WHO] 2004)

Health is influenced, either positively or negatively, by a variety of factors. Some of these factors are genetic or biological and are relatively fixed. 'Social determinants of health' arise from the social and economic conditions in which we live and are not so fixed. The kind of housing and environments we live in, the health or education services we have access to, the incomes we can generate and the type of work we do, for instance, can all influence our health, and the lifestyle decisions we make.

A range of factors has been identified as social determinants of health and these generally include: the wider socio-economic context; inequality; poverty; social exclusion; socio-economic position; income; public policies; health services; employment; education; housing; transport; the built environment; health behaviours or lifestyles; social and community support networks and stress. A life course perspective provides a framework for understanding how these social determinants of health shape and influence an individual's health from birth to old age.

People who are less well off or who belong to socially excluded groups tend to fare badly in relation to these social determinants. For example they may have lower incomes, poorer education, fewer or more precarious employment opportunities and/or more dangerous working conditions or they may live in poorer housing or less healthy environments with access to poorer services or amenities than those who are better off – all of which are linked to poorer health.

While the precise pathways through which social determinants influence health are not clear and are the subject of continuing research, it is important to note that:

- (i) Social determinants contribute to health inequalities between social groups. This is because the effects of social determinants of health are not distributed equally or fairly across society.
- (ii) Social determinants can influence health both directly and indirectly. For example damp housing can directly contribute to respiratory disorders, while educational disadvantage can limit access to employment, raising the risk of poverty and its adverse impact on health.
- (iii) Social determinants of health are interconnected. For example poverty is linked to poor housing, access to health services or diet, all of which are in turn linked to health.
- (iv) Social determinants operate at different levels. Structural issues, such as socio-economic policies or income inequality, are often termed 'upstream' factors.

While 'downstream' factors like smoking or stress operate at an individual level – and can be influenced by upstream factors.¹

Efforts to address inequalities in health must address the way in which the social determinants of health are distributed unfairly. Addressing the social determinants of health suggests 'going beyond the immediate causes of disease' and placing a stronger focus on upstream factors, or the fundamental 'causes of causes' (WHO CSDH, 2007).

As Fran Baum, one of the WHO Commissioners on the Social Determinants of Health, has pointed out, governments need a commitment to the values of fairness and justice and an ability to respond to the complex nature of the social determinants of health 'beyond exhorting individuals to change their behaviour' (Baum 2007:90).

What are Health Inequalities?

'Poor social and economic circumstances affect health throughout life. People further down the social ladder usually run at least twice the risk of serious illness and premature death as those near the top' (Wilkinson and Marmot 2003:10).

The terms 'health inequalities' and 'health inequities' are both² used in the research and policy literature, and both refer to the unfair or unjust nature of health differences between social groups, generated by social conditions.

A substantial body of research has established that those who are poorer or disadvantaged are more likely to face more illness during their lifetime and die younger than those who are better off. This means that the chances of a long and healthy life are not the same for everyone. There is a health gap between rich and poor. There is also a clear social gradient in health whereby health generally improves with each step up the income ladder.

Other forms of inequality, based on ethnicity, gender or geography for example, can compound health inequalities generated by underlying socio-economic inequalities. This means that some social groups are particularly badly affected.

- 1 There is also a growing interest in research which links these social determinants, particularly stress, with biological changes.
- 2 Whitehead and Dahlgren (2006) make the point that the terms are synonymous. Health inequalities is the term used generally in this report, because it is more commonly used in an Irish policy context.

The human and economic costs of health inequalities are substantial. Recent research (based on 2004 figures) indicates that inequality-related health losses amount to more than 700,000 deaths per year and 33 million cases of ill health in the European Union as a whole (Mackenbach et al 2007). The authors estimate that these losses account for 20% of the total costs of health care and 15% of the total costs of social security benefits.

It has been estimated that 5,400 fewer people would die prematurely each year across the island of Ireland by tackling social deprivation and inequalities, matching death rates of Europe (Department of Health, Social Services and Public Safety, Northern Ireland 2002: 23).

A certain amount of variation in health, based on biological or genetic factors is to be expected in the population. But health inequalities, or health inequities, refer specifically to differences in health between social groups that have three distinguishing features (Whitehead and Dahlgren 2006). They are systematic, that is they are not random but follow a consistent social pattern. They are socially produced, rather than the result of biological or other fixed processes, and are therefore regarded as modifiable. They are widely perceived to be unfair or inequitable.

In this way, health inequalities represent an important aspect of the human rights agenda where fair opportunities for health and well-being are recognised as a human right. This is perhaps best expressed in the WHO Alma Ata Declaration:

‘This conference strongly reaffirms that health, which is a state of complete physical, mental and social well being and not merely the absence of disease or infirmity, is a fundamental human right and that the attainment of the highest possible level of health is a most important world wide social goal whose realisation requires the action of many other social and economic sectors in addition to the health sector’ (Alma Ata Declaration 1978).

Multiple causes

As noted earlier the pathways from social determinants to health inequalities are not yet fully understood.³ But it is thought that a range of factors contribute to health inequalities. These include:

- Socio-economic or material factors such as government social spending and the distribution of income and other resources in society which influence the social and built environment (housing, transport etc).

³ See Solar and Irwin (2007) for a detailed discussion of current theories and perspectives.

- Psychosocial factors such as stress, isolation, social relationships and social support.
- Behavioural or lifestyle factors, such as smoking, diet and exercise.

These factors are inter-related and can all be influenced by the social conditions in which people live their lives. Stress or isolation for instance is often linked to the impact of poverty, financial strain, social exclusion, discrimination or inequality. Behavioural factors such as cigarette use or poor diet can also be influenced by these social contexts. Research has shown how smoking may be related to coping with strained material circumstances (Graham 1993); and that a healthy diet can be difficult to achieve on a low income. In Ireland, low-income one parent households with one child would have to spend 80 per cent of their weekly disposable income to purchase a healthy food basket (Friel et al 2004).

Measuring health inequalities

Adequate baseline data is necessary to help us understand health inequalities more fully and to help identify appropriate targets and interventions to reduce them. The routine availability of data on health inequalities is also useful for keeping the issue on the policy agenda and for monitoring the effect of agreed strategies and interventions. In order to measure health inequalities between social groups, we need:

- (i) Information about death, illness, health and health service use.⁴
- (ii) Information about how these health indicators are patterned across different demographic or socio-economic groups and across different geographical areas.⁵

Ideally these two sets of information should be collected in ways that coincide with international standards, so that data can be compared across national and international boundaries as well as time.

Being able to map health inequalities geographically at a small population area level (e.g. electoral division level in Ireland; ward or enumeration district level in Northern

4 The most commonly used health and illness indicators tend to include: mortality rates (i.e. death rates); life expectancy; low birth weight; morbidity patterns, (i.e. patterns of illness); self-rated health (or people's own perceptions of their health status); disability or long standing illness; and health service utilisation data.

5 The most commonly used demographic and socio-economic indicators include gender, age, occupational or social class status, socio-economic group, ethnicity, level of education, income or experience of deprivation and housing tenure.

Ireland) is important. This helps to build a picture of the spatial distribution of health inequalities, to identify problem areas and to target resources equitably as a result. Complementary data collection strategies for groups whose experiences may not be captured through mainstream research (e.g. nomadic Travellers, homeless people, refugees and asylum seekers and those in prisons or other institutions) are also important.

There is now a considerable body of evidence about health inequalities across the island. This comes from all-Ireland research (Balanda and Wilde 2001; Balanda and Wilde 2003; O'Reilly et al 2006) and from information available separately in both parts of the island. Key findings from this research are outlined in more detail in Part Two.

It has not been easy to build up an accurate evidence base on health inequalities. In Ireland deficits in population health data and commitments to address them have been noted in a number of documents (e.g. Department of Health and Children 2004; Nolan 2006). Obtaining comparable data across the island has also posed difficulties for researchers and others working on an all Ireland basis. This is due to differences in how socio-economic and health data are collected and categorised (O'Reilly et al 2006). For example a recent paper highlights the way that socio-economic group coding practices in the Republic make it difficult to monitor trends in socio-economic inequalities in mortality in that jurisdiction; a problem not encountered in Northern Ireland (Balanda, Kobayashi & Graham 2008). The difficulties that lack of data, particularly harmonised data, poses at EU level have also been highlighted (Mackenbach et. al 2007a).

Improvements in the collection of relevant population health data, particularly in Ireland and on an all-Ireland basis, would therefore make an important contribution to working for greater health equity.

A life course perspective

A lifecycle or lifecourse perspective provides a useful framework for understanding how social determinants influence health and the generation of health inequalities and for identifying entry points for interventions.

Briefly a 'lifecourse' perspective explores how different social determinants operate or accumulate as advantages or disadvantages over different stages of the lifecycle. Research shows that health experiences in early life, even in the womb, and the social conditions that shape them, e.g. poor maternal health resulting from material disadvantage, will go on to influence health in later life.

Information arising from a variety of longitudinal studies in Ireland and Northern Ireland will add greatly to knowledge of the way in which social determinants create health inequalities across the lifecourse. Findings from the Lifeways study, part of a major research project conducted through the Health Research Board Unit for Health Status and Health Gain (Irish Medical Journal 2007) have already provided evidence of the impact of social influences on maternal and early childhood health.

Global issues

The WHO Commission on the Social Determinants of Health aims to strengthen and promote health equity both in and between countries. The Commission also calls for attention to the global context, which influences relations between countries and conditions within them. Gross inequalities between developed and developing countries demand much greater international efforts to work for health equity globally.

Working for Health Equity

Health equity is defined as the 'absence of unfair and avoidable or remediable differences in health' among social groups (Solar and Irwin 2007). Health equity is therefore about the values of fairness and justice. A focus on health equity means valuing health as an essential and valuable resource for human development, helping people reach their potential and contribute positively to society. Health also represents an important public good, an investment in human, societal and economic development.

Individuals can make choices in everyday life that improve and protect their health. But their health is also influenced by external factors beyond their control. In order to address these external factors and create social conditions conducive to health, Governments need to champion public health and health equity. They need to collaborate right across departments and public bodies. They also need to work with other sectors such as the community and voluntary sector, service users, commercial interests, employers and trade unions. At a strategic level Governments need to continue to tackle the problems of poverty, inequality and social exclusion; providing equitable, accessible health and other public services and ensuring that public policies are conducive to health.

These strategic commitments must be supported by mechanisms such as target setting, monitoring and evaluation underpinned by adequate data collection to measure progress on health equity and anti-poverty goals. Health impact assessment

procedures and regulatory frameworks that support health are required as well as mechanisms to facilitate the participation of other sectors, particularly those who are most disadvantaged.

While there is a substantial international literature on the nature of health inequalities, the evidence base about effective interventions to reduce them is in need of ongoing development. This is because the links between the social determinants of health and health inequalities are often indirect and long term. But the evidence base for reducing health inequalities is growing and there are international lessons which policy makers in Ireland can draw on in developing specific interventions (eg Whitehead and Dahlgren 2006; Mackenbach et al 2007a).

Approaches and principles

Available evidence suggests that three broad approaches are necessary to address health inequalities. These approaches are not mutually exclusive but are 'interdependent and should build on one another' (Whitehead and Dahlgren 2006). They include:

1. *Focusing on the most disadvantaged groups*

This targets the worst off or poorest groups and aims to improve their health through specific measures. This approach can improve the health of those who are worst off, even if the health gap between rich and poor is unchanged.

2. *Narrowing health gaps*

This aims to improve the health of those who are poorest or most disadvantaged by raising their health outcomes closer to those who are most advantaged. This usually involves target setting to reduce the disparity in health outcomes between the most advantaged and most disadvantaged groups.

3. *Reducing the social gradient*

Tackling the social gradient in health involves reducing differences and equalising health all along the income ladder.

Combining these three approaches underlines the need for both tailored interventions (which specifically address the needs of those worst affected by inequalities) and universal strategies built on the principles of equity and quality. Action for health equity will obviously differ from country to country depending on the nature of problems experienced and differing policy contexts.

Though context is important, international analysis suggests some general principles for action on health equity. Whitehead and Dahlgren (2006) identified ten guiding principles for the WHO European Office. These include:

1. Health equity policies should strive to level up, not level down.
2. The three main approaches to reducing social inequities in health are interdependent and should build on one another.
3. Population health policies should have the dual purpose of promoting health gain in the population as a whole and reducing health inequities.
4. Actions should be concerned with tackling the social determinants of health inequalities.
5. Stated policy intentions are not enough: the possibility of actions doing harm must be monitored and assessed (through health equity impact assessment).
6. Appropriate tools are needed to measure the extent of inequities and the progress towards goals.
7. Concerted efforts must be made to give a voice to the voiceless.
8. Wherever possible, social inequities in health should be described and analysed separately for men and women.
9. Differences in health based on socio-economic position should be linked to ethnicity and geography.
10. Health systems should be built on equity principles – public health services should be provided according to need, not ability to pay, they should not be driven by profit, and should offer the highest standards of care to all.

(Whitehead and Dahlgren 2006)



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Part Two: Health Inequalities in Ireland and Northern Ireland

There is compelling evidence of health inequalities in both Ireland and Northern Ireland. This evidence is striking, and underlines the need for concerted action on the social determinants of health inequalities.

All-Ireland Evidence

Significant differences in death rates between social classes were highlighted in the Institute of Public Health's *Inequalities in Mortality* report (Balanda and Wilde 2001). Overall the findings showed that between 1989 and 1998:

- The death rate for all causes in the lowest occupational class was 100 to 200% higher than the rate in the highest occupational class.
- Differences in mortality rates were even greater for some causes of death.

When it comes to health and illness, significant inequalities between socio-economic groups were revealed in an Institute of Public Health all-Ireland report on social capital and perceived health (Balanda and Wilde 2003) which found that:

- People with no formal education qualifications were half as likely as those with third-level education to say they had excellent or very good health.
- Those who were unemployed were a third less likely than those in employment to have a high general mental health score.
- People with the lowest incomes were half as likely as those with the highest incomes to be very satisfied with their health or to have a very good quality of life.

More recently marked social gradients in self-rated health across the island were documented in a large survey of patients of general practices on the island of Ireland (O'Reilly et al 2006). This study found that household income levels were strongly linked to health with similar steep gradients in both Ireland and Northern Ireland.

Ireland

In addition to worrying differences in death rates highlighted by the all-Ireland mortality report, recent analyses of the EU Survey on Income and Living Conditions in Ireland revealed significant inequalities in health and illness between socio-economic groups (Layte et. al 2007) in 2004:

- 85% of those who were 'non-poor' reported good or very good health, whereas this was true of only 66% of those experiencing income poverty.

- Almost half (47%) of those who were consistently poor (i.e. in income poverty and experiencing deprivation) and 38% of those who were income poor reported having a chronic illness, compared with 23% of the general population.
- 11% of men in the highest income decile⁶ had a chronic illness. This rose to 20% for those in the middle of the income range, and to 42% for those in the second lowest decile.

The health of some socially excluded groups is even more severely affected. Travellers in Ireland live on average 10 to 12 years less than the general population (Barry et al, 1987). Homeless people are vulnerable to ill health and premature death. In 2006 for instance, 55 homeless people who had been in contact with Simon Communities services died prematurely (Simon Communities 2007).

Northern Ireland

In Northern Ireland there is also considerable evidence of health inequalities. Much of this evidence comes from the health and social care inequalities monitoring system which provides information on area differences in mortality, morbidity and health service use. Baseline results were presented in 2004 and an update bulletin was published in 2007 (Department of Health Social Services and Public Safety 2004, 2004a and 2007).

- There is a two and a half fold difference in the rate of premature mortality (death) between the managerial and professional class and those in routine or manual occupations (Joseph Rowntree Foundation 2006).
- Health outcomes in deprived areas are generally worse than in Northern Ireland overall (Department of Health, Social Services and Public Safety [DHSSPS] 2004a). Despite some relative improvements, there is a continuing health gap between the most deprived areas and Northern Ireland overall. This is most evident in the potential years of lives lost, infant mortality rates, teenage births, admission rates to hospital and cancer incidence (DHSSPS 2007).
- While life expectancy has been increasing in recent years for both men and women, both in deprived areas and in Northern Ireland overall, there is no evidence of a narrowing of the inequality gap (DHSSPS 2007).

⁶ In the survey the income ladder (or the income distribution) is divided into tenths or ten equal groups from those with the highest incomes down to those with the lowest. Each group is called a decile.

- There was a higher prevalence of long-standing illness among people in lower socio-economic classes. 30% of professional/managers suffered from longstanding illness compared to just under half (47%) of unskilled workers (DHSSPS 2004).
- People in poorer households were more likely than those in wealthier households to have borne the brunt of the Troubles, either in their areas or on their lives (DHSSPS 2004).

The Context for Action in Ireland and Northern Ireland

There are both opportunities and challenges for addressing the social determinants of health inequalities on the island of Ireland. Opportunities exist in stated policy goals and commitments to address poverty and social exclusion, improve public health and reduce health inequalities in both parts of the island and in growing community development activity and advocacy around these issues.

Evidence of significant health inequalities between rich and poor on the island and rising unemployment and changing economic circumstances in Ireland pose significant challenges.

If existing or emerging policy commitments are to bring about change they need to be championed, prioritised, and resourced. Long-term national targets are necessary to achieve greater equity in health. These need to be monitored to assess progress (and any unintended consequences). They need to be supported by medium and short-term and local level policies and goals, and meaningful performance indicators and responsibility for them needs to be made explicit (Nolan 2006).

Opportunities

The need to tackle poverty, social exclusion and health inequalities has been outlined at national policy levels in Ireland and Northern Ireland, providing a potentially positive environment in which to continue to achieve progress. This high-level policy context broadly encompasses:

- In Northern Ireland after a period of consultation the *Lifetime Opportunities: Government's anti-poverty and social inclusion strategy for Northern Ireland* was published in 2006 (Office of the First Minister and Deputy First Minister 2006). Health strategy documents *Investing for Health* published in 2002 and *A Healthier*

Future published in 2004 (DHSSPS 2002 and 2004b) set out goals and targets to increase life expectancy and healthy life years and reduce inequalities in health between geographic areas, socio-economic and minority groups.

- In Ireland a ten-year National Anti-Poverty Strategy (NAPS) was introduced in 1997. This has been replaced by the *National Action Plan for Social Inclusion 2007-2016* (Office for Social Inclusion 2007). Specific targets for the reduction of health inequalities were identified by a NAPS working group on health in 2001 and endorsed in the National Health Strategy, *Quality and Fairness: A Health System for You* (Department of Health and Children 2001). Issue-specific recommendations that address a wide range of influences, for example, on the problems of obesity or alcohol misuse, have also been made by Government-appointed taskforces.

In addition to this high-level policy environment, community development initiatives across the island have increasingly challenged health inequalities, highlighting the need to involve disadvantaged groups and communities in working for change. This is exemplified in the work of the Community Development and Health Network in Northern Ireland, and in the work of participating projects in the Building Healthy Communities initiative funded by Combat Poverty Agency in Ireland⁷.

The all-Ireland *Public Health Alliance* has also brought together interested organisations and individuals to advocate for a fairer and healthier society and to raise public awareness of health inequalities and the need to tackle them (see Battel-Kirk and Purdy 2007).

Challenges

Despite the positive policy environment, greater advocacy and reductions in consistent poverty, challenges remain. These include relatively high risks of poverty for some groups such as lone parents, the unemployed, children and those with disabilities as well as rising unemployment and changing economic circumstances in Ireland. There is also continuing evidence of significant health inequalities between social groups on the island.

Further detail on the impact of various social determinants on health and specific problems such as gender and income inequality, inequities in health, housing and education, fuel poverty, obesity, food poverty and the experience of marginalised groups such as Travellers and immigrants, is provided in Part Three. In addition, the history of the Troubles, in which many people were killed or injured, leaves a legacy which must be addressed and is layered onto the issues of economic development, poverty and social exclusion across the island.

7 See www.chdn.org (Community Development and Health Network website) and www.cpa.ie/health (Combat Poverty Agency website) for further information.



Part Three: Key Social Determinants of Health

1. Poverty and Inequality

Both poverty and economic inequality are bad for health. Poverty is an important risk factor for illness and premature death. It affects health directly and indirectly, in many ways, e.g. financial strain, poor housing, poorer living environments and poorer diet, and limited access to employment, other resources, services and opportunities. Poor health can also cause poverty.

The adverse impact of income inequality on health has also been increasingly acknowledged. There is much debate about how income inequality adversely affects population health. Societies with higher levels of income inequality also tend to have higher levels of poverty and public investment in health and education tends to be lower in societies with higher levels of income inequality (Dahlgren and Whitehead 2006).

Recent research by Pickett and Wilkinson (2007) for example, showed that in richer societies child well-being outcomes tended to be worse with higher levels of income inequality. The authors suggest that in richer countries at least, improvements in child well-being may depend more on reductions in income inequality and levels of relative income poverty, than on further economic growth.

Poverty in Ireland and Northern Ireland

Different methods are used to collect income, deprivation and poverty data in Northern Ireland and Ireland so direct comparisons are not straightforward (Hillyard et al 2003; Joseph Rowntree Foundation [JRF] 2006).

A recent study of poverty and social exclusion in Northern Ireland for the Joseph Rowntree Foundation (2006) used EU indicators to conclude that Ireland and Northern Ireland ranked close to one another in terms of poverty, in the lower half of the EU league (where first was best, and last worst).

Ireland

The European Union Survey of Income and Living Conditions in Ireland (EU SILC) monitors poverty trends, and the most recent survey data refers to 2006 (Central Statistics Office [CSO] 2007). This survey includes two measures of poverty:

- The *at risk of poverty rate*, i.e. the percentage of people who fall below an income threshold, set at 60 per cent of the national median income (also known as relative income poverty).
- *Consistent poverty*, or the percentage of people who fall below the income threshold and are also deprived as a result of this income. Being deprived is defined as lacking (because it is unaffordable) at least one of eight household items such as a roast once a week or new, not second-hand, clothes⁸.

⁸ A revised consistent poverty measure will be used from 2007 onwards, using a set of up-to-date deprivation indicators in keeping with current living standards (CSO 2007)

Overall 17% of households in Ireland were found to be at risk of poverty in 2006. This represented about 720,000 people. 6.9% were found to be in 'consistent poverty' - accounting for nearly 300,000 people living on low incomes and deprived of basic necessities because they could not afford them (Combat Poverty Agency 2007:15).

High-risk groups included the unemployed, those who were ill or disabled and members of lone parent households. Women had a higher risk of poverty than men, and children had a higher risk of poverty than adults. One in every five children was found to be at risk of poverty. The at risk of poverty rate for the elderly declined significantly from 20% in 2005 to 14% in 2006 (See Table 1).

Lone parent households had the highest levels of consistent poverty at 33% - and the highest deprivation levels at almost 65%. More than one in ten children experienced consistent poverty.

Table 1. Poverty in Ireland 2006

	At Risk of Poverty 2006	Consistent Poverty 2006
Total Population	17% (720,770 people)	7% (292,550 people)
Lone Parent Families	40%	33%
Unemployed People	44%	23%
Ill or Disabled People	41%	20%
Children under 14	20%	11%
Older People	14%	2%
Women	17.4%	6.6%
Men	16.6%	6.4%

Source: *EU Survey on Income and Living Conditions in Ireland 2006 (CSO 2007)*; Combat Poverty Agency (www.combatpoverty.ie)

The latest comparable data for the EU 25 (which refer to 2005 figures) show that along with Greece and Spain, Ireland had the third highest risk of poverty with a rate of 18.5%. (Lithuania and Poland had higher rates at 21%). The average rate for the EU 25 in 2005 was 16%. Between 2005 and 2006 Ireland's at risk of poverty rate fell from 18.5 to 17%.

Northern Ireland

In Northern Ireland poverty data from the Joseph Rowntree Foundation Monitoring Poverty and Social Exclusion Study (JRF 2006) found that

- 20% of the population were living in relative income poverty (based on below 60% of median income) over the period 2002/3 to 2004/5, accounting for 350,000 people.
- 25% of children were living in income poverty, accounting for 100,000 children.

An interim report from the Office of the First Minister and Deputy First Minister Committee's *Inquiry into child poverty in Northern Ireland* noted that 100,000 children were living in relative poverty in Northern Ireland and that 44,000 children were living in severe child poverty – a situation the Committee regarded as 'unacceptable in the 21st century'. Targets to eliminate child poverty by 2020 and to work toward the elimination of severe child poverty by 2012 have been set in the Programme for Government (Northern Ireland Assembly 2008).

In 2005/6 over half of Northern Ireland's population had incomes of less than £300 per week, and more than half of children in Northern Ireland lived in households with incomes in the bottom two quintiles (fifths) of the income ladder (Department for Social Development 2007).

Inequality

In general terms income inequality in Northern Ireland and Ireland is high compared to other rich countries. Recent research suggests that among EU or OECD countries, Ireland (with the UK) is in a group with a relatively high degree of income inequality, compared not just to Scandinavian countries where inequality is low, but also compared to other countries like France, Germany, Belgium and the Netherlands (Nolan and Maitre 2007). Given available data for Northern Ireland, the same seems to apply, though the level of income inequality may be worse. Income inequality is generally measured in two ways:

- Income distribution is measured by dividing the population into tenths or fifths (deciles or quintiles), moving from the richest tenth (the top decile) down along the income ladder to the poorest tenth (or bottom decile) to see how much income each group holds.
- A statistical calculation called the Gini coefficient. This is a number between 0 and 1, or a percentage between 0 and 100 where 0 represents total equality,

where each individual has an equal share and 1 represents total inequality, where the total national income would be in the hands of just one individual.

Research on poverty and social exclusion has suggested that Northern Ireland, with a Gini coefficient of 42%, was one of the most unequal societies in the developed world at that time (Hillyard et al 2003: 43). In Ireland the EU SILC found that in 2005 those in the top income quintile (the top fifth) had almost five times the income of those in the bottom fifth. The Gini coefficient had increased from 31.1% in 2003 to 32.4% in 2005. Sustained economic growth had not managed to reduce the income gap between rich and poor, and recent research shows that during the economic boom income gaps between those at the top and those at the bottom of the income ladder widened (Nolan and Maitre 2007).

Policy issues to consider

- Strategies to reduce poverty and inequality are fundamental to reducing health inequalities.
- Long-term targets for greater health equity and the reduction of health inequalities need to become government priorities, and need to be championed, resourced, reviewed and supported by medium and shorter term goals, policies and actions.
- Policies and actions to address poverty, social exclusion and health inequalities need to be mainstreamed into all policy areas. Working for health equity requires a joined-up approach across government departments and cross-sectoral partnerships between and within sectors. Health Impact Assessment could usefully inform this process as it enables policy makers to assess the health implications of a wide range of public policy decisions.

2. Social Exclusion and Discrimination

Social exclusion is the process by which groups and individuals are prevented from participating fully in society as a result of a range of factors including poverty, unemployment, caring responsibilities, poor education or lack of skills. Travellers, women, older people, people with disabilities or homeless people, for example, may experience social exclusion. Social exclusion therefore is about more than income poverty. It is about isolation from participation in social life, and from power and decision-making. It is harmful to the individuals and communities affected, it is harmful to society as a whole and it is linked with poorer health outcomes.

Social exclusion is often compounded by discrimination, which can arise on the basis of a person's gender, race or ethnicity, disability, marital, family or caring status, age, religion or sexual orientation. Equality legislation has an important role to play in tackling these forms of discrimination and promoting greater equality, inclusion, acceptance and diversity.

Gender

Gender differences in health and mortality are complex and not yet fully understood. The social determinants of health have both similar and different effects on men and women. Women seem to have a biological advantage over men in terms of life expectancy. Men tend to die younger than women, and research suggests that the work they do and issues like job security and unemployment often affect men's health. The Inequalities in Mortality Report (Balanda and Wilde 2001:11) found that on the island of Ireland the all-cause mortality rate for men was 54% higher than for women.

On the other hand it also appears that women often bear extensive caring and nurturing responsibilities and a higher prevalence of poverty. The stress of making ends meet impacts on the health of those who are less well off, in particular women (Daly and Leonard, 2002). In Ireland the EU Survey of Income and Living Conditions showed that, in 2006, women had a higher risk of poverty than men, and people living in female-headed households had a higher risk of poverty than those in male-headed households (CSO 2007). In Northern Ireland women also had a higher rate of poverty than men, with a quarter of men (25%) in poor households compared to 29% of women (Hillyard et al 2003:51).

Ethnicity

The experience of discrimination can be stressful and can worsen the health of those who belong to ethnic minority groups.

Travellers

It is known that Irish Travellers experience significantly worse health than the settled population. Traveller infant mortality rates are higher and in general life expectancy is much lower than for settled people. Irish Travellers often face poor living conditions and accommodation as well as discrimination, which are all detrimental to health.

An all-Ireland Study of Traveller Health is currently underway at University College Dublin and is jointly funded by the Department of Health and Children in Ireland and the Department of Health, Social Services and Public Safety in Northern Ireland. This will update and expand our knowledge and understanding of Traveller health, and the particular experiences that adversely affect their health; thereby supporting the implementation of strategies to tackle the health problems of the Traveller community.

Asylum seekers, refugees and low income migrant workers

The population on the island of Ireland has become increasingly diverse. Research highlights issues of concern, particularly among refugees and asylum seekers, including social exclusion, food poverty and nutrition problems (e.g. Manandhar et al 2006). Concerns also exist about vulnerability of migrant workers to exploitation and poor working conditions (see Migrant Rights Centre Ireland 2007).

Homelessness

Homeless people, particularly those living on the streets, often experience extreme poverty and marginalisation and the impact on both physical and mental health is well documented. The Simon Communities Annual Review revealed that 55 people who had used its services in 2006 died prematurely, with an average age of just 42 years (Simon Communities 2007).

Disability

Unemployment and poverty rates are high among people with disabilities. This socio-economic exclusion of people with disabilities results in lower incomes. Combined with lack of access to transport, the built environment, services and many other aspects of everyday participation in community life, this can lead to particularly acute forms of marginalisation.

A study of disability and social inclusion in Ireland found that people with disabilities were twice as likely to be in poverty as others in society (Gannon and Nolan 2006). In Northern Ireland over half (56%) of households that contained one or more disabled person were in poverty compared to 29% of 'non-disabled' householders living in poverty (DHSSPS 2004).

Families with children with disabilities are also at risk of poverty. Many parents opt out of the labour force to care for their disabled children and their employment opportunities can be compounded by a shortage of appropriate care and education facilities.

Mental health

Living in poor material circumstances or being faced with discrimination or exclusion is a stressful experience. People living in poverty tend to experience poorer mental health and have a higher dependency on mental health services than people in higher socioeconomic groups (Burke 2007 cited in Combat Poverty 2007a). In Northern Ireland research has shown that people who were unemployed were almost twice as likely to show signs of a possible mental health problem as those in employment (DHSSPS 2002).

Sexual orientation

It is widely acknowledged that lesbian, gay or bisexual groups are at risk of discrimination and exclusion. This exclusion can also result in stress and mental health difficulties.

Policy issues to consider

- Addressing social exclusion, promoting social inclusion and respecting diversity need to be key public policy priorities.
- Data collection strategies need to ensure that adequate information about the social and spatial patterning of population health is made routinely available.
- Public service delivery should be equitable, culturally sensitive and appropriate to diverse needs and accessible to people with disabilities and other vulnerable groups and communities. Information about health and welfare entitlements and public services should be made available in a broad range of formats and languages, including Irish Sign Language.

3. A Life Course Perspective

The influence of wider social conditions on health is significant at different points in the lifecycle, particularly when people are most dependent or vulnerable, e.g. childhood, pregnancy and older age. Recent research shows how accumulated social disadvantage or advantage over the lifecycle influences health and well-being, the likelihood of illness and of premature death. These influences occur across the lifecourse, from 'womb to tomb'.

Pregnancy

Maternal health during pregnancy is important for women's own well-being, as well as being a very important influence on infant health. International evidence shows that good health in the womb and in childhood has long-term beneficial effects.

The experience of socio-economic disadvantage can be harmful to a mother's health and can influence a child's health in the long term. Research in Ireland indicated that babies born in 1999 to parents who were unemployed were over twice as likely to have low birth weights as babies born to higher professionals (McAvoy 2006). This research also highlighted the greater risk of death, disability and academic underachievement associated with low birth weight. The need to develop a greater priority on equitable birth outcomes and better maternal health for disadvantaged women has also recently been highlighted in the Interim Report on the Northern Ireland Assembly Committee's Inquiry into Child Poverty (Northern Ireland Assembly 2008). Support for mothers, particularly for those who are less well off and those who are parenting alone, is vital to maternal and childhood health.

Childhood

Child poverty is a significant problem on the island of Ireland. This is particularly important from a public policy point of view because poor health during childhood has long-term consequences not just for health and well-being, but also for education and employment opportunities.

The Northern Ireland *Investing for Health* Strategy (DHSSPS 2002) recognises clear links between family socio-economic circumstances and the health status and health behaviours of children. In poorer families children were found to have more adverse behavioural conditions, higher accident rates, higher rates of decayed teeth and teeth extractions, higher intakes of fried food, processed meats and sweets and lower intakes of fruit and vegetables.

Older age

With rising life expectancy, older life is providing more opportunities for good health, enjoyment and activity. In 2005, nine out of ten older persons (aged 65 and over) in Ireland considered their health to be fair to good (Office for Social Inclusion 2007). However, diminishing income, reduced mobility and reduced social support or activity may impact on health as one grows older. In addition, those who have experienced adverse social conditions earlier in life can experience the accumulation of these factors even more acutely – or may even face premature mortality.

In Ireland over 51% of those aged 65 or over reported having a chronic illness or disability compared with 18% of the working age population in 2005 (Office for Social Inclusion 2007). The indications are that at risk of poverty levels among older people in the Republic of Ireland have decreased significantly in recent years, from 20% in 2005 to 14% in 2006. In Northern Ireland research indicates that 20%, or 50,000, pensioners experience income poverty (Joseph Rowntree Foundation 2006).

Policy issues to consider

- The elimination of child poverty will improve children's health now and into the future. Policies and targets to eliminate child poverty should be prioritised and implemented.
- The reduction of health inequalities should be embraced as a central objective of maternity and antenatal services.
- Various stages of the lifecycle from 'womb to tomb' present opportunities and entry points for action on health equity, better public health and the reduction of health inequalities.
- Healthy ageing can be promoted through the development of appropriate living environments in tandem with appropriate health and social welfare policies and services to meet the needs of older people - this will increase the chances of disadvantaged people being able to enjoy their old age.

4. Public Policies and Services

Although individuals can make choices in everyday life that may improve and protect their health, they are not completely in control of the social conditions in which they live and work. Public policy exerts a powerful influence on these external conditions, and can play an important role in supporting individuals by creating conditions conducive to good health. Public policy also has an important role to play in encouraging other sectors to contribute to greater health equity.

Public policy decisions influence people's access to resources (e.g through employment, tax and welfare policies) and shape people's access to and experience of important public services. Equitable and quality health services, decent housing, educational opportunities and good public transport are all beneficial for health.

The National Economic and Social Council in Ireland (NESC 2005) has drawn attention to the role of services such as education, health, housing, transport and social care in supporting a more inclusive society. Combat Poverty Agency also recently highlighted the role of public services in combating poverty, a key social determinant of health (2007a).

Income support is vital to lifting people over the poverty line, but quality public services help to tackle the multidimensional nature of poverty and social exclusion. The relationship for instance between social expenditure and poverty is well-established and straightforward in that countries that spend more tend to enjoy lower levels of poverty and vice versa (Combat Poverty Agency 2007).

Health services

In the case of both primary care and hospital services, access based on need rather than on the ability to pay is important for health equity. Comprehensive and equitable primary health care is vital to supporting healthy lives and to the identification and care of health problems as they arise within the community. Access to primary health care also has the potential to reduce the need for more costly acute hospital care in the longer term. When people become ill, access to equitable and appropriate care and treatment from specialist or hospital services becomes fundamental.

There are concerns about equity of access to the two-tier secondary health system in Ireland. Although public patients tend to be older, sicker and poorer than private patients, there has been evidence of lengthier waits for treatments for those who rely on public hospital services (Tussing and Wren 2006). Though waiting times have improved, recent

estimates show that over 2,000 public patients were waiting over a year for surgery (*Irish Times* June 26th 2008). In this way the structure of the health system can compound the adverse effects of socioeconomic circumstances on health. The private/public mix also means that private care is being heavily subsidised by public money.⁹

In terms of primary care in Ireland, generally only those on very low incomes or over the age of 70 are entitled to a medical card, i.e. free General Practitioner (GP) care. Recent research (Layte et al 2007) found that GP use was higher among medical cardholders. This reflects greater need given the poorer health status of medical cardholders. But there are concerns that this may also reflect difficulties poorer people experience accessing specialist services, and that GP costs may deter people without medical cards from accessing health care when they need it.

A recent all-Ireland study of primary care found that access to GP services was faster in the Republic than in Northern Ireland (Galway et al 2007). However the authors note that the faster access in Ireland may be due to the deterrent effect of the consultation charges freeing up services – which may come at a significant cost in terms of equity. Other research by the authors found that one in four private patients in the Republic who had a medical problem in the previous year did not attend their GP due to financial concerns and that amongst paying patients it was the poorest and those with the worst health who were most affected by charges (O'Reilly et al in press).

There are strong arguments from an equity perspective for universal access to primary care in Ireland in the longer term – and in the shorter term for increasing medical card coverage. Universal primary care, like access to free education, represents an important investment. Universal access to primary care will not reduce health inequalities on its own, as can be seen from the existence of health inequalities in other European countries, including Northern Ireland where access is universal, but it would make an important contribution.

These examples from Ireland illustrate clearly how the structure of the health system can exacerbate socio-economic inequalities in health. The health system has an important role to play in advocating for other sectors to play their part in working for better health. But the structure and operation of the health system is itself fundamental to achieving greater health equity.

9 Tussing and Wren (2006:139) note that private patients pay about 50-60% of the full costs of their treatment, and that taxpayers in the bottom half of the income distribution contribute to the private care of those in the upper half. Timonen (2005) notes that the mixing of public and private financing in the service sector has become a feature of the Irish welfare state and calls for the extent to which these public subsidies facilitate privileged access to services to be estimated and openly acknowledged.

Education

The foundations for life-long health are set down in childhood. Childhood poverty casts a long shadow over the health of an individual. Poverty is an underlying determinant of ill health and education is regarded as a very important route out of poverty. Research on health inequalities has frequently shown that those with poorer levels of education experience poorer health. This may well be because level of education is a strong indicator of a person's socio-economic status.

Public policy interventions that address educational disadvantage have a significant part to play in fighting poverty and its implications for health. International evidence demonstrates that early interventions (both care and education) at pre-school age are particularly important to childhood development, breaking the cycle of poverty and educational disadvantage for children, and enabling parents to participate in the labour market. Yet these services are relatively underdeveloped in Ireland compared to the rest of Europe (see OECD 2004). In Ireland in 2004 for instance only 7% of children aged three or under and almost half of four year olds were in pre-school education (Office for Social Inclusion 2007). This underlines the need to ensure that commitments to improve early childhood interventions on both parts of the island are realised.

Education and training are important pathways to employment. Life long learning and access to training in the workplace equips people with additional qualifications and skills. Addressing life long learning and training needs is particularly important in the current context, given concerns about the working poor.

In both Ireland and Northern Ireland about a quarter of the adult population are thought to have low literacy levels (DHSSPS 2002 – citing OECD research from 2000). Adult literacy is linked to employment and is an important foundation for in everyday life. Research in Ireland (National Adult Literacy Agency 2002) specifically focused on the issue of health literacy found that adults with low literacy struggled with essential health information.

The education system also has an important role to play in providing children with a greater knowledge and understanding of health. This has implications for the curriculum, but also for healthy food consumption in school and for access to opportunities for physical activity in the school environment.

Housing and accommodation

International research shows that there is a strong relationship between the neighbourhood environment, housing quality and health. This relationship is not fully

understood particularly as housing and neighbourhood environments tend to reflect rather than create social inequalities. Poor people for example, are more likely to live in poor quality built environments, and this contributes to poorer health for a variety of reasons (Lavin et al 2006).

In their assessment of the impact of the built environment on health, Lavin et al (2006) reviewed a range of housing and neighbourhood quality factors that have both direct and indirect effects on health. The review highlighted how overcrowding, dampness and inefficient or inadequate heating have consequences for health. International evidence had identified a link between lack of space and mental ill-health. Dampness had been associated with respiratory problems and a research review in Northern Ireland had documented the link between damp and mould growth and poorer health in both adults and children.

Those living in cold, damp, energy-inefficient homes and on low incomes often cannot afford to heat their homes adequately resulting in fuel poverty. A review of fuel poverty on the island of Ireland (McAvoy 2007) notes that fuel poverty detrimentally affects health both directly and indirectly. Direct effects include 'thermal stress' on the body, and increased risk of respiratory and allergic conditions. Indirect effects include financial strain on the household budget, debt, and 'spatial shrink' whereby households occupy fewer rooms during the winter. The latter for example, can mean limited play or homework space for children in families.

In 2004 it was estimated that 153,500 - or one in four - households were living in fuel poverty in Northern Ireland. In Ireland in 2001, 226,000 households experienced fuel poverty (Mc Avoy 2007). As different methods are used to collect data on the issue it is not possible to estimate the level of fuel poverty on the island. A comparative analysis of fuel poverty in Europe however found that Ireland had among the highest rates of fuel poverty and that both Ireland and the UK had among the highest rates of seasonal mortality – due partly to thermally inefficient housing (Healy 2004). Single person households and those headed by lone parents and pensioners are at particular risk of fuel poverty. Increases in fuel prices may frustrate efforts to tackle fuel poverty by driving poor households deeper into debt and plunging 'new' households into fuel poverty (McAvoy 2007).

The neighbourhood environment also influences health. The Institute of Public Health's research on social capital and health on the island of Ireland (Balanda and Wilde 2003) found that poor perceptions of neighbourhood quality or local services were associated with poorer health. For some groups in society, the health problems that arise from housing, accommodation and neighbourhood environments are

particularly severe. Travellers for instance often live in poorly serviced accommodation without adequate access to sanitation or other utilities. Homeless people, both those who sleep rough and those who use hostel accommodation, face considerable health risks.

Apart from the health impacts of housing, access to housing itself is also relevant. In the context of rising house prices over the past decade, housing need has become more acute for people on lower incomes. In Northern Ireland there is evidence of a mismatch between supply and demand, particularly for low-income families (Institute of Public Health in Ireland 2007). In Ireland housing need has been exacerbated by a shortage of social housing, unaffordable house prices during a period of economic growth, and insecure or expensive private rental accommodation (see Drudy and Punch 2005).

Public policies on the provision of housing and accommodation, housing quality, neighbourhood planning and services and addressing the accommodation needs of vulnerable groups therefore have important implications for health.

Transport

The lack of adequate public transport systems isolates people without cars, often the least well off, the young, the old, people with disabilities and those in rural locations. This isolation can be social, especially for the young and the old. But it also makes it difficult for people reliant on public transport to access employment and a wide array of other services, including health services and amenities.

Public transport has an important role to play in the lives of those who are socially excluded or less well off. It is also beneficial to public health in more general terms. Sustainable forms of transport such as cycling, walking and the use of public transport have positive effects on health in four ways. They can provide exercise, increase social contact between people, reduce the rate of fatal accidents and reduce air pollution (Wilkinson and Marmot 2003).

Yet the evidence in Ireland points to increasing car dependency (Central Statistics Office 2007a). This compounds concerns about social isolation, reduced opportunities for physical activity, increasing obesity, health hazards associated with heavy traffic and environmental pollution, and the implications for work/life balance.

Sustainable transport policies, such as encouraging walking buses (organised walking routes to school) as an alternative to the school run for children, have important health benefits. In Northern Ireland the *Safer Routes to School* pilot initiatives

encourage parents, pupils and teachers to use sustainable transport (walking, cycling or public transport). The *Regional Transportation Strategy* aims to promote cycling through the development of urban cycle networks and more cycle park facilities, and lists over 80 actions for improving conditions for pedestrians and encouraging walking in general (DHSSPS 2005).

A detailed review of the impact of transport on health carried out for the Institute of Public Health in Ireland is contained in Kavanagh et al 2005.

Policy issues to consider

- More equitable and adequately resourced public services will contribute to greater social inclusion and a fairer distribution of resources and opportunities in society. This will have beneficial effects on health and health inequalities. Access to health services should be based on need rather than on ability to pay.
- The provision of early childhood education, addressing educational disadvantage throughout the system, providing for adult education and lifelong learning are core to combating poverty and inequality and will contribute to reducing health inequalities.
- The opportunity to live in a healthy neighbourhood environment and to live in decent, warm, affordable housing or accommodation is important for health. The problem of fuel poverty on the island of Ireland requires strategic and focused attention.
- The provision of adequate and affordable public transport will not only address the needs of those who are isolated from services or employment, it will contribute to reduced traffic and environmental pollution and better public health. Sustainable transport initiatives, which promote and facilitate cycling, walking and the use of public transport need to be developed and promoted drawing on international best practice.

5. The Built Environment

A healthy built environment is an important influence on individual health and well-being. This has implications for the air we breathe, the water we drink, the buildings we live and work in, the planning and development of cities, towns and neighbourhoods and of their contingent infrastructural services and amenities.

Exposure to air pollution, such as that from traffic, is associated with respiratory disorders such as asthma. Air pollution is more common in inner urban areas, places that are often characterised by other indicators of disadvantage. Research in Belfast linked poor air quality and socially deprived areas and suggests that policies to improve air quality may have a particular benefit for the most deprived geographical communities (DHSSPS 2002).

City, town and neighbourhood planning and design have important implications for safety, access to physical activity and social connectedness. A recent report on the health impacts of the built environment by the Institute of Public Health in Ireland noted that public spaces and networks influence health in a number of ways (Lavin et al 2006). The report identifies among other things how access to good-quality well-maintained public spaces, efficient, modern public transport systems and 'walkable' neighbourhoods can encourage physical activity, promote social interaction and contribute to better air quality.

For children the provision of safe play space, both in public areas and in schools, is of particular importance given growing concerns about obesity. In relation to buildings Lavin et al (2006) identified issues of physical accessibility, adequate space, light, safety, temperature and humidity as being important for health. This applies both to domestic dwellings (dealt with separately earlier) and in public buildings, particularly workplaces, schools and hospitals.

The problem of fuel poverty, outlined in section 4.3, is an important public health issue linked to housing and low income. Living in cold, damp, thermally inefficient conditions has an adverse impact on health. At their most extreme, the health effects include an increased risk of death in winter months, higher levels of respiratory illness, high blood pressure, heart disease and stroke (Clinch and Healy 1999 cited in McAvoy 2007).

The potential for achieving change in this area is outlined in more detail in a review of fuel poverty and policy published by the Institute of Public Health (McAvoy 2007).

Policy issues to consider

- Health impact assessment, with a focus on equity, is a systematic tool that could play a particularly important role in ensuring that the built environment is conducive to health and should become an integral part of the planning process and the regeneration of neighbourhoods. Information on health impact assessment and how to use it is available from the Institute of Public Health in Ireland.
- Environmental and planning policies should facilitate access to public spaces for play and recreation and opportunities for physical exercise.

6. Work and Employment

There are two main ways in which work is fundamentally linked to health. Firstly, being in work is better for health than being out of work. Unemployment for instance is a major cause of poverty and material hardship and is also associated with stress. Being at work on the other hand provides not only an income, but also access to social networks, a sense of identity and opportunities for development or progression.

Secondly, while being in work has many health benefits, hazardous working conditions, particularly for those in manual or unskilled jobs, or less secure and low-paid jobs can have adverse effects on health. These can be direct hazards that arise from the physical environment or indirect hazards associated with job insecurity, low pay or limited access to pensions or career progression.

According to the Health and Safety Authority in Ireland there were 67 work-related deaths in Ireland in 2007. There were also over 7,000 non-fatal work injuries reported to the authority during that year (Health and Safety Authority 2008).

Several studies show that the 'psychosocial' environment at work is also influential, and that health suffers when people have little opportunity to use their skills and decision-making capacity (Marmot et al 2006). Bullying and harassment may cause psychological distress at work, and a recent survey in Ireland showed that 7.9% of people had experienced bullying. Women were nearly twice as likely to experience bullying as men, with 10.7% of women compared to 5.8% of men having had this experience (O'Connell, Calvert and Watson 2007).

Migrant workers are at risk of poorer pay and conditions in the workplace (see Migrant Rights Centre Ireland 2007). Travellers and people with disabilities have significantly high unemployment rates. This may be due in part to underlying attitudes about the skills and abilities of these groups, as well as to issues of social exclusion and educational disadvantage.

Women earn less at work than men do, and are over-represented in low paid jobs and part-time employment. Despite growing numbers of women in the workforce, a recent four-country study (including Ireland) of working men and women with at least one child under six, showed that women carried out significantly more of the domestic and childcare tasks in the home. The study also showed that greater potential flexibility at work was linked to greater work satisfaction and employee's satisfaction with their health and life in general (Fine Davis et al 2004). In relation to Ireland, the study found there were relatively more negative perceptions toward people who participated in

family friendly programmes. There was also a greater sense of pressure on employees to work over and above normal hours to get ahead.

A more detailed review of the impact of employment on health was carried out by the Institute of Public Health in Ireland and is contained in Doyle et al (2005).

Policy issues to consider

- Improved conditions and protections at work will benefit health. These include the need to ensure safe working conditions and procedures and strategies to deal with workplace stress including that arising from bullying and harassment. It is also important to prioritise the extension and promotion of family friendly policies and work/life balance initiatives, improved pension coverage for people on low wages and the provision of workplace training. Effective monitoring of employment protection legislation; initiatives to promote migrant rights and intercultural diversity and ensuring that the minimum wage is adequate and linked to living standards is also required.
- Labour market policies which provide sustainable employment opportunities and access to lifelong learning and training for the unemployed, particularly the long term unemployed, and the elimination of 'poverty traps' for those moving from unemployment to work, are also important.

7. Community and Social Participation

Research suggests that social support and strong community relationships are associated with good health (Stansfield 2006). The quality of the community environment and the experience of material hardship may be detrimental both to health and the nature of community relationships. All-island research on social capital shows that many aspects of the social environment play an important role in health. For instance it found that perceptions of poor facilities and services in disadvantaged communities had an adverse impact on people's sense of health and well-being (Balanda and Wilde 2003).

Both community relationships and community involvement may have an impact on health outcomes. Building strong, connected and well-served communities on the one hand and involving communities in the planning and delivery of local services (including health) on the other is beneficial to health. This is particularly the case for communities who face material disadvantage or social exclusion, whether they are geographical communities or communities of interest.

Combat Poverty Agency, the statutory body responsible for the promotion of community development in the Republic of Ireland, has defined community development as a 'process whereby those who are marginalised and excluded are enabled to gain in self-confidence, to join with others and to participate in actions to change their situation and tackle the problems that face their community'.

In recent years Combat Poverty has played an important role in promoting community development as a tool to address health inequalities in the *Building Healthy Communities* programme. A number of community development and health projects are resourced under the programme to address local problems and strengthen the voice of those affected by poverty and health inequalities in the policy making and service planning process.

In Northern Ireland, the Community Development and Health Network (CDHN) has been active for some years now in promoting community development as a public health tool, and in particular as a mechanism to reduce health inequalities. The CDHN is a member-led organisation involving groups throughout Northern Ireland that 'aims to make a significant contribution to ending health inequalities using a community development approach'. The network has been engaged in campaigning, influencing policy and developing best practice, which shows that 'communities both geographical and of interest and identity can define their own health needs and design and implement preventative and radical solutions'.

The principles and practices of community development dovetail with current trends in public health, which emphasise preventative, primary and community based health care. It is therefore important that community development principles, which emphasise meaningful participation and involvement, are adopted in the development of policies, strategies, interventions and services.

Policy issues to consider

- The meaningful involvement and participation of communities and individuals in the design and implementation of strategies and initiatives to tackle social exclusion and poverty, in the regeneration of neighbourhoods and in the evolution of preventative, primary and community-based health care and other local services needs to be resourced, supported and encouraged.

8. Health Behaviours

Everyday choices people make have a direct and important impact on their health – the food we eat, how much exercise we take, whether or not we smoke or drink for instance. The WHO estimates that lifestyle-related factors such as smoking, alcohol misuse, obesity, high blood pressure and high cholesterol are implicated in at least a third of the total burden of disease in Europe (Dahlgren and Whitehead 2006).

Access to health information and education is essential to help people make informed decisions about their health. However, even with good information, it can sometimes be difficult to make healthier choices. This is because health behaviours are influenced by other social, personal and environmental factors such as peer networks, income or other resources, access to facilities and amenities, food production and promotion, work and living conditions, cultural practices and stress.

Therefore, in addition to targeting individuals with information and education, public health policy needs to help make healthier choices the easier choices (DHSSPS 2002). It also needs to try to identify and tackle obstacles to healthy lifestyles faced by particular groups (DoHC 2001) in order to develop more supportive interventions and resources.

A wide range of issues come under the heading of health behaviours, including, food and nutrition, exercise, smoking, alcohol and drug use, breastfeeding, dental care and sexual health. It would not be possible to cover all of these issues in detail here, so three important issues – alcohol, food and smoking are highlighted for illustrative purposes.

Alcohol

As the Northern Ireland *Investing for Health* strategy points out, moderate alcohol consumption is part of everyday life for many people. But there is significant national and international evidence to show that excess alcohol consumption is harmful, to individuals, families, communities and society generally. The resulting damage to health and related deaths is considerable.

In Northern Ireland it has been estimated that about 150 people die every year as a direct result of alcohol misuse and a further 600-700 deaths are attributable at least in part to alcohol misuse (DHSSPS 2002: 50). A quarter of men and 14 per cent of women are estimated to be drinking in excess of the recommended limits (DHSSPS 2002).

In Ireland adults consume more alcohol per drinker, have higher levels of binge drinking and as a consequence experience more harm than in a number of other European countries (Strategic Task Force on Alcohol [STFA] Second Report 2004:19).

The Strategic Task Force on Alcohol highlighted the fact that alcohol related mortality had increased over the decade up to 2002. In 2002 1,416 deaths were estimated to have arisen from the five main alcohol related causes – alcohol-related cancers, chronic conditions associated with alcohol, chronic liver disease and cirrhosis, acute conditions associated with alcohol (e.g. poisoning) and suicide (STFA Second Report 2004:15). In Ireland and Northern Ireland, the death rate from alcohol abuse in the lowest occupational class was over 280% higher than the rate in the highest occupational class (Balanda & Wilde 2001). Alcohol is also a major factor in road deaths and injuries – with alcohol implicated in 40% of road deaths and at least 30% of all road accidents each year (National Safety Council estimate cited in STFA 2004).

Food

A good diet is essential for health, and poor nutrition is known to contribute to the risk of heart disease, some cancers, diabetes, raised blood pressure, obesity and dental decay. Diet has changed in the developed part of the world resulting in an over-consumption of energy dense fats and sugars and there are growing concerns about growing levels of obesity in particular.

All-Ireland research shows that 39% of adults are overweight and 18% are obese (Irish Universities Nutrition Alliance 2001). In Ireland the Report of the National Taskforce on Obesity (see Department of Health and Children 2005) noted that obesity tends to be higher in men, those aged over 35 and those in the lower socio-economic groups. The report also highlighted higher levels of obesity and overweight among Irish adolescent girls than the international average and a worrying rise in obesity among children.

Obesity arises from an imbalance between consumption and physical activity. The determinants of food consumption and physical activity on the island are complex and multi-faceted. Both, *Fit Futures*, a report from the taskforce on food, activity and young people in Northern Ireland (DHSSPS 2006), and *Obesity: the policy challenges*, the report from the National Taskforce on Obesity in Ireland (DoHC 2005), outline the range of factors influencing rising obesity.

These include reduced opportunities for physical activity, particularly among children, the availability of convenience and snack foods, food consumption outside the home resulting from work and commuting pressures, the advertising and promotion of an unbalanced diet, the relative cost of healthy options and greater car reliance.

Responding to these issues calls for joined-up strategies to tackle obesity and address the wider range of influences on diet and patterns of physical activity. The Taskforce on Obesity (DoHC 2005) in Ireland argued that nutrition policies, such as implementing dietary guidelines had mostly been within the remit of the Department of Health and Children. While acknowledging that this work was important, the Taskforce advocated going further. It urged the government to take a new look at the totality of policies that influence the type and supply of food available and the range and quality of opportunities that are available to people to be physically active in order to address the problem comprehensively – through changing what has come to be known as our “obesogenic environment”.

Paradoxically food poverty, the inability to afford or have reasonable access to a nutritionally adequate diet, exists amidst food plenty even in economically successful societies like Ireland. The issue of food poverty is one of growing concern (see Friel and Conlon 2004). In Northern Ireland, *Investing for Health* (DHSSPS 2002) noted that food choice was influenced by many factors, particularly cost - with many people living in deprived neighbourhoods experiencing the most difficulty reaching shops which sell a range of affordable foods to make up a healthy, balanced diet.

A recent research study on the financial costs of healthy eating in Ireland identified financial and physical access to healthy food as problematic (Friel et al 2004). It concluded that healthy eating was not feasible among certain groups on social welfare or minimum wages and would absorb high proportions of weekly income for those on low incomes (Friel et al 2004). Given this finding, the researchers called for policy and action toward ‘not only ensuring financial capacity but also guaranteeing that affordable healthy food choices are physically available to all’.

A recent study of food poverty in Northern Ireland shows that people on low incomes consume more milk, cream, processed meats and food high in fat, oils, sugar and preservatives. This report strongly advocates that food poverty be considered not merely within the realm of personal consumer choice but within the wider policy arena of physical and financial access to healthy food stuffs and life skills (Purdy et al 2007).

Smoking

Cigarette smoking is a major risk factor for heart and lung disease and cancers and is the single greatest cause of premature death and avoidable illness (DHSSPS 2002). In Northern Ireland for instance, tobacco is responsible for over 2,700 deaths per annum (DHSSPS 2002:35).

Despite widespread knowledge of the effects and risks of smoking, many people continue to smoke, particularly among lower socio-economic groups. The 2006 EU

SILC estimated that one in four (25%) of the Irish population over 16 smoked. Smoking rates were higher among those who were less well off - lone parents (65%), the unemployed (52%) and the ill or disabled (3%) (CSO 2007).

In Northern Ireland smoking prevalence is estimated at 25% (Northern Ireland Statistics and Research Agency 2007), the same as Ireland. The *Investing for Health* strategy (DHSSPS 2002) pointed to socioeconomic gradients in smoking. Among men in professional and managerial occupations, 15% smoked compared to 42% of those who were unskilled while the comparison for women was 16% and 38%. Smoking rates were higher among the unemployed too, with 49% of unemployed men smoking compared to 24% of employed men and 45% of unemployed women compared to 26% of employed women (DHSSPS 2002:49).

Research in Scotland (Bancroft et al 2003) on both men and women smokers in areas of deprivation concluded that everyday contexts which smokers inhabit either constrain or facilitate smoking, and as such play a central role in the way in which they smoke. The influences on smoking were closely related to circumstances of socio-economic deprivation. Graham (1993) has linked smoking to coping in strained material circumstances, particularly among women.

Both the Republic of Ireland and Northern Ireland have been pro-active in the introduction of workplace smoking bans. This protects workers from smoking and may affect smoking rates in the longer term.

Policy issues to consider

- Public health education and health promotion are vital to providing people with accurate and supportive information about the factors influencing good health. But the challenge for public health is to address the unequal distribution of the social determinants of health and health behaviours and to make healthy choices the easy choices, particularly for those on low incomes.
- Recommendations on tackling obesity and alcohol misuse, which address a broad range of influences, are outlined in a number of policy documents across the island. The implementation of these recommendations needs to be prioritised
- The social gradient in some health behaviours particularly diet and smoking, suggests that healthy lifestyles may not be easily achieved for people on low incomes. The obstacles to healthy lifestyles experienced by less well off groups in society need to be identified and understood in order to develop more effective and practical support strategies and resources.

9. Stress

A range of research has shown how stress can have a powerful and detrimental effect on health. Poverty, material disadvantage and social exclusion are often associated with stress. Stress may result from lack of money, financial strain or debt, unemployment, issues of neighbourhood safety and poor quality of life. It can also arise from feeling excluded from participation or decision-making, the experience of discrimination, powerlessness and lack of social support or social isolation.

Some of Ireland's most excluded groups experience mental health and stress difficulties. There is evidence that Travellers, lone parents and asylum seekers for example experience stress, depression or mental health difficulties linked to discrimination, stigmatisation and poor living conditions (Combat Poverty Agency 2007b:17).

Investing for Health notes that mental health and emotional well-being are fundamental to health, yet evidence in Northern Ireland suggests a socioeconomic gradient to aspects of mental health (DHSSPS 2002). People who were unemployed for example were almost twice as likely to show signs of a possible mental health problem as those in employment. Poverty is among the factors that affect mental health, and in Northern Ireland the experience of the Troubles and of political conflict has had an added impact.

Stress impacts on an individual's sense of well-being and mental health, which is central to health. Stress also leads to physical ill-health through biological pathways, by affecting the immune system, as well as through behavioural pathways by inducing risky health behaviours (Dahlgren and Whitehead 2006).

In recent years, there has been a growth in research interest in the psychosocial impact of social status or the experience of inequality on people's health. This is a relatively new area of research. It has been proposed that in more unequal societies, people's subjective experience of exclusion or of being at the lower end of the social hierarchy has important health effects, principally through the stress mechanism (Wilkinson 2005).

Policy issues to consider

- Promoting mental health and improving access to quality mental health services are important. Mental health services should be adequately resourced and a multi-disciplinary approach needs to be embraced to address the needs of those

affected by mental health issues. The current mental health strategy in Ireland *Vision for Change* (DoHC, 2006) should be implemented as a matter of urgency.

- Stress is sometimes rooted in financial insecurity, the experience of discrimination and exclusion and other factors such as social isolation. Addressing this kind of stress requires a focus on the upstream factors from which it arises - in other words tackling the issues of poverty, discrimination and inequality all of which are associated with stress.

References

Balanda, K. and Wilde, J. (2001) *Inequalities in Mortality 1989-1998: A Report on All Ireland Mortality Data*, Dublin/Belfast: Institute of Public Health in Ireland

Balanda, K. and Wilde, J. (2003) *Inequalities in Perceived Health: A Report on the All Ireland social capital and health survey* Dublin/Belfast: Institute of Public Health in Ireland

Balanda, Kobayashi and Graham (2008) *Socio-economic coding in the Republic of Ireland: Impact of the measurement of socio-economic differences in mortality. In preparation*. Institute of Public Health in Ireland.

Bancroft, A., Wiltshire, S, Perry, O. and Amos, A. (2003) ‘ “It’s like an addiction first thing ... afterwards its like a habit” daily smoking behaviour among people living in areas of deprivation’ *Social Science and Medicine* 56 (6) 1261-1267

Barry, J., Herity, B., and Folan, J. (1987) *The Travellers Health Status Study: Vital Statistics of Travelling People*, Dublin: Health Research Board

Battel-Kirk, B. and Purdy, J. (2007) *Health Inequalities on the Island of Ireland*, Public Health Alliance for the Island of Ireland, Belfast and Dublin.

Baum, F. (2007) Cracking the Nut of Health Equity: top down and bottom up pressure for action on the social determinants of health, IUHPE *Promotion and Education*, Vol XIV (2) [available on the WHO CSDH website]: www.who.int/social_determinants/

Burke, S., Keenaghan, C. O'Donovan, D. and Quirke, B. (2004) *Health in Ireland – an unequal state*, Public Health Alliance Ireland

Burke, S. (2007) *Background Paper on Mental Health*, Dublin: Combat Poverty Agency

Central Statistics Office (2007) EU Survey of Income and Living Conditions 2006, <http://www.cso.ie/eusilc/default.htm>

Central Statistics Office (2007a) *Census 2006 Volume 12: Travel to Work, School and college*

Clinch, J.P. and Healy, J (1999) Housing Standards and Excess Winter Mortality in Ireland: *Environmental Studies Research Series*, Department of Environmental Health Studies: University College Dublin.

Combat Poverty Agency (2007) *Annual Report 2006*, Dublin: Combat Poverty Agency

Combat Poverty Agency (2007a) *Submission to the OECD Review of the Irish Public Service*, Dublin: Combat Poverty Agency

Combat Poverty Agency (2007b) *Health Policy Statement* Dublin: Combat Poverty Agency

Dahlgren, G. and Whitehead, M. (2006) *Levelling Up (part 2): A Discussion paper on European Strategies for Tackling Social Inequities in Health*, WHO Europe.

Daly, M. and Leonard, M. (2002) *Against All Odds: Family life on a low income*, Dublin: Combat Poverty Agency.

Department of Health and Children (2006) *A Vision for Change: Report of the Expert Group on Mental Health Policy*, Dublin: Government Publications

Department of Health and Children (2005) *Report of the National Taskforce on Obesity: Obesity – the policy challenges*, Dublin: Government Publications.

Department of Health and Children (2004) *Health Information: A National Strategy*, Dublin: Government Publications

- Department of Health and Children (2002) *Traveller Health: A National Strategy 2002-2005*
- Department of Health and Children (2000) *National Health Promotion Strategy 2000-2005*, Dublin: Government Publications
- Department of Health and Children (2001) *Quality and Fairness: A Health System for You: Health Strategy*, Dublin: Government Publications
- Department of Health, Social Services and Public Safety (2002) *Investing for Health*, Belfast: DHSSPS
- Department of Health, Social Services and Public Safety (2004) *Equality and Inequalities in Health and Social Care in Northern Ireland: A Statistical Overview*, Belfast: DHSSPS.
- Department of Health, Social Services and Public Safety (2004a) *Health and Social Care: Inequalities Monitoring System: First update bulletin 2004*, Belfast: DHSSPS
- Department of Health, Social Services and Public Safety (2004b) *A Healthier Future: A Twenty Year Vision of Health and Well-being in Northern Ireland 2005-2025*, Belfast: DHSSPS
- Department of Health, Social Services and Public Safety (2005) *Investing for Health Update 2005*, Belfast: DHSSPS
- Department of Health, Social Services and Public Safety (2006) *Fit Futures: Focus on food, activity and young people*, Report to the Ministerial Group on Public Health.
- Department of Health, Social Services and Public Safety (2007) *Health and Social Care: Inequalities Monitoring System: Second Update Bulletin 2007*, Belfast: DHSSPS
- Department for Social Development (2007) *Households Below Average Income, Northern Ireland 2006/6*, Belfast DSD.
- Doyle, C., Kavanagh, P., Metcalfe, O. and Lavin, T. (2005) *Health Seminar Impacts of Employment: A Review*, Institute of Public Health in Ireland.
- Drudy, P.J. and Punch, M. (2005) *Out of Reach: Inequalities in the Irish Housing System*, TASC: New Island Books

European Partners for Equity in Health (2004-2007) *Closing the Gap: Strategies for Action to Tackle Health Inequalities*, www.health-inequalities.eu

Fine-Davis, M., J. Fagnani, D. Giovannini, L. Hojgaard and H. Clarke (2004) *Fathers and Mothers: Dilemmas of the Work Life Balance: A comparative study of four European countries*, Kluwer Academic Publishers.

Friel, S., and C. Conlon (2004) *Food Poverty and Policy*, Dublin: Combat Poverty Agency.

Friel, S., O. Walsh, and D. Mc Carthy (2004) *The Financial Cost of Healthy Eating in Ireland*, Combat Poverty Agency, Working Paper 04/01.

Galway, K., Murphy, A., Kelly, A., Gilliland, A., Murphy, A.W., O'Reilly, D., O'Dowd, T., O'Neill, C., Shryane, E., Steel, K. and Bury, G. (2007) Perceived and reported access to the general practitioner: An international comparison of universal access and mixed private/public systems, *Irish Medical Journal*, June 2007, 100 (6)

Gannon, B. and Nolan, B. (2006) *Disability and Social Inclusion in Ireland*, Economic and Social Research Institute and the National Disability Authority.

Graham, H. (1993) *When Life's a Drag: women, smoking and disadvantage*, HMSO London.

Graham, H. and M. Kelly (2004) *Briefing Paper: Health Inequalities, concepts, frameworks and policy*, UK Health Development Agency/NHS.

Graham, H., H. Inskip, B. Francis and J. Harmon (2006) Pathways of Disadvantage and Smoking Careers: evidence and policy implications, *Journal of Epidemiology and Community Health* 60 (suppl. 2) ii7-ii12.

Harvey, B. (2007) *Evolution of Health Services and Health Policy in Ireland Dublin*: Combat Poverty Agency

Health and Safety Authority (2008) *Concern at overall increase in workplace deaths for 2007: but significant reduction in agriculture fatalities*, Press Release, January 3rd 2008 (www.has.ie/eng/news_and_events/pressreleases)

Healy, J. (2004) *Housing, Fuel Poverty and Health: A Pan European Analysis*, Ashgate.

Hillyard, P., Kelly, G. McLaughlin, E., Patsios, D. and Tomlinson, M. (2003) *Bare Necessities: Poverty and Social Exclusion in Northern Ireland: Key Findings*, Belfast: Democratic Dialogue

Institute of Public Health in Ireland (2007) *Poverty in Northern Ireland: A Briefing Paper*, Dublin/Belfast: Institute of Public Health in Ireland.

Irish Medical Journal (2007) Supplement: Findings from the Health Research Board Unit for Health Status and Health Gain 1999-2007, 100 (8).

Irish Universities Nutrition Alliance (2001) *North South Ireland Food Consumption Survey*, Dublin: Food Safety Promotion Board

Joseph Rowntree Foundation (2006) *Findings: Monitoring poverty and social exclusion in Northern Ireland 2006* [based on Kenway, P., MacInnes, T., Kelly, A. and Palmer, G. *Monitoring Poverty and Social Exclusion in Northern Ireland 2006*, Joseph Rowntree Foundation].

Kavanagh, P., Doyle, C. and Metcalfe, O. (2005) *Health Impacts of Transport: A Review*, Institute of Public Health in Ireland.

Lavin, T., Higgins, C., Metcalfe, O., and Jordan, A. (2006) *Health Impacts of the Built Environment: A Review*, Institute of Public Health in Ireland.

Layte, R., Nolan, A. and Nolan, B. (2007) *Poor Prescriptions: Poverty and Access to Community Health Services*, Dublin: Combat Poverty Agency

Mackenbach, J., Meerding, W.J. and Kunst, A. (2007) *Economic Implications of health inequalities in the European Union*, Health and Consumer Protection Directorate General. Available online at http://ec.europa.eu/health/ph_determinants/socio_economics/documents/socioeco_inequalities_en.pdf

Mackenbach, J., Judge, K., Navarro, V., and Kunst, A. (2007a) *Strategies to Reduce Socio-Economic Inequalities in Health in Europe: Lessons from the Eurothine Project* Chapter 33, Tackling Health Inequalities in Europe: an integrated approach, Final Report

Manandhar, M., Share, M., Friel, S., Walsh, O. and Hardy, F. (2006) *Food, Nutrition and Poverty Among Asylum Seekers in North West Ireland*, Combat Poverty Agency Research Working Paper series 06/01, Dublin: Combat Poverty Agency

Marmot, M. Siegrist, J. and Theorell, T. (2006) Health and the psychosocial environment at work in Marmot, M. and Wilkinson, R. (eds) *Social Determinants of Health*, Second Edition, Oxford University Press.

Mc Avoy, H. (2007) *All Ireland Policy Paper on Fuel Poverty and Health*, Dublin: Institute of Public Health in Ireland.

McAvoy, H., Sturley, J., Burke, S. and Balanda, K. (2006) *Unequal at Birth: Inequalities in the occurrence of low birthweight babies in Ireland*, Institute of Public Health in Ireland.

Migrant Rights Centre Ireland (2007) *Annual Report 2006*, MRCI Dublin.

National Adult Literacy Agency (2002) *Health Literacy Policy and Strategy Report*, Dublin: NALA.

National Economic and Social Council (2005) *The Developmental Welfare State*, Dublin: National Economic and Social Council

Nolan, B. and Maitre, B. (2007) 'Economic growth and income inequality: setting the context' pp 27-41 in T. Fahy, H. Russell and C. Whelan (eds) *Best of Times?: The Social Impact of the Celtic Tiger in Ireland*, Dublin: Institute of Public Administration.

Nolan, B. (2006) *Setting Targets to Reduce Poverty and Health Inequalities* Dublin: Combat Poverty Agency

Northern Ireland Statistics and Research Agency (2007) *Continuous Household Survey 2006/7: Bulletin 6*.

Northern Ireland Assembly (2008) Committee for the Office of the First Minister and Deputy First Minister, *Interim Report on the Committee's Inquiry into Child Poverty in Northern Ireland*. See also press release January 8 2008.

O'Connell, P., Calvert, E. and Watson, D. (2007) *Bullying in the Workplace: Survey Reports*: Report to the Department of Environment, Trade and Employment.

OECD (2004) *Early Childhood Education and Care Policy: Country Note for Ireland*, OECD: Directorate for Education

Office of the First Minister and Deputy First Minister (2006) *Lifetime Opportunities: Government's anti-poverty and social inclusion strategy for Northern Ireland*, Belfast: OFMDFM

Office for Social Inclusion (2007) *National Action Plan for Social Inclusion 2007-2016*, Dublin: Stationery Office

O'Reilly, D., Thompson, K.J., Murphy, A.W., Bury, G., Gilliland, A., Kelly, A., O'Dowd, T. and Steele, K. (2006) 'Socio-economic gradients in self reported health in Ireland and Northern Ireland', *Irish Journal of Medical Science*, 175 (3) 43-51

O'Reilly, D., O'Dowd, T., Galway, K., et al (In Press) Consultation charges in Ireland deter a large proportion of patients from seeing the GP: results of a cross-sectional survey, *European Journal of General Practice*.

Pickett, K. and Wilkinson, R. G. (2007) *Child Well Being and Income Inequality in Rich Societies: ecological cross-sectional study*, *British Medical Journal* (335) 1080-1085

Purdy, J. McFarlane, G, Harvey, H. Rugkasa, J and Willis, K(2007) *Food Poverty and Policy in Northern Ireland*. Public Health Alliance.

Simon Communities (2007) *Ending Homelessness, Creating Homes: Annual Review 2006 and Calendar 2008*.

Solar, O. and Irwin, A. (2007) *A Conceptual Framework for Action on the Social Determinants of Health*: Draft discussion paper for the WHO Commission on Social Determinants of Health.

Stansfeld, S.A. (2006) 'Social support and social cohesion' in Marmot, M. and Wilkinson, R., (eds) *Social Determinants of Health*, Second Edition, Oxford University Press.

Timonen, V. (2005) *Irish Social Expenditure in a Comparative International Context: Epilogue*, Dublin: Combat Poverty Agency

Townsend, P., Whitehead, M. and Davidson, N. (eds) (1992) *Inequalities in Health: The Black Report and the Health Divide*, London: Penguin Books

Tussing, A. D. and M. Wren (2006) *How Ireland Cares: the case for health care reform* Dublin: New Island

Whitehead, M. and Dahlgren, G. (2006) *Levelling Up (part 1) A Discussion Paper on Concepts and Principles for Tackling Social Inequities in Health*, WHO Europe

Wilkinson, R. (2005) *The impact of inequality: how to make sick societies healthier*, London: Routledge

Wilkinson, R. and M. Marmot (2003) *The Solid Facts: Social Determinants of Health*, World Health Organization Europe (second edition).

Wilkinson, R. (2006) 'Ourselves and others – for better or worse: social vulnerability and inequality' in Wilkinson, R. and Marmot, M. (eds) *Social Determinants of Health*, Oxford University Press.

WHO (2004) Commission on the Social Determinants of Health (CSDH): note by the Secretariat, Document number EB115/35.

WHO CSDH (2007) *Achieving Health Equity: from root causes to fair outcomes*, Interim Statement, Commission on Social Determinants of Health.