

**Barrow-in-Furness
Health Improvement and Health Inequalities Strategy
2008 to 2010**

Baseline Assessment



February 2008

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2 Executive Summary

The purpose of this report is to inform the priorities and action in the revised Health Improvement Plan (HIMP) for Barrow. It outlines differences in health in Barrow as compared England as well as differences in health within Barrow. It analyses the causes of these differences and identifies priority areas for action.

The health of people living in Barrow-in-Furness.

- Life expectancy for men in Barrow is on average 2 years less than for England as a whole. At current trends Barrow will not meet the national health inequalities target by 2010.
- A boy growing up in Central ward today could expect to die on average 8 years younger than the national average, if the current mortality rates continued.
- Bringing life expectancy in Barrow up to the target level would mean preventing about 70 premature deaths each year.
- The burden of chronic ill health in Barrow is very large. 45% of households include one or more person with a long term limiting illness as compared to 34% nationally(1). 14 % of the working age population are on incapacity benefit. 35% of these people are unable to work because of mental health or behavioural problems.
- Although infant mortality is not higher than the national average, there has been an increasing trend in Barrow since 1998. Nationally infant mortality was decreasing during this time.
- The main causes of the low level of life expectancy in Barrow are deaths from circulatory diseases, cancers, suicides and accidents, which are all significantly higher than the national average. If the rate that people are dying from these conditions in Barrow was reduced to the national average, this would reduce the gap in life expectancy for men from 2 years to just 6 months and for women from 8 months to 3 months.
- The rate of premature mortality from circulatory disease in Barrow has declined fairly consistently over the past 10 years, and it is likely that the Local Area Agreement (LAA) target for Barrow will be met. These declines have been most pronounced in the most deprived 20% of areas of Barrow.
- The rate of premature mortality from Cancer in Barrow was declining until 2001-2003. Since then there has been no noticeable decline, if the recent trend continues, the national 2010 target for Barrow will not be met. Cancer mortality has remained fairly constant in the most deprived 20% of areas over recent years.
- Mortality from colorectal cancer and mesothelioma is significantly higher than the national average in men living in Barrow.
- Survival from some cancers particularly lung cancer is lower than is found nationally.
- The number of suicides in 15-44 year old men in Barrow has been rapidly increasing in recent years.
- Mortality from accidents in Barrow is 50% higher than the national average and has been increasing over the last 10 year. If this trend continues the 2010 target will not be met.

The causes of ill health

- Indicators of the level of smoking, healthy eating, misuse of alcohol, and physical activity are all slightly worse for Barrow than the national average.
- In the neighbourhood management area, just over a third of people smoke and only 14% of people eat the recommended 5 portions of fruit and vegetables per day.
- In 2007 only 1 in 5 of babies born to mothers living in Hindpool were being breastfed by the time they left hospital.
- There are however some recent improvements in socioeconomic conditions, such as employment, education and housing in recent years, although these are still below national levels

The potential impact of interventions

- Reducing smoking prevalence by 2% each year would prevent about 40 deaths over the next 4 years.
- Identifying people at risk and ensuring that people with circulatory disease are given optimum treatment could result in 20 fewer deaths per year.

Priority areas for action.

- To improve life expectancy in Barrow there will need to be action to reduce the number of deaths from circulatory disease, cancer, suicides and accidents. In terms of cancer and accidents this will require action to alter the current trend.
- Actions will need to focus on improving the health of men in Barrow.
- These improvements will need to occur across all areas in Barrow, but be most pronounced in the most deprived areas.
- This will mean that some actions, particularly those related to cancer, will need to be targeted at the most deprived 20% of areas as shown in Figure 4.
- In the short term priority actions will need to focus on:
 - Improving the early diagnosis and treatment of cancer and circulatory disease.
 - Reducing smoking, improving diet, increasing physical activity and reducing excessive alcohol consumption.
 - Preventing accidents particularly in young men
 - Improving mental health and preventing suicides
 - Helping people with disabilities and chronic ill health into work.

3 Introduction

This baseline assessment of health inequalities has been commissioned by the Barrow Healthy Communities and Older People (HCOP) task group of the Furness strategic partnership. The purpose of this report is to inform the priorities and action in the revised Health Improvement Plan (HIMP) for Barrow. Life expectancy rates in Barrow are below the England and Wales average and there are large differences in life expectancy between areas within Barrow. Therefore the primary focus of the health improvement plan is to determine action required to achieve improvements in the health of the population of Barrow with respect to the rest of England and to improve the health of the most disadvantaged areas within Barrow. Progress towards these objectives is monitored through targets laid out in Public Service Agreements (PSA), the Local Area Agreement (LAA) and the Furness Partnership Community Plan. These targets are given below.

PSA 1: Life Expectancy

By 2010 increase life expectancy at birth in England to 78.6 years for men and 82.5 years for women (PSA1) with the following specific targets:

- *To reduce mortality from heart disease and stroke and related diseases by at least 40% in people under 75 years, with at least a 40% reduction in the inequalities gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole. (This is subject to a further stretch target in the Cumbria LAA)*
- *To reduce mortality from cancer by at least 20% in people under 75, with a reduction in the inequalities gap of at least 6% between the fifth of the areas with the worst health and deprivation indicators and the population as a whole*
- *To reduce mortality from suicide and undetermined injury by at least 20% by 2010*
- *To reduce mortality from accidents by at least 20% by 2010*

PSA 2: Health Inequalities

Reduce the level of inequality by 10% by 2010, as measured by infant mortality and life expectancy at birth, between the most deprived areas by tackling the wider determinants of health inequalities:

- *Starting with children under one year, reduce by at least 10% the gap in mortality between 'routine and manual' groups and the population as whole.*
- *Starting with local authorities, reduce by at least 10% the gap between the fifth of areas with the worst health and deprivation indicators and the population as a whole.*

LAA: Cumbria Community Strategy

Reduce the gap in all cause mortality between Barrow and the England population by at least 10% by 2010 (compared to baseline 1995-97).

Furness partnerships community plan

By 2010, reduce by at least 10% the gap between the 20% of areas in Barrow with the lowest life expectancy at birth and the population as a whole.

This report outlines the causes of the differences in health status between Barrow and England, the causes of health inequality within Barrow and identifies areas for action to address these inequalities.

In particular it will try and answer the following questions:

- How much does the health of people in Barrow differ from England as a whole?
- How much does the health of people in the most disadvantaged areas of Barrow differ from the district as a whole?
- What are main diseases or conditions resulting in these differences.
- What are the main risk factors resulting in these diseases?
- To what extent are differences in mortality related to the prevalence of risk factors in the population of Barrow and to what extent are they related to the effectiveness of health services in diagnosing and treating these conditions early ?

4 The population of Barrow

Located in the southern tip of Cumbria, and covering an area of just over 77 square kilometres, Barrow-in-Furness is the smallest geographical borough in the county with a population of 71,000 (ONS 2006). Compared to England as a whole, Barrow has a higher proportion of older people over 65 years of age and a lower proportion of 20-39 year olds (see

Figure 1).

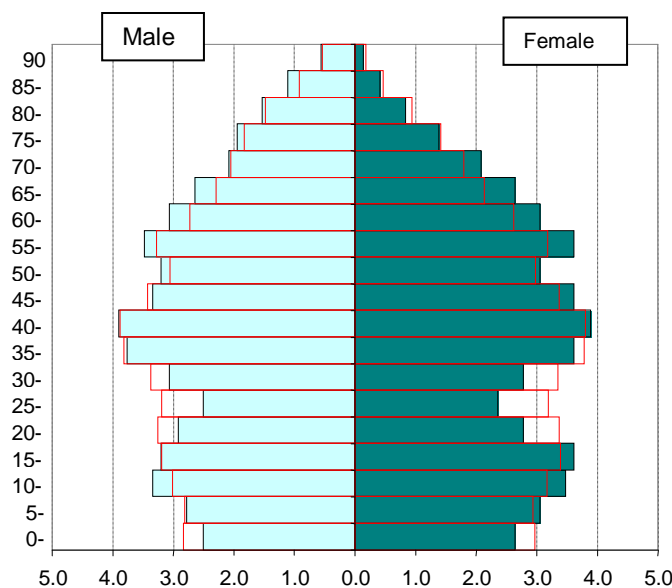


Figure 1 Distribution of the population in Barrow (shown in green) as compared to England (shown in red) by age and sex.

Figure 2 shows how the proportion of older people in the population is likely to increase markedly in the future. It is estimated that the proportion of people in Barrow over 65 will have increased from 18% in 2006 to 23% in 2020 (source Cumbria County Council).

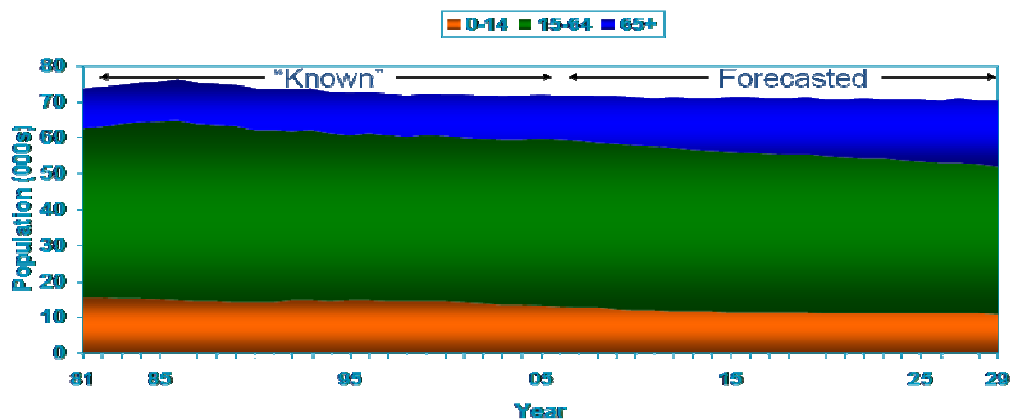


Figure 2 Long term population trend in Barrow (Source: Cumbria County Council)

5 What are Health inequalities and what causes them?

There is a wealth of evidence that illness does not strike people by chance, to a large extent it is people's social and economic circumstances that determine their risks of developing disease. We know that across the UK there is a gradient of health from the most disadvantaged groups to the most affluent(2). Areas with better economic, housing, crime, education and environmental indicators have better health. For example people living in the most affluent area in Cumbria (Kendal Heron Hill) live on average 10 years longer than people living in the most deprived area (Central Ward, Barrow)(3). Health inequalities refer to these systematic differences in health that are related to social differences rather than being determined biologically(4).

The determinants of health can be looked at in 4 main layers as shown in Figure 3. Individual behaviour (e.g. diet, physical activity, smoking, alcohol consumption and sexual behaviour) is influenced by relationships within the family and the wider community which in turn is influenced by living and working conditions. These are largely determined by the wider economic and social environment(4). Action across all these levels is needed reduce health inequalities.



Figure 3. Model of the determinants of health (Source Dahlgren and Whitehead).

6 Social and economic deprivation

In order to tackle health inequalities we need to focus activities on those most in need. One way to approach this is to target the most deprived areas. Overall levels of socio-economic deprivation can be measured in terms of income, health, housing, crime, education and the environment. Based on the Indices of Multiple Deprivation (IMD 2004), which measures indicators across each of these areas, Barrow is the 29th most deprived local authority out of 354 in England (DETR 2004). As Barrow is in the worst 5th of areas in the UK, it is one of the target areas in the national inequalities strategy, known as *spearhead areas*. This means that health needs to be improved across Barrow to bring it up to the level of England as a whole.

There are however wide differences in deprivation within Barrow. The map below shows the most deprived 20% of areas within Barrow (see Figure 4). These are all contained in the six most deprived wards in Barrow. The graph below shows the population in each ward, the proportion living in the 20% most deprived areas and the overall deprivation score for each ward.

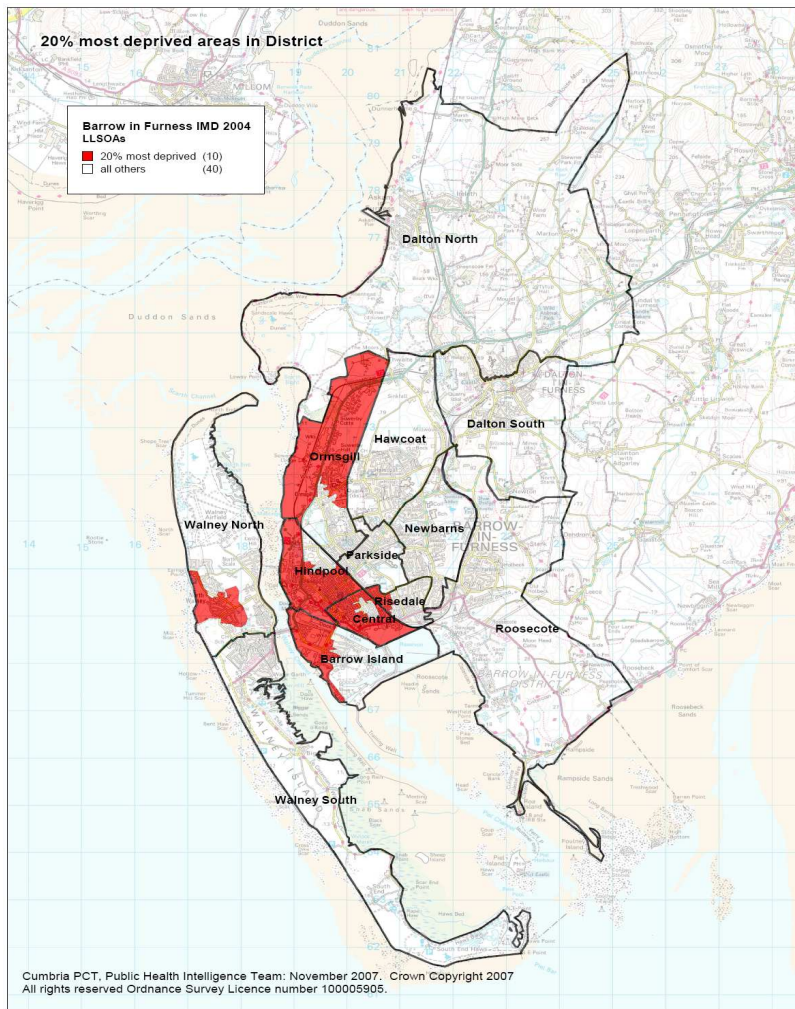


Figure 4 Map showing the 20% most deprived areas in Barrow

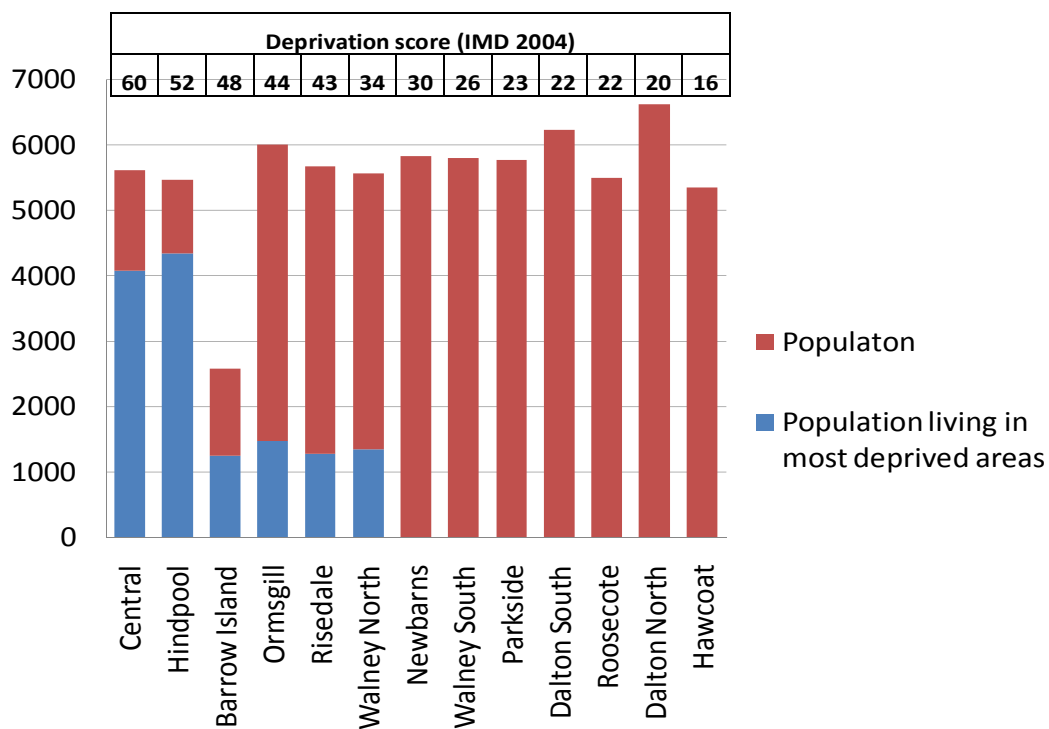


Figure 5 Barrow wards, showing population, population living in the 20% most deprived areas and overall deprivation score for each ward.

In tackling health inequalities, some action will need to take place across the district, others will need to target the most deprived areas shown in Figure 2. In this report health indicators will be presented for the district as a whole, for each ward, and for the worst 20% of areas within the district.

6.1 Community Experience

The Cumbria Quality of Life Survey (2006) highlights marked differences in perceptions of quality of life and local service delivery between Cumbria as a whole and the economically deprived Neighbourhood Management Initiative Areas (NMIAs). 88% of Cumbria residents say they are satisfied, compared only 61% in the Barrow Neighbourhood Management area. Interestingly, a recent focus group carried out by 'StreetSafe' (06/12/07) in a Public House in Barrow showed that some people's perceptions of their health in Barrow was actually quite positive. Out of 28 customers, 9 described that their health as 'very good', 11 as 'good', 7 as 'average' and 1 as 'poor'.

7 The health of people in Barrow

7.1 Mortality

The most basic way to measure the health of a community is to look at when and how people die. Life expectancy shows the average age a child born today in an area could expect to live assuming that people are dying at the same rate and ages that we find today. It is affected by the number of people dying and the age at which they die.

Life expectancy in Barrow is below the England average. The life expectancy for men in 2003 to 2006 was 75.3 years, nearly 2 years lower than the England average (see Figure 6 below). Although there were increases from 1995-2001, these increases have not been sustained. Recently the gap has been widening and if the current trend continues the target of reducing the gap by 10% for men will not be reached by 2009-2011. (See Figure 6).

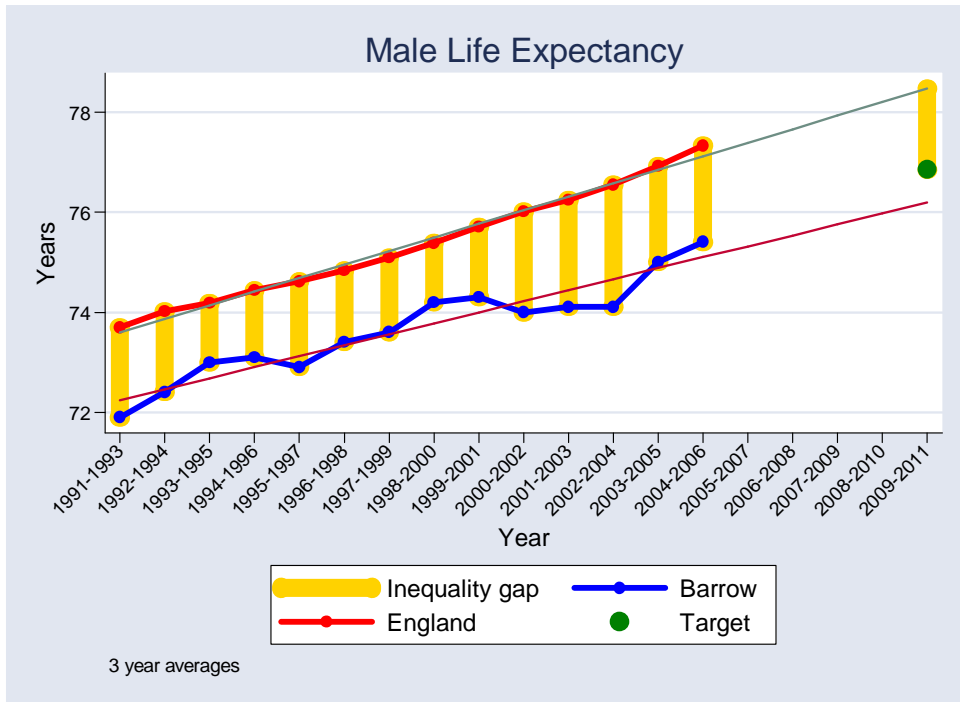


Figure 6- Male life expectancy in Barrow and Furness. Source: ONS
 Life expectancy for women in Barrow in 2003-06 was 80.7 years old, about 8 months lower than the England average (81.6 years). However life expectancy for women in Barrow has been increasing at a faster rate than found nationally and the gap is narrowing. If the current trend continues the target of reducing the gap by 10% for women will be reached by 2010.

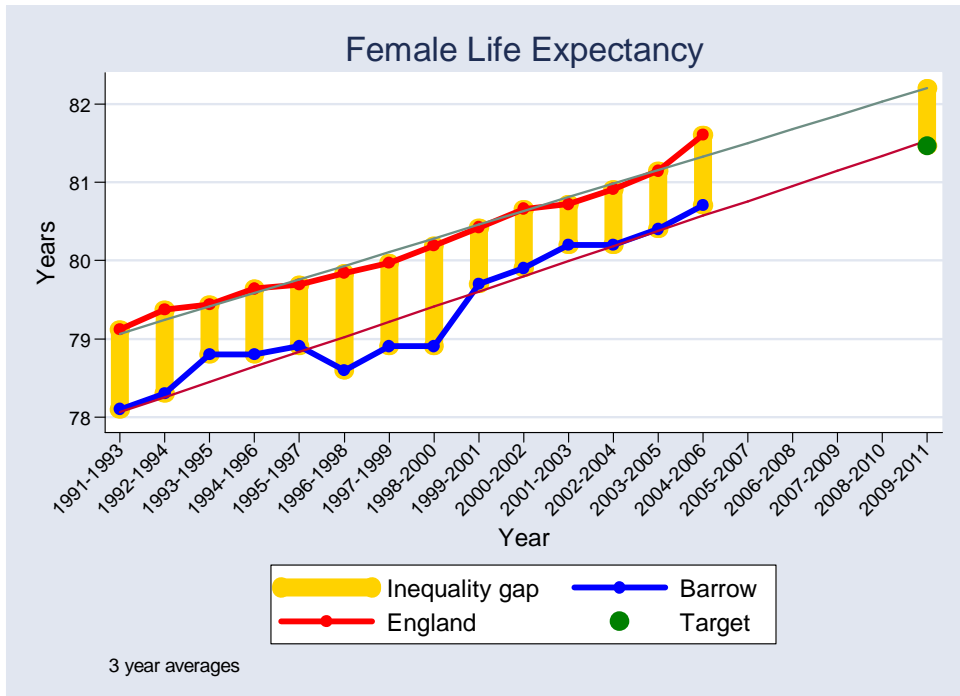


Figure 7 Female life expectancy in Barrow and Furness: Source ONS

Life expectancy is not always well understood as a concept. In Local Area Agreements, all-age all-cause mortality rates have been used as an indicator

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as it is easier to interpret locally and correlates well with life expectancy and data is available earlier. All cause mortality refers to the number of deaths in an area as a proportion of the population in that area. The main difference from life expectancy is that it will be affected equally by deaths at young ages as deaths at older ages.

Figure 8 and Figure 9 below show the trend in all age all cause mortality per 100,000 people from 1995 to 2006 for men and women respectively. The trajectory that will need to be achieved between 2006 and 2010 is given in red. It is clear from these graphs that for men initial declines in mortality were not sustained between 1999 and 2002. Since 2002 however male mortality rates have begun to decline again and are now below the trajectory set in the LAA. Nevertheless if the current long term trend continues the 2010 male mortality target in the LAA will not be met (see Figure 8). The situation for women in Barrow is better with mortality reducing at or beyond the target rate (see Figure 9).

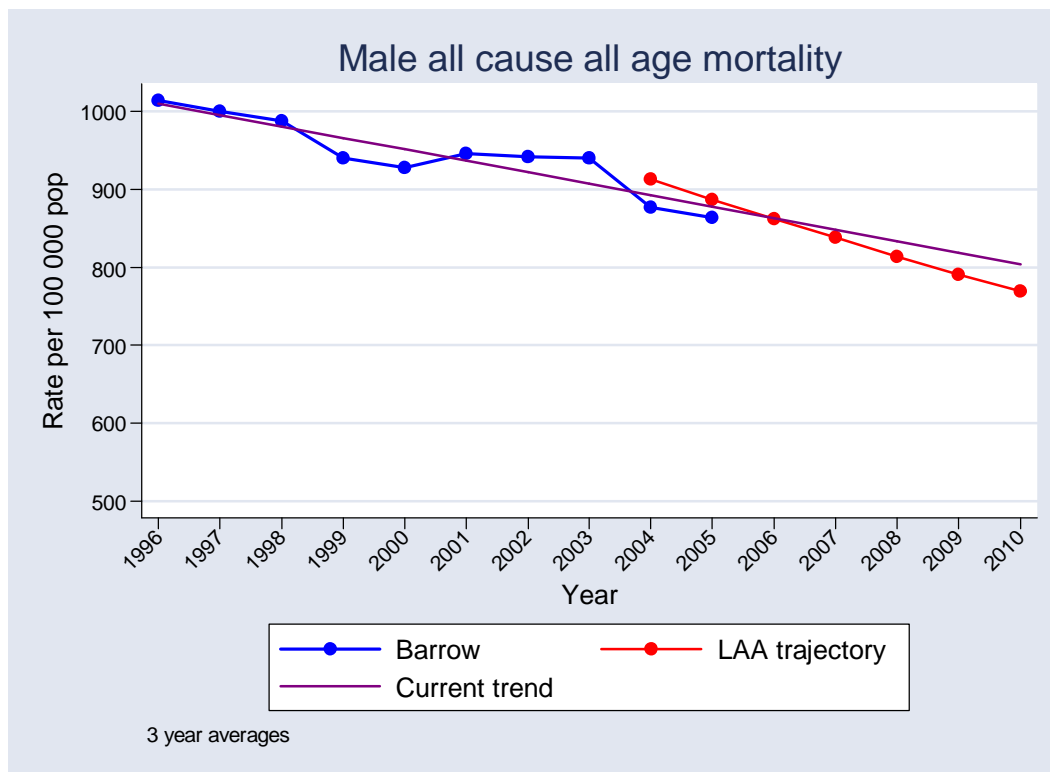


Figure 8 Men - all age all cause mortality rates for Barrow, with trajectory set in the Cumbria Local area agreement. (Source North West Public Health Observatory)

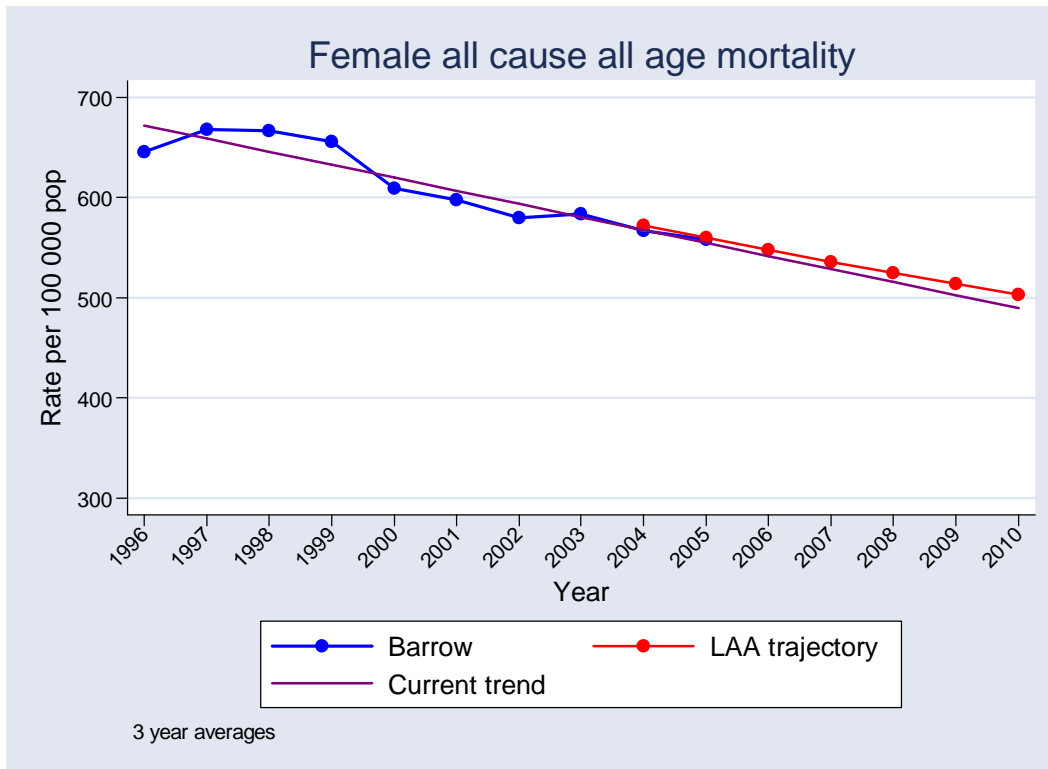


Figure 9 Women - all age all cause mortality rates for Barrow, with trajectory set in the Cumbria Local area agreement. (Source North West Public Health Observatory)

As well as having worse health than the national average, there are wide differences in health between areas within Barrow. The graph below shows that life expectancy is lower in the more deprived wards in Barrow.

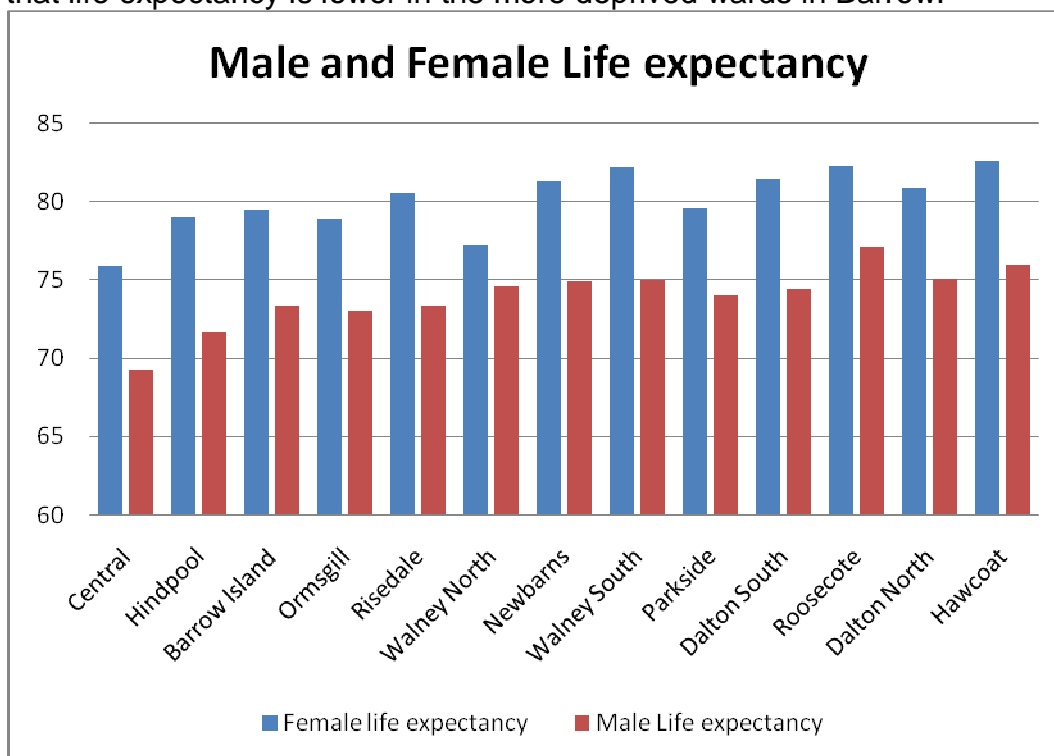
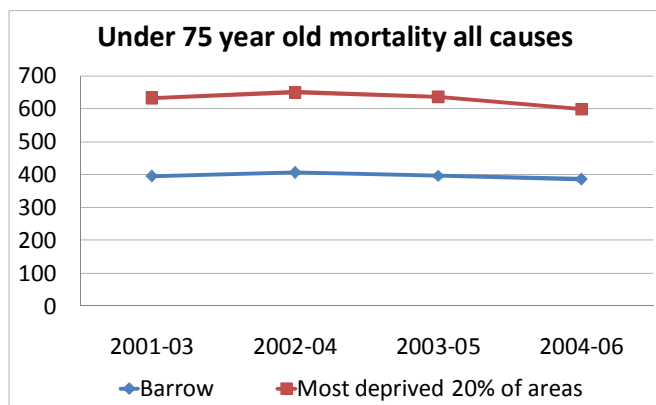


Figure 10. Life expectancy by ward 1993-2003. (Source ONS)

In this time period, all of the wards apart from Roosecote were below the 2010 target levels of male life expectancy. At this time in central ward men were living on average 8 years less than the England average. In order for Barrow to meet its target, life expectancy in all wards will need to level up to that of the most affluent ward. This means that although health improvement will need to be most pronounced in the most deprived areas, some improvements need to be across the district. Figure 10 shows the level of mortality in under 75 year olds in Barrow compared to the most deprived 20% of areas within Barrow. This shows that, there has been little change in under 75 year old mortality in Barrow recently. The level of mortality is markedly higher in



deprived areas; however since 2002 there has been a slight decline in the level of mortality in the deprived areas narrowing the gap with the district as a whole to a small extent.

Figure 11 Under 75 year old mortality all causes for Barrow and the most deprived 20% of areas in Barrow.

7.2 Long term limiting illness

Mortality is not the only measurement of the health of people living in Barrow; we also need to consider whether people are suffering from long term illnesses. In the 2001 census 45% of households in Barrow included one or more person with a long term limiting illness as compared to 34% nationally. In 2006 out of all the local authorities in England, Barrow had the 3rd highest proportion of people of working age claiming incapacity benefits (IB) (14%). The main types of disability reported by people claiming incapacity benefit were mental health and musculoskeletal problems (5;6)(see Table 1) .

	Men (%)	Women (%)
Mental, behavioural	31	41
Musculoskeletal	26	23
Circulation	9	3
Nervous system	5	5
Injury, poisoning	5	3
Respiratory	4	4
All other	20	21
	100	100

Table 1. Nature of ill health or disability of people in incapacity Benefit in Barrow(6)

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Although the differences in terms of mortality between Barrow and the rest of country are large, the differences in terms of long term limiting illness are much larger. Healthy life expectancy is a measure of how long people in each area could expect to live in good health. In Barrow in 2001 for men this was 6% lower than England at 64.7 years old, whilst for women it was 5% lower at 68.5 years. (Source ONS). The highest burden of long terms limiting illness appears to be in Central, Hindpool and Barrow island wards (see Figure 12), where approximately 1 in 5 people of working age are receiving incapacity benefit.

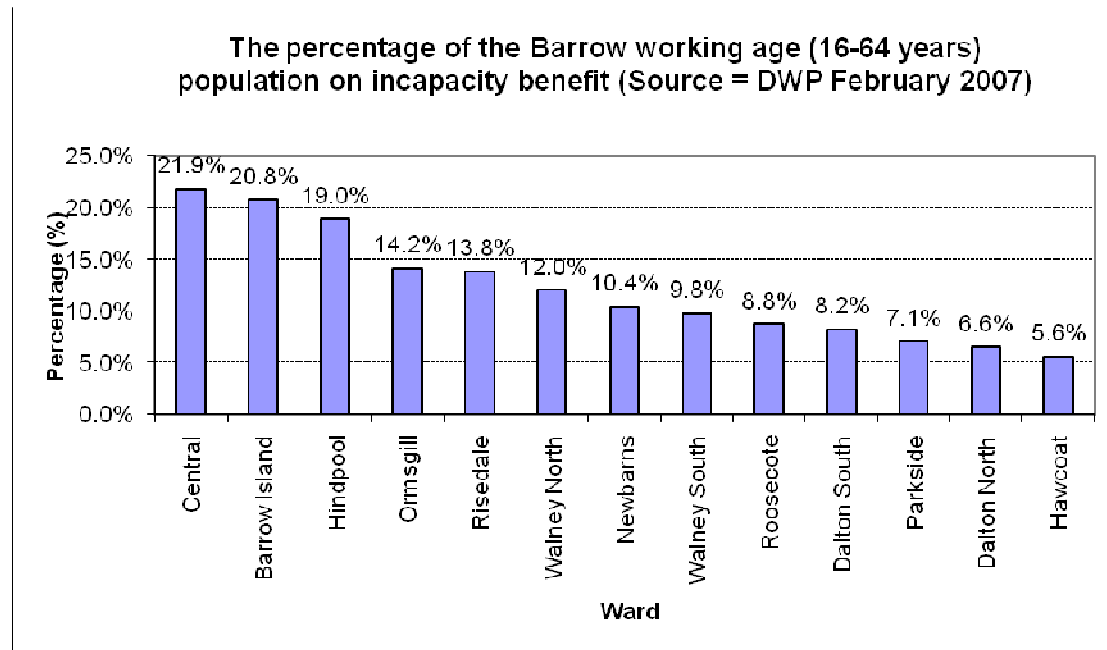


Figure 12 The proportion of the working age population on incapacity benefits.

7.2.1 Mental Health

Whilst mental health problems can result in people dying (i.e. through suicides), they make up a much bigger proportion of the burden of chronic disease. Nationally 26% of the total burden of disease is related to mental health and other neuro-psychiatric diseases(7).

In Barrow mental health is a particular problem. In 2007 5% of the working age population were on incapacity benefit for mental health or behavioural disorders, as compared to only 3% nationally. There is a wide variation in mental health across the district with Central, Barrow Island, Hindpool and Ormsgill Wards having higher levels than the district average (see Figure 13).

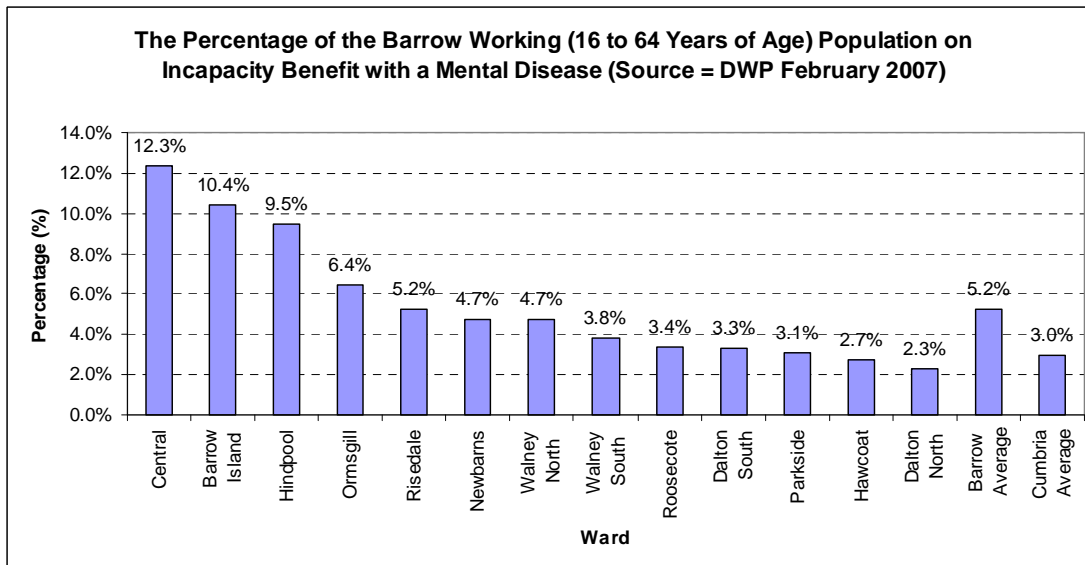


Figure 13. The proportion of the working age population on incapacity benefits for a Mental Health disorder.

7.3 Infant Mortality

Infant mortality refers to the number of deaths that occur within one year of birth as a proportion of all live births in an area. Although this involves a very small number of deaths, young children are the group most affected by adverse social and environmental conditions. They are sensitive not only to conditions in their immediate environment after birth, but also to the pre- and post-natal health of their mother. Information on infant mortality provides a specific indication of the health status of young children and a more general indicator of overall socioeconomic conditions.

Between 2003 and 2005 there were 13 infant deaths in Barrow and this was not significantly higher than the average for England as a whole. What is noticeable however, is that although the rate in Barrow was initially lower than the national average there has been a marked increase since 1998.

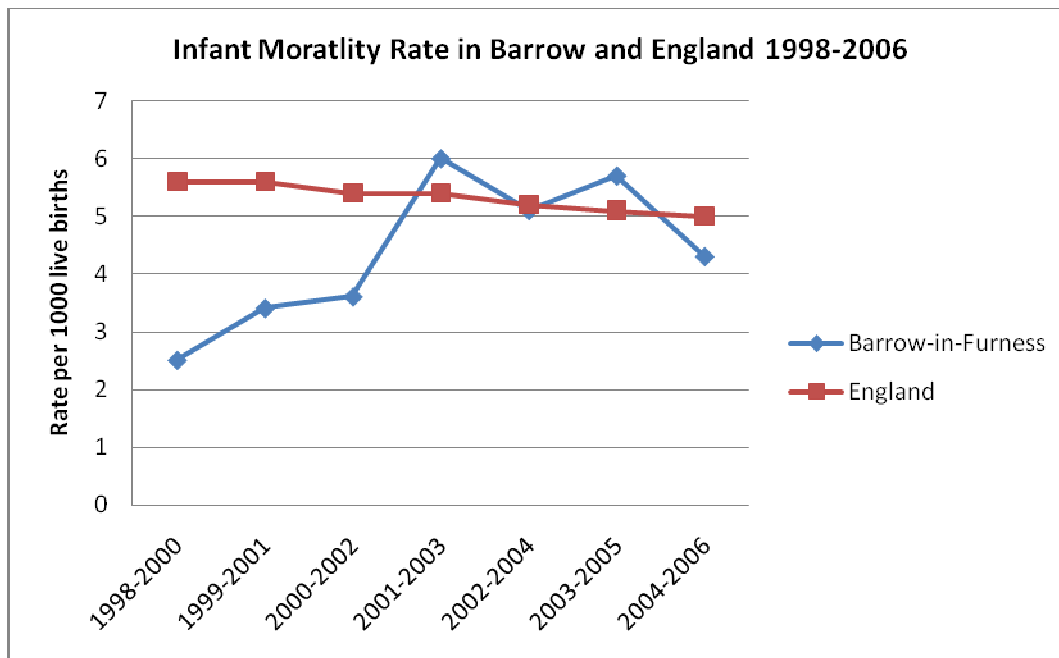


Figure 14. Infant Mortality rate in Barrow and England 1998-2006 (Source NCHOD)
 Nationally in 2002-04 infant mortality was 19% higher in routine and manual groups as compared to the national average. This had increased from a 13% gap in 1997-1999(8). Improvements in socioeconomic conditions in the long term will reduce infant mortality. However we know that nationally, differences in infant mortality are mainly the result of 5 immediate causes; Immaturity, low birth weight, Sudden Unexpected Death in Infancy (SUDI), congenital disorders and Infection(8). In the short term, a reduction in smoking in pregnancy, teenage pregnancy, obesity, improved parental nutrition and an increase in breast feeding will all contribute to improvements in infant mortality(8).

As mentioned above one of the main factors contributing to infant mortality is low birth weight, often due to immaturity. Figure 15 shows the proportion of babies born under weight in each ward. The highest level is found in Central ward with Risdale, Ormsgill, Barrow Island, Hindpool and Walley South having levels higher than the district as a whole.

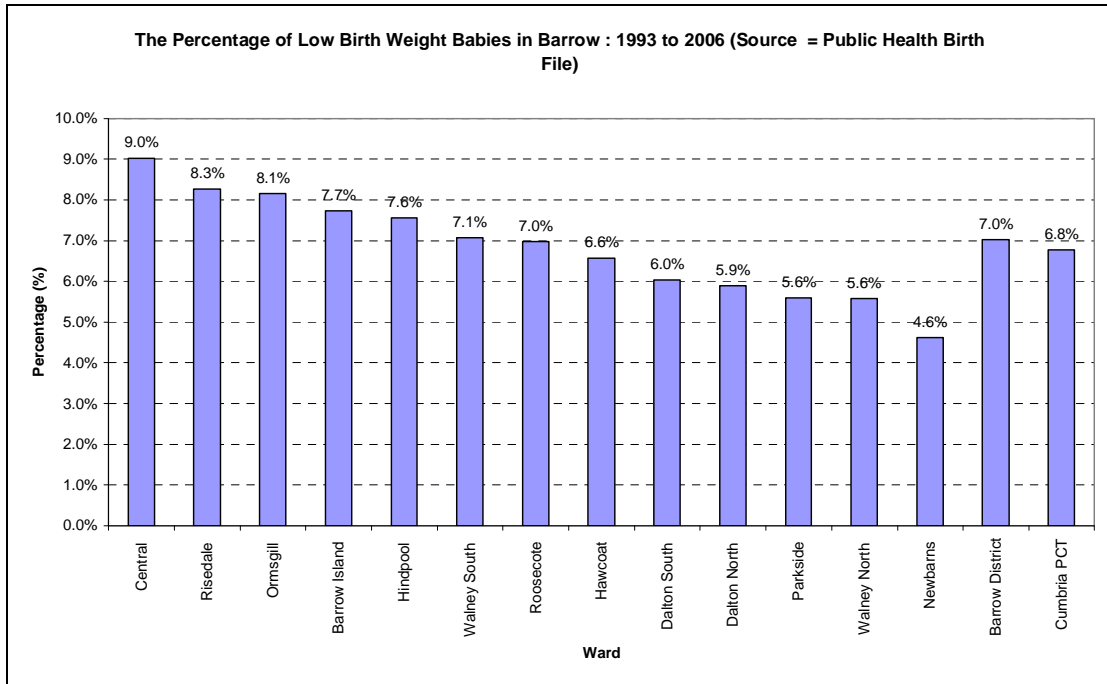


Figure 15 The proportion of babies born under weight by ward 1993-2006.

8 What are the main diseases causing the low level of life expectancy in Barrow?

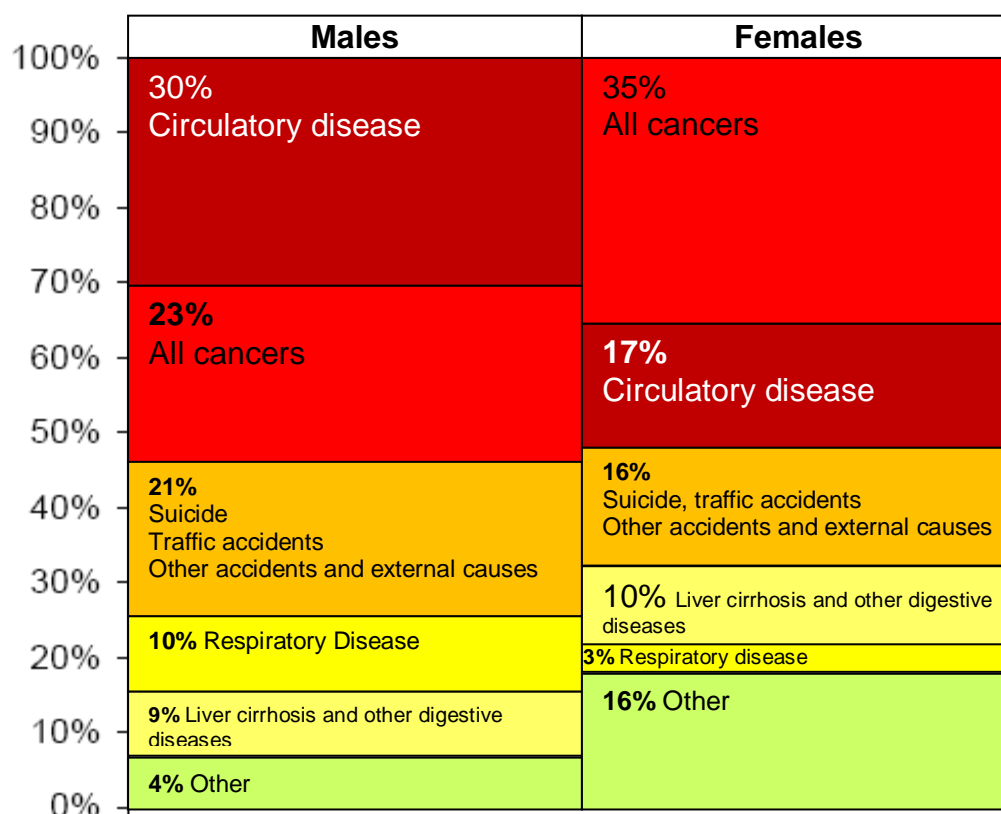


Figure 16 The proportion of the gap in life expectancy between Barrow and England attributable to each disease category in 2003-2005 (source APHO).

Most of the difference between life expectancy in Barrow and the average for England as a whole is related to 3 main groups of diseases and conditions; circulatory disease, cancer, suicides and accidents. Figure 16 shows the proportion of the gap in life expectancy that is attributed to these causes(9). In other words of the 2 year gap in male life expectancy between Barrow and England as a whole, 30% or about 7 months, of that gap is due to circulatory diseases, 23% is due to cancer etc. In practice this means that if male mortality due to circulatory disease, cancer, suicides and accidents in Barrow was improved so that it was the same as that found nationally the gap in life expectancy would be reduced by 74%, from 2 years to about 6 months. Similarly the gap in female life expectancy would be reduced from 8 months to 3 months. Focusing on the causes of these conditions and diseases will have the greatest impact in terms of improving life expectancy in Barrow. The following section will look in detail at these 4 main diseases and conditions.

8.1 Circulatory diseases

The rate that people under 75 years old die from circulatory diseases in Barrow is about 24% higher than is found nationally (SMR=124 95%CI 110- Barrow HIMP: Baseline Assessment–February 2008

139). It is higher for both men and women. Mortality from circulatory disease accounts for 30% of the gap in male life expectancy and 17% of the gap in female life expectancy. Mortality from circulatory disease in Barrow declined until 2001, between 2001 and 2004 there was little change, but in recent years there has once again been a noticeable decline (see Figure 17). Within the LAA a target has been set to reduce under 75 year old circulatory disease mortality to 87 per 100,000. This is a more challenging target than had previously been set by the Department of Health. However it is likely that if the current long term trend continues this target will be met.

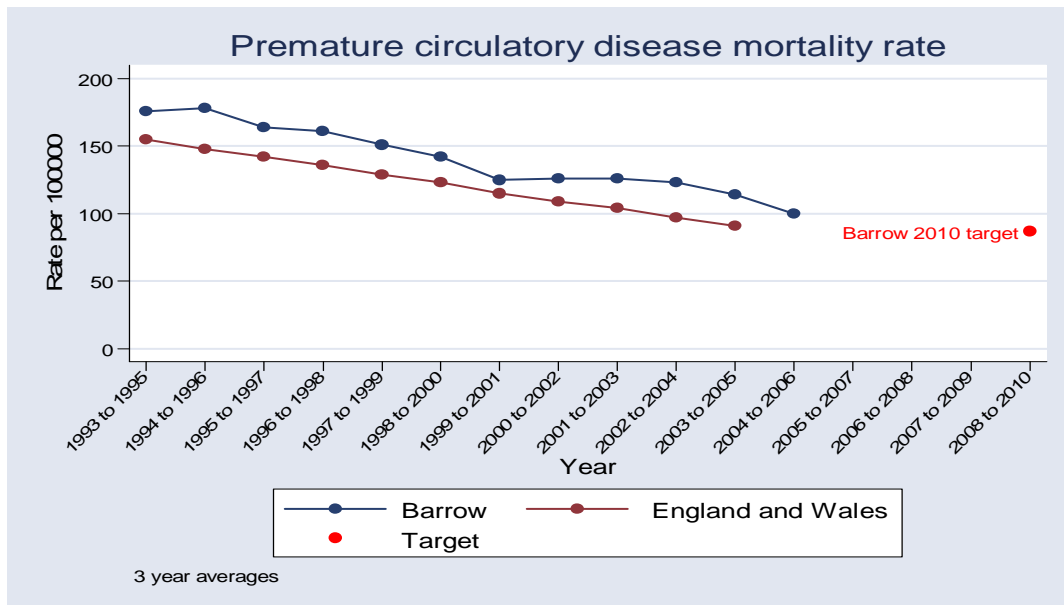


Figure 17 Under 75 year old mortality from circulatory diseases in Barrow and England and Wales.

The graph below shows the under 75 year old mortality rates from circulatory disease for each of the wards in Barrow. Hindpool and Central have rates that are significantly higher than the average for Barrow.

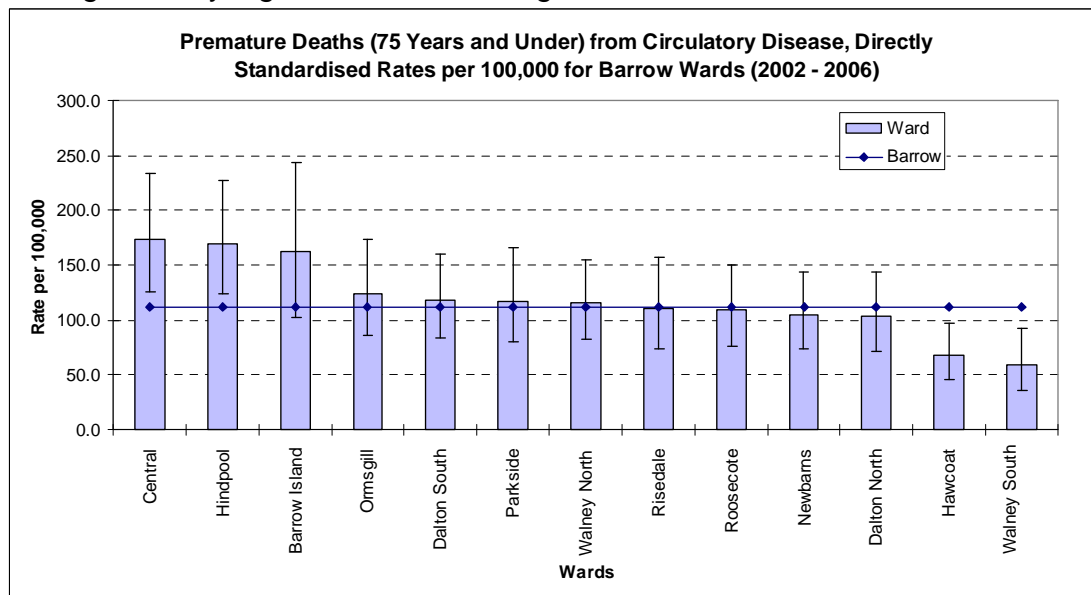


Figure 18 Standardised mortality ratios from circulatory disease in under 75 year olds, Barrow wards.

Figure 19 shows the mortality rate for circulatory disease in the most deprived 20% of areas in Barrow as compared to Barrow as a whole. Interestingly in Barrow whilst mortality is higher in the most deprived areas, it has been falling faster in these areas and the gap is narrowing.

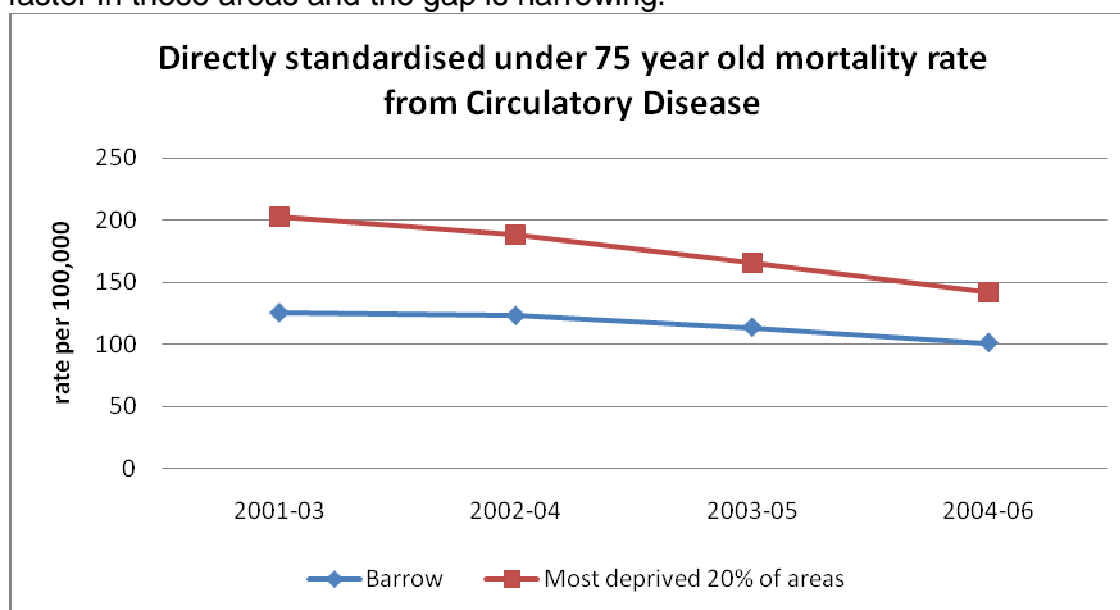


Figure 19. Under 75 year old mortality all causes for Barrow and the most deprived 20% of areas in Barrow.

The main behavioural risk factors that will result in high levels of circulatory disease will be smoking, diet and levels of physical activity. As well as exposure to these particular risk factors mortality from cardiovascular disease may be related to whether people with these diseases, or at risk of these diseases are identified early and provided with effective treatment. One important factor will be whether people are assessed by their GPs.

Based on the Health Survey for England(10) we can estimate that there would be about 19,000 people in Barrow who would have a greater than 20% risk of developing cardio vascular disease in the next 10 years(11). The Joint British Societies guidelines(12) recommends that these people are assessed in primary care. This could lead to real improvements in life expectancy by giving those 'at risk' lifestyle advice and/or medication before they are diseased. Similarly it could be estimated that there would be about 22,000 people in Barrow with hypertension(13). In 2006-7 GP practices in Barrow reported that they had 11727 people on their registers with hypertension (source QMAS). This would indicate that there are potentially about 10,000 people with untreated hypertension in Barrow. Diagnosing and treating hypertension in this population would prevent a significant number of premature deaths in Barrow(9).

The CHD National Service Framework (NSF) recognised in 1999 that barely half of all eligible patients actually receive effective treatments for myocardial infarction (MI), angina, or heart failure(14), resulting in 20,000 avoidable coronary deaths nationally each year(15). There are an estimated 5000 people with Coronary Heart Disease (CHD) in Barrow(16), In 2006-07 GP practices reported that they had 4033 people on their registers with CHD. This

is fairly close to the estimated level which suggests that access to primary care for people with CHD in Barrow is reasonable.

The graph below shows the 19 GP practices in Barrow in 2005-06. The blue area shows the number of people we would estimate there to be with Coronary Heart Disease (CHD) in each practice population. A range is given to take into account chance variation. The black dots identify the number of people reported on each practice's register with CHD through the Quality Management and Analysis System (QMAS). Whilst most practices are within the range that we would expect, some practices have lower numbers on their registers than the number of people we would expect to find with CHD in their populations. These GP practices tend to be in the more deprived areas. There may be several reasons for this. It could be related to problems with data reporting, but it may indicate that there are people in these populations with CHD who are not currently attending their GP for this condition. This means that progress could be made in these areas by developing new ways of identifying people who have CHD and providing them with appropriate advice and treatment.

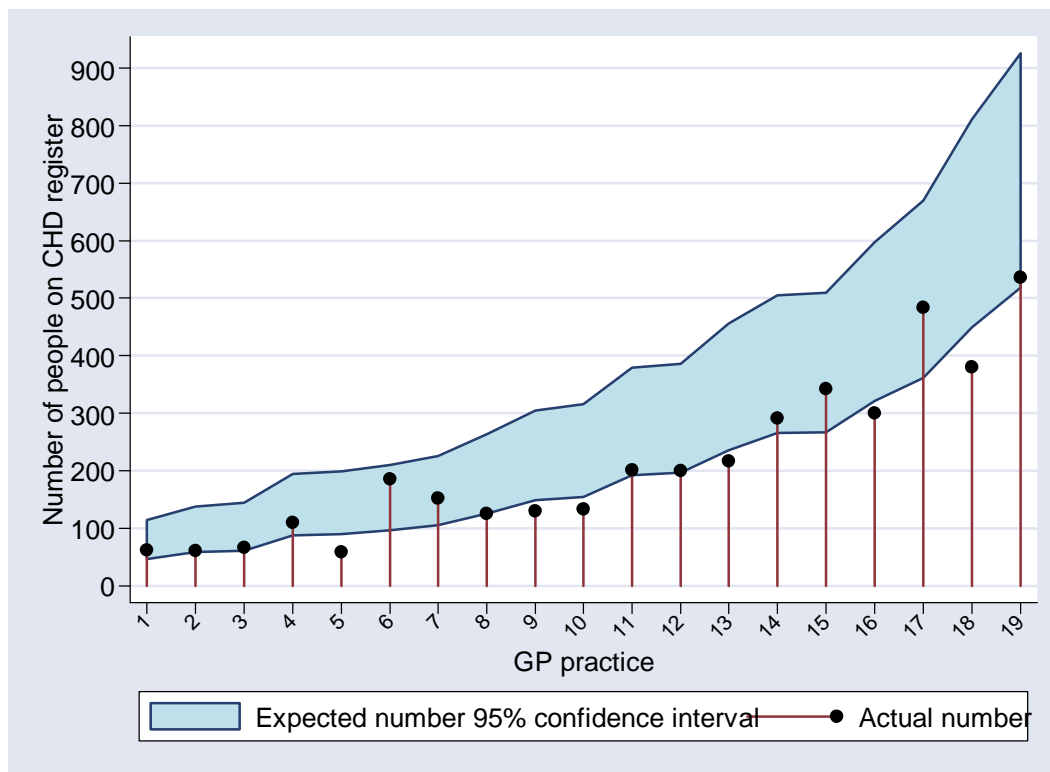


Figure 20 Number of people on CHD registers (QMAS 2006-2007) for each GP practice and the expected range based on the Health Survey for England 2003, adjusting for the age, sex and level of deprivation in each practice.

8.2 Cancer

In 2003-2005 the rate that people under 75 were dying from cancer in Barrow was 20% higher than the England average. This was true for both men and women (SMR in Men=119 95%CI 102-137, and SMR in women = 123 95%CI 105-143). Premature mortality from cancer in Barrow has consistently been higher than the England and Wales average; however it had been declining at a faster rate until 2001. What is particularly worrying is that since 2001 in

Barrow there has been no decline in cancer mortality rates, whilst these have been declining nationally. In recent years there have been increases in mortality from the three most common cancers (Lung, Colorectal and Breast). If the trend since 2001 continues, the 2010 target of less than 130 deaths per 100,000 will not be met (see Figure 21)

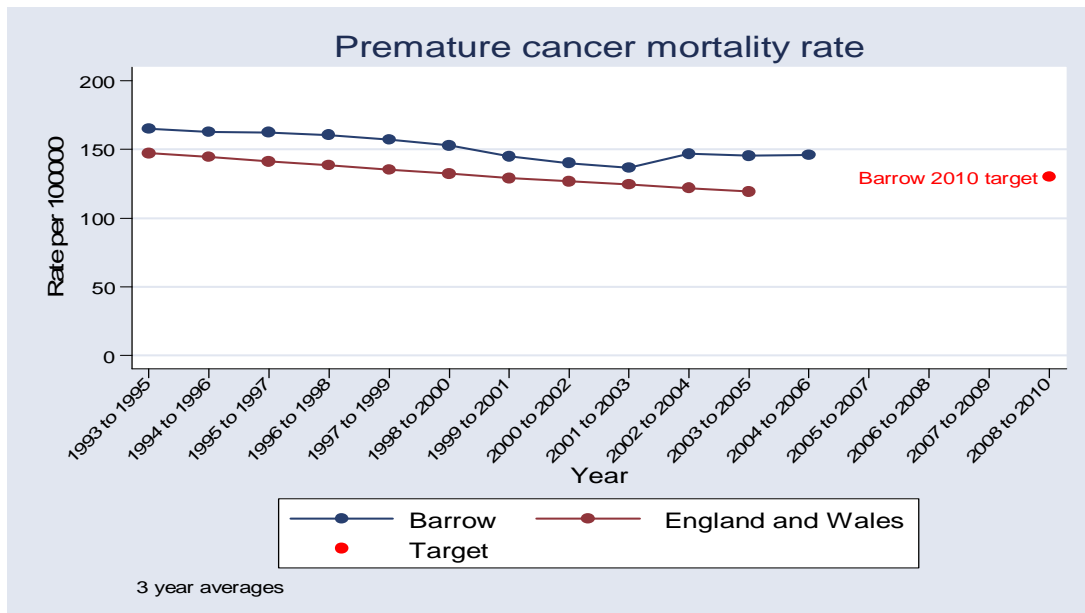


Figure 21 Under 75 year old mortality rate from all cancers – Barrow and England and Wales rates.

Figure 22 shows the mortality rate from cancer for the 13 wards in Barrow. Hindpool ward has a significantly higher mortality rate in people less than 75 years of age as compared to the district as a whole.

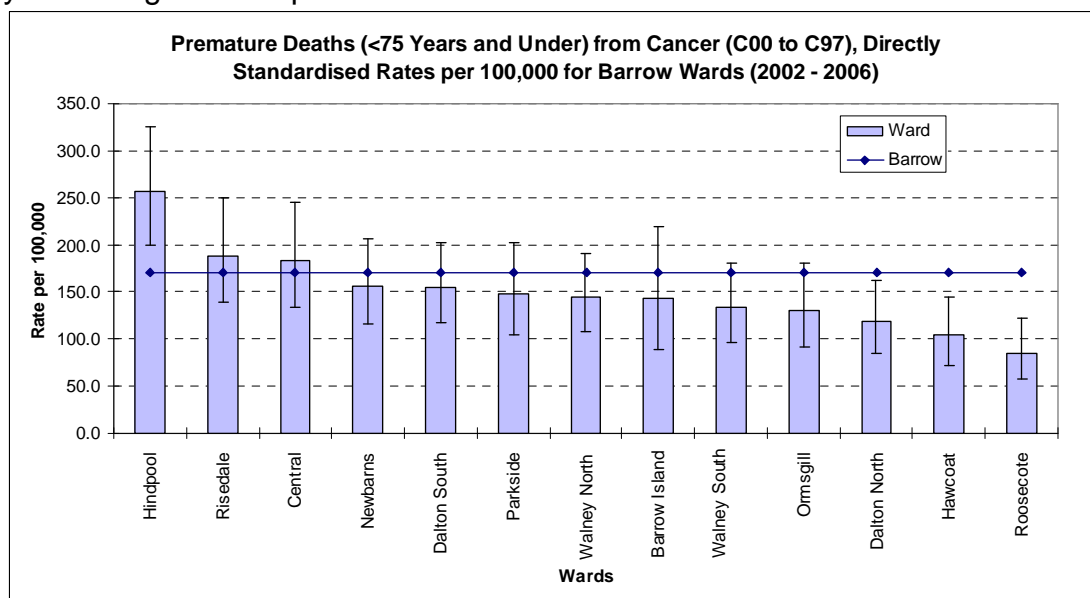


Figure 22. Under 75 year old mortality rates from Cancer, Barrow wards.

Figure 23 shows the trend in cancer mortality in the borough as a whole as compared to the 20% most deprived areas in Barrow. The level of cancer mortality is higher in the more deprived areas. It has however remained at a fairly constant level in both groups in recent years; there is no evidence of the gap narrowing.

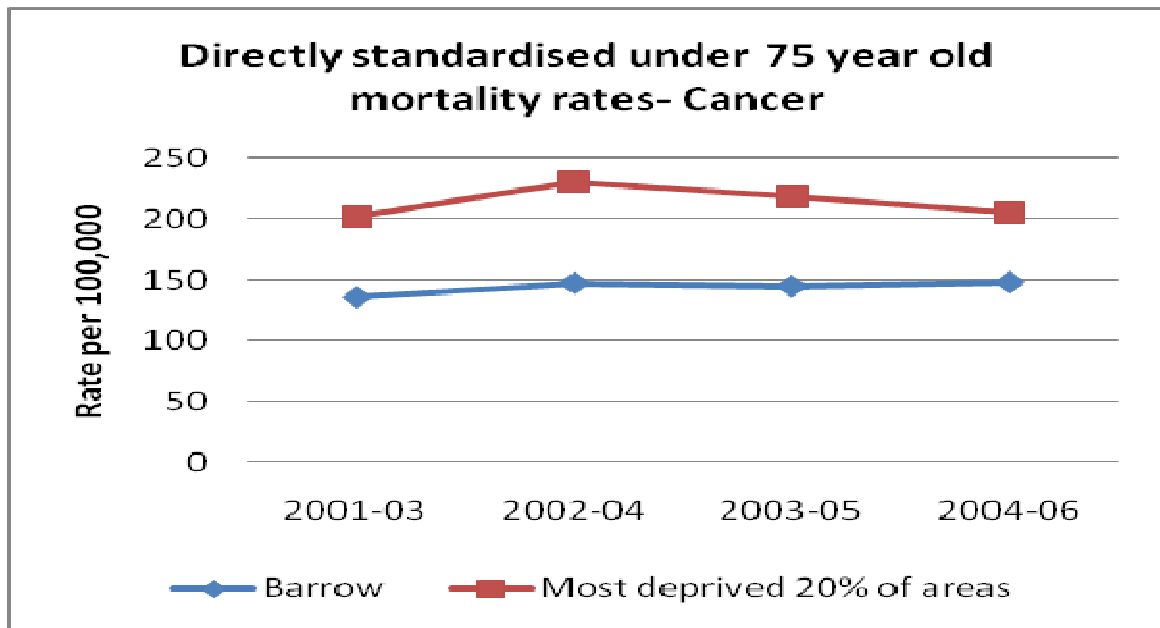


Figure 23 Under 75 year old mortality all causes for Barrow and the most deprived 20% of areas in Barrow.

8.2.1 Which types of cancer are contributing to this high mortality?

Table 2 shows the number of deaths between 2003 and 2005 from each type of cancer in men and the standardised mortality ratio (SMR). It also shows the number of new registrations of people with cancer between 2002 and 2004 and the standardised registration ratio (SRR). SMR and SRR show the rate of deaths and registrations as compared to the national rate, adjusting for age and sex, where the national rate is 100. For men lung cancer, colorectal cancer, mesothelioma and prostate cancer were the most common causes of cancer deaths. Colorectal cancer and mesothelioma mortality is significantly higher in men as compared to the national average and the levels of Lung cancer are on the borderline of being significantly higher. Registrations for testicular cancer are significantly higher than the national average although they only resulted in 1 death during this time.

Site	Deaths in under 75 year olds 2003-2005				Registrations of new cases in under 75 year olds 2002-2004			
	Expected	Observed	SMR	Sig	Expected	Observed	SRR	Sig
All cancers	162	190	117		339	362	107	
Lung	42	54	128		51	57	112	
Colorectal	17	27	157		44	53	121	
Mesothelioma	4	19	475		5	24	512	
Prostate	12	14	118		79	69	87	
Oesophagus	11	*	72		12	*	59	
Stomach	7	*	73		12	10	86	
Bladder	5	*	106		14	14	97	
Leukaemia	5	*	99		10	10	103	
Pancreas	8	*	49		8	*	47	
Kidney	5	*	82		10	14	140	
Lymphoma	6	*	72		14	10	70	
Testis	0	*	415		7	16	235	
Skin	3	0	0		11	10	91	

Table 2 The number of deaths, Standardised Mortality Ratio (SMR), Registrations, Standardised Registration Ratio (SRR) for the main types of Cancer in **Men. Low numbers have been suppressed**



 - Significantly higher than national rate

Table 3 shows the same information for women. The main causes death from cancer in women are lung, breast and colorectal. There are several types of cancer for which there are higher than average levels of mortality but these differences are not statistically significant and could have occurred by chance. The high overall level of cancer mortality in women does not appear to be related to a high rate in any particular type of cancer. Registrations for breast kidney and cervical cancer were significantly higher than found nationally.

Site	Deaths in under 75 year olds 2003-2005				Registrations of new cases in under 75 year olds 2002-2004			
	Expected	Observed	SMR	Sig	Expected	Observed	SRR	Sig
All cancers	131	161	123		327	398	122	
Lung	26	30	117		31	28	90	
Breast	26	29	111		123	148	120	
Colorectal	10	12	115		28	36	126	
Ovary	10	*	78		18	24	137	
Pancreas	*	*	113		*	*	109	
Kidney	*	*	207		*	11	208	
Leukaemia	*	*	149		6	*	98	
Stomach	*	*	138		*	*	108	
Non-Hodgkin's Lymphoma	*	*	111		11	12	112	
Uterus	*	*	142		17	18	108	
Bladder	*	*	169		*	*	92	
Cervix	*	*	79		*	16	198	
Oesophagus	*	*	56		*	*	137	
Mesothelioma	*	*	327		*	*	250	
Mal Melanoma Skin	*	*	54		13	*	70	

Table 3 The number of deaths, Standardised Mortality Ratio (SMR), Registrations, Standardised Registration Ratio (SRR) for the main types of Cancer in **Women**. ***-Low numbers have been suppressed**

 - Significantly higher than national rate

The level of mortality from cancer is likely to reflect the number of new people developing the disease and the length of time they survive once they have been diagnosed. Whilst new registrations of men with colorectal and lung cancer were slightly higher than the national average, this does not entirely explain the high mortality rates. This suggests that the high level of mortality from these conditions in Barrow is partly due to poor survival. Table 4 shows the percentage of people within the former PCT of Morecambe Bay surviving 5 or more years after diagnosis as compared to England as a whole. This indicates that survival is lower for this population, particularly for men with lung cancer, women with breast cancer and men with prostate cancer. The lower level of survival for people diagnosed with breast cancer, does not appear to be related to a low level of screening uptake, which was in fact higher for Morecambe Bay PCT (81%) as compared to the average for England (75%) in 2004 (source NCHOD)(17).

		England(1999-2003)	Morecambe Bay PCT(1996-2000) (95% CI)
Lung	Men	6.5%	4.0% (2.1-5.9)
	Women	7.6%	6.6% (3.7-9.4)
Colorectal	Men	49.6%	45.4% (40.1-50.8)
	Women	50.8%	52.8% (46.7-58.9)
Breast	Women	81.0%	73.9% (70.5-77.3)
Prostate	Men	74.4%	56.5% (51.5-61.6)

Table 4. 5 year relative survival following diagnosis with Lung Colorectal, Breast and Prostate cancer (source Cancer Registry)

Poor survival could be the result of several causes; people being identified later with more advanced stages of disease, people having more co-morbidities or other risk factors (e.g. smoking), or people having poorer access to effective treatment.

8.3 Accidents and Suicides

Accidents and suicides account for 21% of the gap in life expectancy between men in Barrow and England as a whole. They account for 16% of the gap for women. The suicide rate is particularly high in men in Barrow. Twenty-three men died from suicide in Barrow between 2003 and 2005, giving a mortality rate that is 70% higher than the national average (SMR 171 95%CI 108-256). Six women died from suicide during that time (SMR =120 95%CI 44-261).

The small number of suicides per year means that the rate tends to vary considerably from year to year, however the suicide rate has consistently been higher than the level for England and Wales as a whole. There has been a fairly clear increase in the suicide rate from 1998 to 2004, although there seems to have been a decline in recent years (Figure 24). The most marked increases have however been in men aged between 15-44 (see Figure 25). If the recent decline is maintained it is likely that the 2010 target for Barrow of less than 13 deaths per 100,000 people will probably be met.

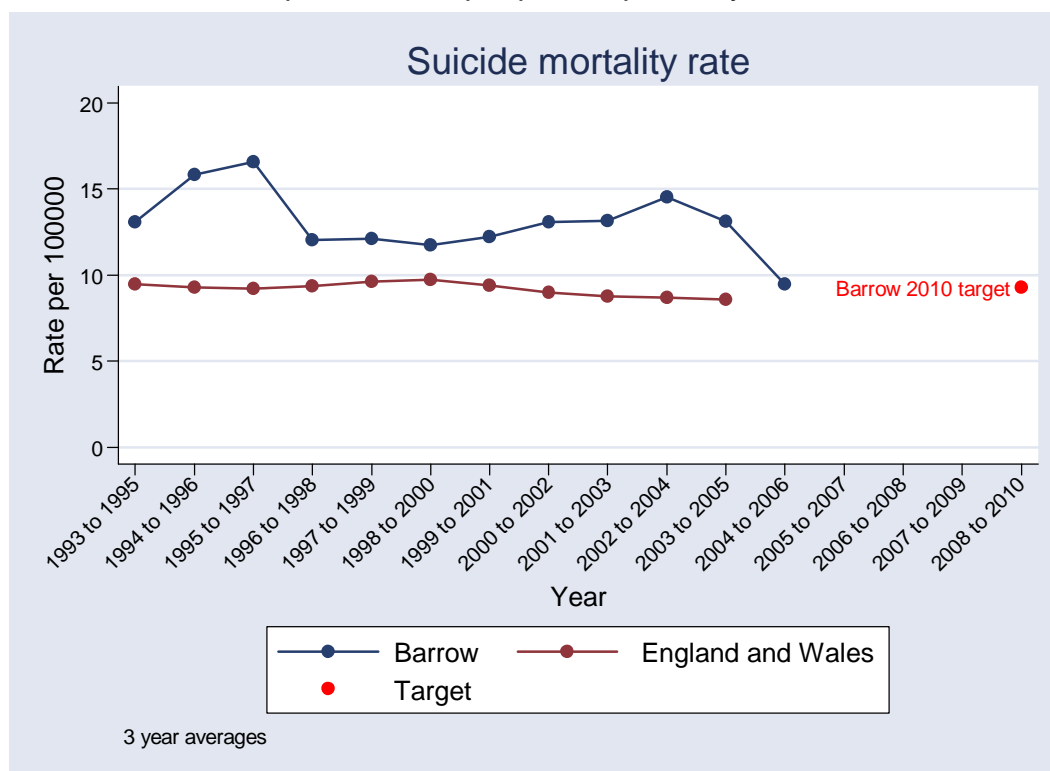


Figure 24 Mortality rate from suicide and undetermined deaths (source: Cumbria PCT)

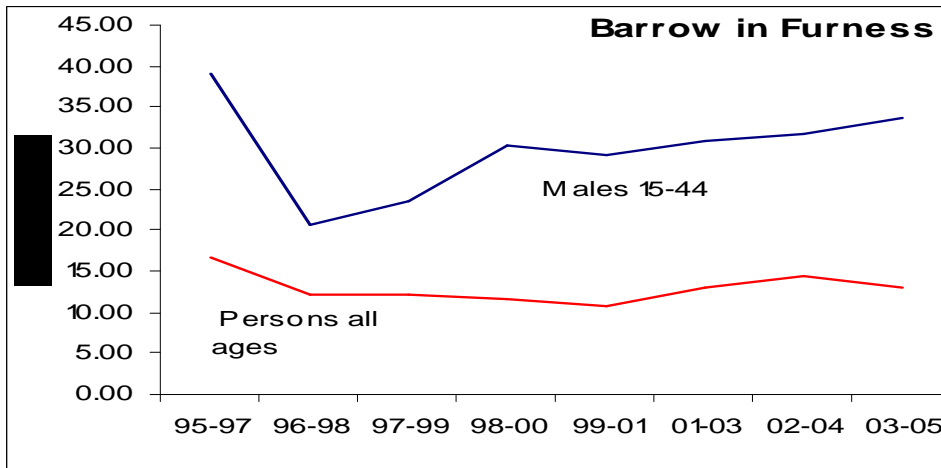


Figure 25 Mortality rate from suicide and undetermined Deaths, 3 year rolling average 15-44 year old men and people of all ages 1995-2005.(source: Cumbria PCT)

About 22 people living in Barrow die each year from accidents. This is about 50% higher than the national mortality rate from accidents (2003-2005 SMR=147 95%CI 114-186)(18). There has been a marked increasing trend over recent years in Barrow and at current projections it is unlikely that Barrow will meet its target to reduce deaths from accidents by 20% by 2010 (from the 1995-1997 baseline) (see Figure 26).

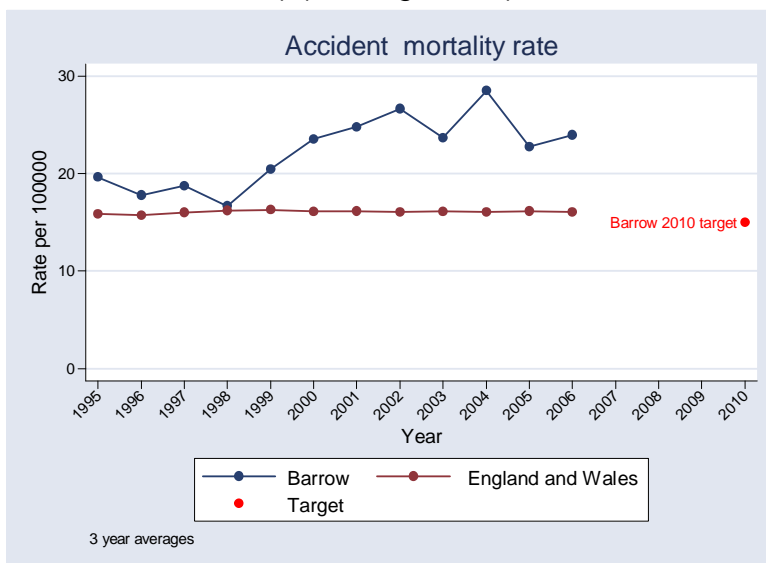


Figure 26 Mortality rate from accidents. (Source NCHOD)

In terms of their contribution to life expectancy the most important causes of accidents in Barrow are RTA's, drowning, poisoning and falls (see Table 5). Accidents do not appear to be a major cause of death in children in Barrow; there were three deaths in children under 15 years old from accidents during these 6 years. Overall most accidents outside the home were in men. A particularly high proportion of RTA's and drowning incidents were in young men. Other studies have identified that alcohol and drug use were important contributory factors to deaths from injury and poisoning in young men (19;20). Nationally young men are more likely to be involved in road traffic accidents attributable to alcohol than any other age group(20).

Falls were however the most common cause of accidental deaths. Over 50% of all accidental deaths were from falls. These were generally in elderly people (Table 5)

Deaths from accidents in Barrow 2001-2006						
Cause of death	Number of deaths	%	% Male	Years of life lost	%	Median Age
RTA	24	(18%)	83%	737	(38%)	45
Drowning or other accidental threats to breathing	14	(11%)	79%	402	(21%)	33
Accidental poisoning or other hazardous exposure	17	(13%)	53%	329	(17%)	58
Falls	69	(52%)	42%	319	(17%)	83
Electrocution	*	(2%)	100%	56	(3%)	50
Exposure to fire or other heat source	*	(3%)	100%	47	(2%)	68
Force of nature	*	(2%)	50%	29	(1%)	70
Place of death						
Outside the home	60	(45%)	70%	1157	(60%)	63
Home or residential institution	72	(55%)	47%	761	(40%)	78
Total	132	(100%)	58%	1918	(100%)	73

Table 5 Number of deaths from accidents in Barrow 2001-2006

9 The number of deaths that would need to be prevented to achieve these targets.

In order to increase life expectancy in Barrow to the target level there will need to be approximately 70 fewer deaths each year in 2009-2011 as compared to 2004-2006. This will reduce the mortality rates for men and women to the target levels in the Cumbria Local Area Agreement and increase life expectancy in line with the national health inequalities target.

However just meeting each of the four national mortality targets for circulatory disease, cancer, suicides and accidents would in total mean only about 34 fewer deaths per year in Barrow. This would not be sufficient to achieve the reductions in life expectancy required, a further 36 deaths would need to be prevented. This indicates that either mortality from these 4 conditions will need to be reduced beyond these targets or there will need to be reductions in deaths from other causes if the life expectancy target is to be reached.

It is likely that reductions beyond the target number of deaths will be achievable for circulatory diseases. This is because deaths from circulatory disease in Barrow have already been falling rapidly; just continuing at the current trend would mean approximately 28 fewer under 75 deaths from circulatory disease each year between 2009 and 2011 as compared to 2004-2006. Although this is nearly three times the number of deaths that would need to be prevented to meet the LAA target, it is potentially achievable in this

time frame as there are several interventions that are likely to be effective (see Section 12).

The 2004-2006 mortality rate from suicide in Barrow was actually lower than the 2009-2011 target; therefore it has been assumed that it should be possible to maintain this low rate in 2009-2011.

In the period 2004-2006, there were 10 infant deaths. Although this gave a rate that was below the England average, it was higher than infant mortality had been in Barrow in 1998-2000. Returning to the 1998-2000 rate, would mean preventing on average 1 infant death per year, and would have a marked effect on life expectancy.

Based on these calculations local targets have been set, these are the same as those given nationally, except for circulatory disease, suicide and infant mortality, for which targets have been set in this plan that are lower than the national targets, for the reasons given above (see Table 6).

Indicator	2004-2006 Baseline	Approximate number of deaths that will need to be prevented each year in 2009-2011 to meet target, (Male, female)	2009-2011 Target	On track	Current trend
Male Life expectancy	75.4	42		NO	↑
Female life expectancy	80.7	28		YES	↑
Male all age all cause mortality	856	42	769	NO	↓
Female all age all cause mortality	552	28	503	YES	↓
Under 75 Circulatory disease	99	28 (18,10)	67	YES	↓
Under 75 Cancer	146	14 (7,7)	130	NO	→
Suicides	9	0	13	YES	↓
Accidents	24	12 (7,5)	15	NO	↑
Infant Mortality rate	4.3	1	2.5	NO	↑

Table 6 Mortality targets for Barrow Health Improvement Plan, all rates are per 100,000 populations and are directly age standardised, except the infant mortality rate (per 1000 live births) and life expectancy(years)

10 What are the main behavioural risk factors resulting in the inequalities gap in infant mortality and life expectancy.

There are five main behavioural risk factors that contribute to poor health and health inequalities; diet, physical exercise, smoking, alcohol consumption, teenage pregnancy and breast feeding. Figure 27 shows how each of these behavioural risk factors can have an impact on the diseases and conditions discussed earlier. The following section will look at the current situation with each of these risk factors in Barrow.

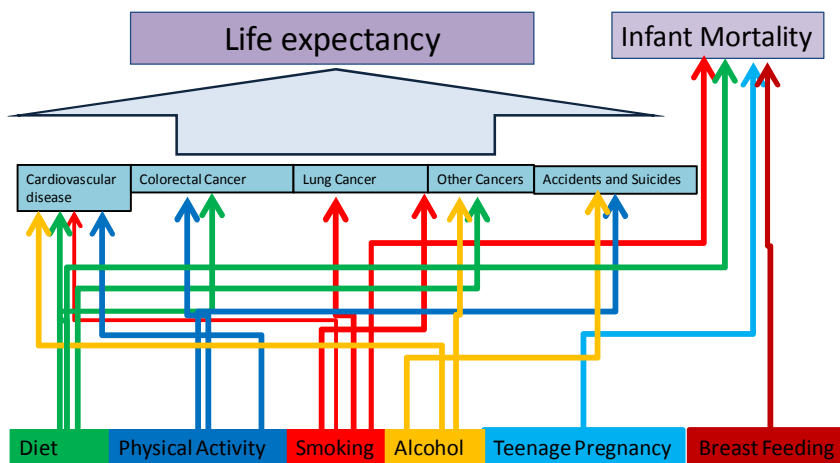


Figure 27 Main mechanisms relating behavioural risk factors to life expectancy and infant mortality.

10.1 Smoking

Smoking is the biggest single cause of preventable illness and death in the UK. About 85% of lung cancer and 19% of coronary heart disease is attributable to smoking(21). Smoking in pregnancy is estimated to increase infant mortality by about 40%(8).

The Cumbria Quality of Life Survey(22) estimated that 25% (95%CI 20-30%) of adults in Barrow smoke as compared to 24% in England as a whole(23). Levels of smoking estimated from national surveys(24) for each ward vary greatly, for example it is estimated that over 30% of residents in Central and Hindpool wards smoke (see Figure 28). The Cumbria Quality of Life survey included a sample of 663 people from the Neighbourhood Management area in Barrow, this estimated that 32% (95%CI 29-36%) of adults living in this deprived area smoke. Levels of smoking in Barrow overall are only slightly higher than the national average, but they are markedly higher in the most deprived areas.

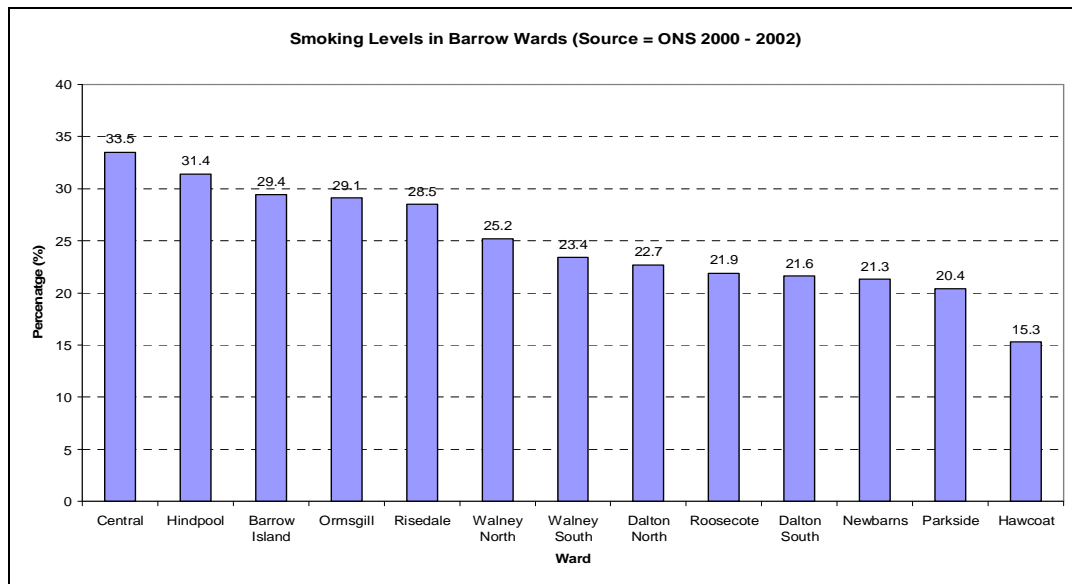


Figure 28 Synthetic estimate of Smoking prevalence by ward in Barrow

This would indicate that there are about 15,000 smokers in Barrow. Between 1/4/2006 and 31/3/2007 there were 784 smokers in Barrow who accessed smoking cessation services and set a date to quit smoking. 46% of these people successfully gave up smoking for at least 4 weeks (see Table 7). Within Barrow a relatively high proportion of smokers are accessing smoking cessation services and setting a quit date as compared to other areas in Cumbria, however the rate at which these people are quitting smoking is lower than in other areas (see Table 7). This probably reflects the fact that people living in more deprived areas find it harder to give up smoking. Nationally quit rates tend to be lower in areas of high deprivation(25).

Area	Estimated number of smokers	Number setting quit date in 2006-07	Estimated % smokers setting a quit date in 2006-07	% quitting at 4 weeks
Barrow	14992	784	5.2%	46%
South Lakes	17518	689	3.9%	57%
Carlisle	27775	774	2.8%	60%
West Cumbria	31848	1167	3.7%	61%
Eden	14230	485	3.4%	69%

Table 7 Estimated number of smokers, number accessing smoking cessation services and % quitting at 4 weeks 2006-07, by area in Cumbria.

10.2 Diet, physical activity and obesity

Several dietary factors impact on health. High levels of fat in the diet, particularly saturated fats are associated with an increased risk of circulatory disease(26). Similarly high levels of salt will increase the risk of circulatory disease(27). Low levels of consumption of fruit and vegetables and high meat intake are associated with increased risk from stomach and colorectal cancer. It is estimated that in industrialised countries about 30% of cancers are attributable to poor diet(28). Deaths in babies under 28 days are more

common in women who are underweight, overweight or obese before they conceive(8).

In Barrow it is estimated that 22% of adults were eating the recommended 5 or more portions of fruit and vegetables per day in 2006(22), slightly lower than the national average of 24%(24). Levels of healthy eating are likely to vary across each of the wards, with Hindpool being estimated to have the worst levels of healthy eating (see Figure 29.). In the Cumbria Quality of Life survey only 14% of people in the neighbourhood management area of Barrow reported eating 5 or more portions of fruit or vegetables per day. Levels of healthy eating in Barrow overall are lower than the national average, but they are markedly lower in the most deprived areas.

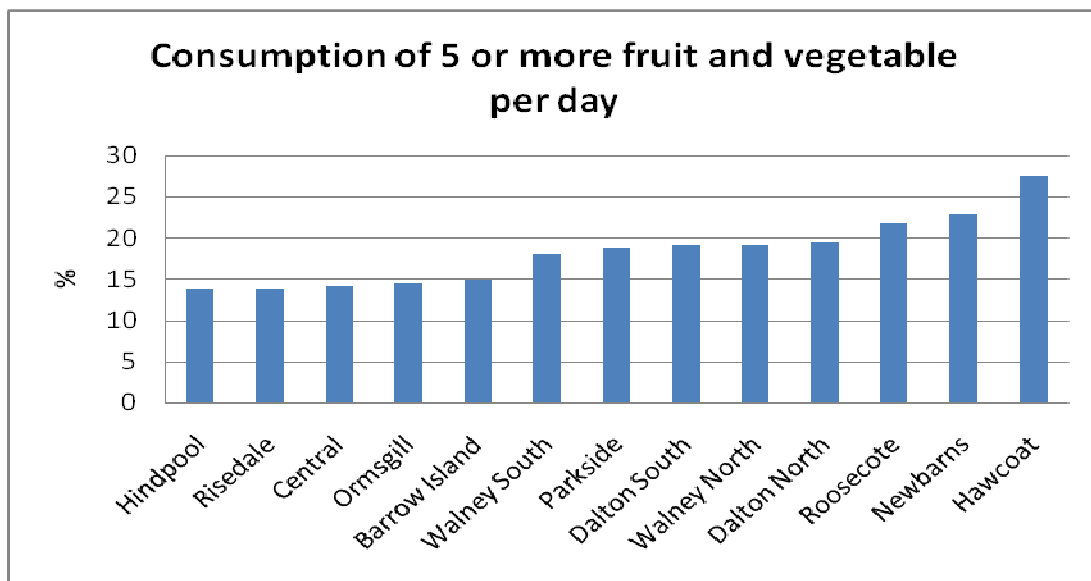


Figure 29 Synthetic estimate of the proportion of adults eating 5 or more portions of fruit and vegetables per day, by ward 2000-2002.

10.3 Physical Activity

Adults who are physically active have a 20-30% reduced risk of premature death(29). Physical activity has an effect on cardiovascular risk, it reduces the risk of some cancers such as colorectal Cancer, it reduces the incidence of falls and osteoporosis in the elderly, and has been shown to reduce depression, stress and anxiety(29).

The Cumbria Quality of Life survey estimated that 49% of the adult population of Barrow engage in moderate physical activity 4 or more times a week, this was actually higher in the neighbourhood management area (NMA) (58%). In this survey 41% of adults in Barrow reported taking vigorous exercise at least once per week; this was slightly lower in the NMA at 39%.

Estimates from the health survey for England indicate that only about 11% of adults in Barrow have the recommended level of 5 sessions of moderate exercise for at least 30 minutes each week as compared to 12% nationally (30). Physical activity appears to be slightly lower in Barrow than the national average. In the most deprived areas levels of physical activity do not appear

to be very different from the borough as a whole. This probably reflects more people being engaged in manual work.

10.4 Alcohol

High levels of alcohol consumption will increase your risk of several cancers (liver, oral, pharynx, and oesophagus), liver cirrhosis and circulatory disease. Alcohol consumption also has an impact on accidents, violent incidents and mental health disorders. In the Cumbria Quality of life survey, 10% of adults reported drinking over the recommended weekly limit. It is estimated that in 2003-2005, 22% of adults in Barrow binge drink. This is significantly higher than the national level of 18% (30). The estimated levels of binge drinking vary across wards (see Figure 30) with Barrow Island having the highest levels(31).

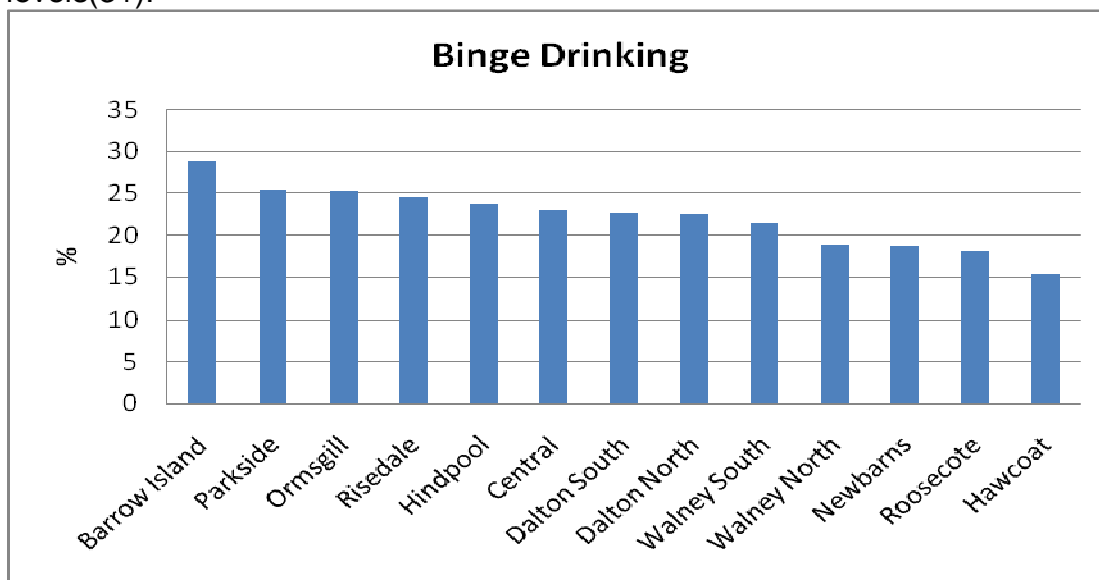


Figure 30 Synthetic estimate of binge drinking by ward in Barrow.

10.5 Teenage Pregnancy

Teenage pregnancy is thought to have various effects on the health and socio-economic position of both mother and baby. Teenage mothers tend to end up being poorer, having lower educational attainment and worse mental health as compared to other women from similar backgrounds(32). Breast feeding rates tend to be lower in teenage mothers and they are more at risk of having babies with low birth weight(32). Infant mortality for babies born to mothers under the age of 20 are around 60% higher than for babies born to mothers aged 20 to 39(8). Reducing teenage pregnancy is a government priority and a national target has been set to:

- *Reduce by at least 50% the conception rate among under 18's in the worst 20% of wards.*

Rates of teenage pregnancies in Barrow are higher than the national average although they have been decreasing from 1998 to 2004 and Barrow will probably achieve the 2010 target of less than 30.9 pregnancies per 1000 women if this trend continues. However, the latest available data from 2003 to 2005 shows a slight increase (see Figure 31)

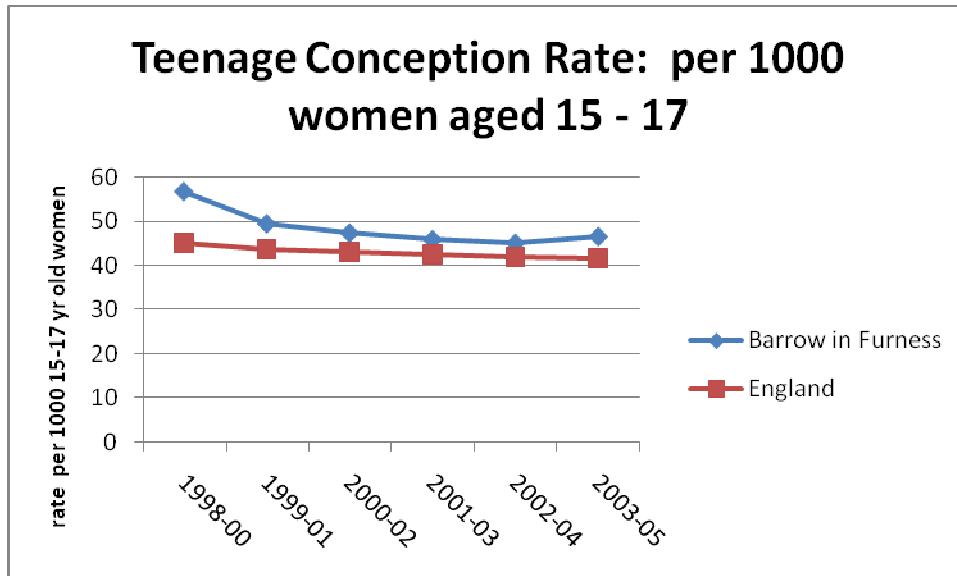


Figure 31 Teenage pregnancy rate (15-17 year olds) Barrow and England 1998-2005 (Source: Department of Health)

10.6 Breast Feeding

The benefits of breast feeding are numerous, including improved nutritional health, prevention from infection and a reduced risk of several diseases in later life such as cardiovascular disease, asthma and diabetes(33). Some studies have suggested that children who were breastfed are less likely to become obese(34). High breast feeding rates will contribute to a low level of infant mortality. However in 2007 in Barrow only 51% of babies were being breast fed at birth(35), as compared to 77% for England and Wales as a whole, reported in the 2005 Infant feeding survey(36). These levels of Breast feeding decrease rapidly following birth. In 2007 only 34.4% of babies were being breastfed at discharge from hospital, 27% by the time of their primary visit. Information on breastfeeding at 6 weeks, 3 months and 6 months is currently not sufficiently complete to draw any conclusions. The rates of breast feeding fall rapidly in the more deprived areas (see Figure 32), with only 1 in 5 of babies born to mothers in Hindpool being breastfed by the time they leave hospital. However it should be noted that breast feeding level have been increasing gradually in recent years.

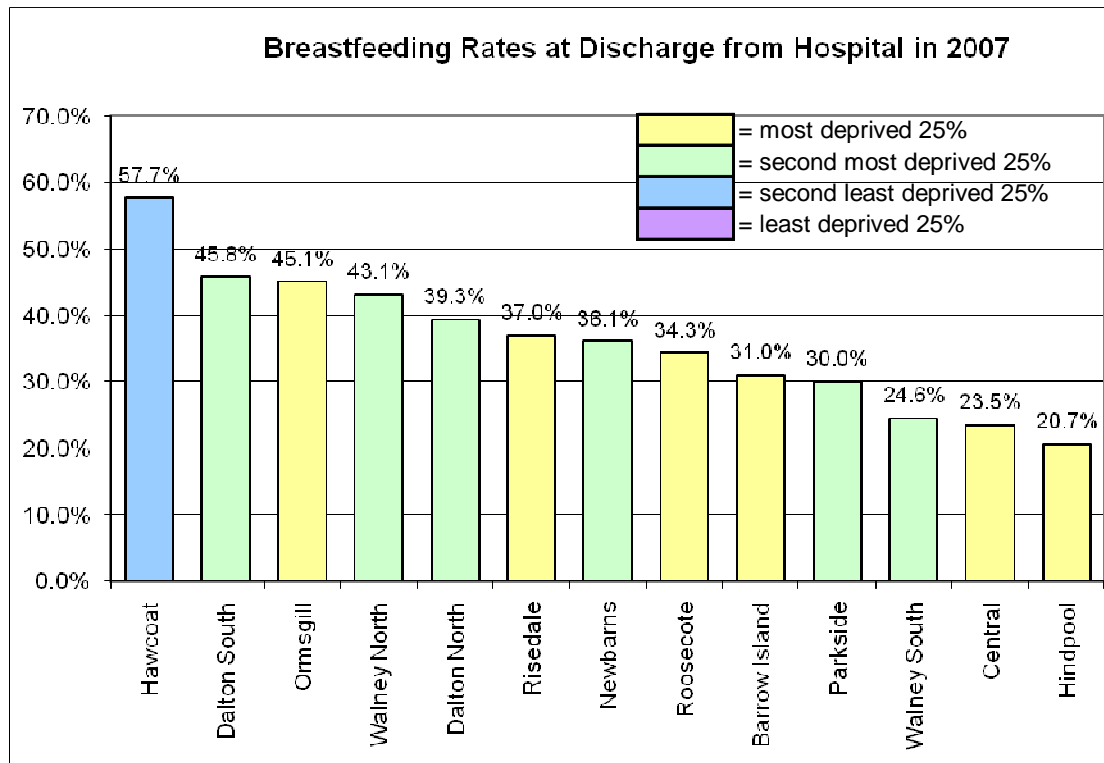


Figure 32 Breast feeding rates at discharge from hospital, by ward in Barrow, 2007.

11 Wider determinants of health.

It is important to remember that behavioural factors only account for part of the differences in health we have observed between socioeconomic groups. One study has estimated that all the lifestyle factors (Diet, Physical activity, smoking and Alcohol) taken together only explain about a third of the difference between socio-economic groups(37). Also the way people behave in terms of diet, physical activity, smoking and alcohol is not simply a matter of choice, and will be influenced by people's social and economic circumstances. For there to be sustainable reductions in health inequalities there need to be changes in these conditions, including improvements in income, employment, housing and educational attainment.

11.1 Work, unemployment and incapacity.

Work has an important impact on health and particularly health inequalities. The relationship between work and health is complex. The work we do affects our level of wealth and access to resources, which has been shown to influence levels of health(38). Some work can involve exposure to hazards, such as asbestos which have a direct impact on health. Recent studies have shown that stress at work can effect health(37). The access we have to physical activity and healthy food at work will also affect our health. As well as work affecting our health, our health can affect our ability to work; this will have consequences for future income and social inclusion.

Traditionally employment in Barrow has been dominated by the shipyard and Barrow continues to be a very self contained labour market with very few

people commuting to other areas(5). Following the decline of the shipbuilding industry, employment levels fell. Following this large numbers of people went onto incapacity benefit (IB) rather than unemployment benefits. Consequently Barrow has continued to have one of the largest proportion of people on IB nationally.

There has however been a growth in employment in Barrow since 2003, though the biggest increase has been in part-time employment, especially among women(6). In 2006 74.4% of Barrow's working age population were in employment, which was lower than the England average of 76.1%, but higher than the average for other areas in receipt of neighbourhood renewal funding (NRF) (see Figure 33.)

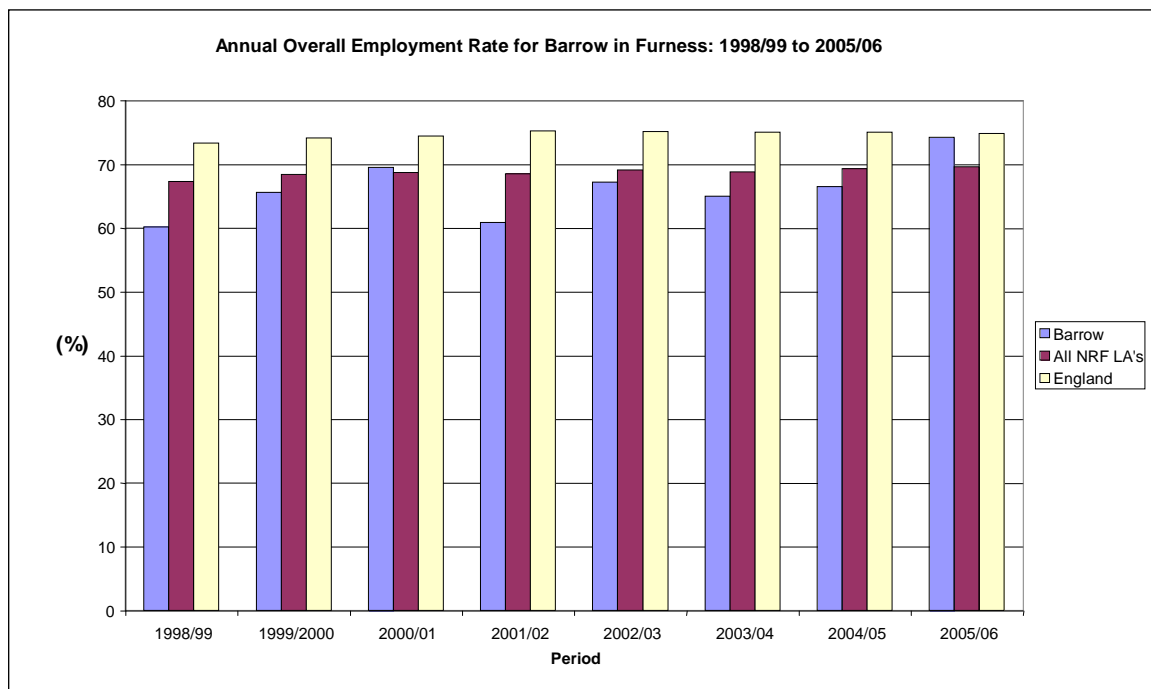


Figure 33 Annual overall employment rate for Barrow in Furness (Source: ONS / PSA Floor Targets- Local Authority Profiles)

As a result of this growth of employment, unemployment has fallen rapidly and the number of people on incapacity benefit has begun to decline slightly (see Figure 34). This is broadly in line with what has happened in a number of other old industrial areas in the UK(6).

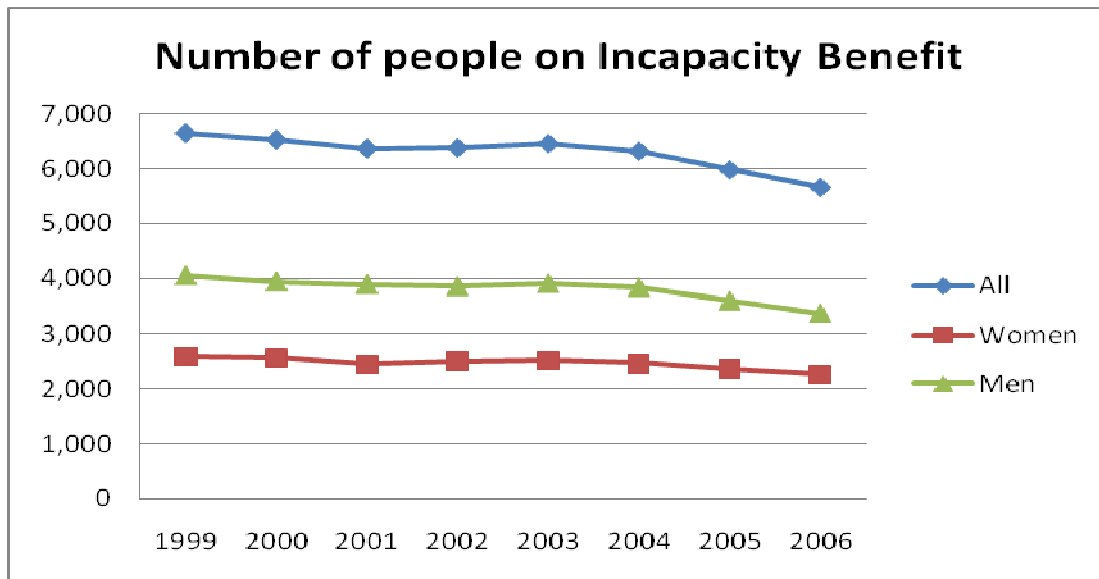


Figure 34. Number of working age IB and SDA claimants in Barrow. Figures are for November each year(6)

However in 2006 there were still 5650 people on Incapacity Benefit (IB), 13% of the working age population. One explanation of the high level of IB is that it reflects hidden unemployment. Recent estimates suggests that out of the 5650 people on IB 3,800 could be regarded as hidden employed, in the sense that they would probably be in work in a genuinely fully employed economy(6). This does not mean that these claims are fraudulent as to claim IB at present you do not have to be incapable of all work in all circumstances(6).

A recent report found that 53% of IB recipients in Barrow have no formal qualifications, 47% have not been in employment for more than 10 years and 60% were previously employed in unskilled manual work. The authors of this report conclude that IB claimants in Barrow represent the least skilled, the least healthy and the least motivated sections of the population who have been squeezed out of the labour market(5). This is a group of people, who are on low income and have a history of health problems that are likely to be compounded by the detrimental effects of long term unemployment. They will therefore be a key group to be targeted in order to address health inequalities in Barrow. This will require action to promote health as well as employment. At present only 12% of IB claimants in Barrow have been offered any kind of rehabilitation(5).

11.2 Housing

The relationship between poor housing and ill health has long been recognised. Poor housing is related to several conditions, including circulatory disease respiratory disease and Mental Health(39). Vulnerable groups, including the elderly, the very young and those suffering from long-term ill health are at particular risk due to the lengthy periods that they spend indoors. People with health problems are disproportionately likely to occupy the least health-promoting segments of the housing stock, a factor that may exacerbate their health problems. Each year there are many excess deaths in winter

mainly from circulatory diseases that are partly attributed to the fact that many people cannot afford to adequately heat their homes(40).

In Barrow there have been major problems with the quality of housing. In 2001 26% of houses were without central heating as compared to only about 8% nationally. In 2004 8.5% of housing in Barrow was classed as unfit as compared to 4.5% nationally. However between 2005 and 2006 major improvements have been made, the proportion of housing that is unfit has almost halved to 4.9% which is only slightly higher than the national average. (See Figure 35)

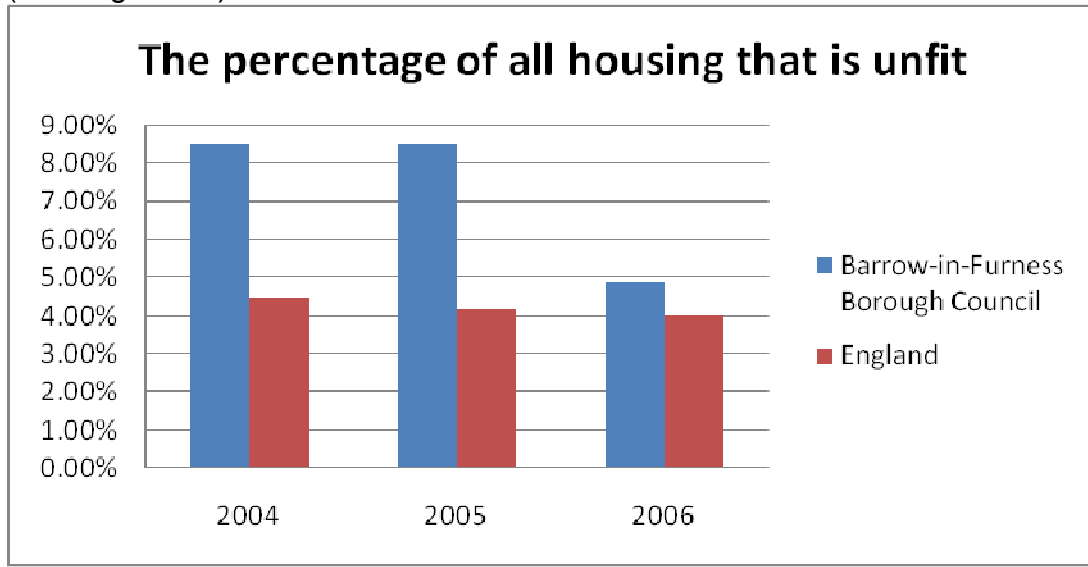


Figure 35 Percentage of all housing that is unfit (source DCLG) (41)

Based on whether people reported having central heating in the 2001 census, it would appear that poor housing was concentrated in the wards of Barrow Island, Central, and Hindpool (see Figure 36).

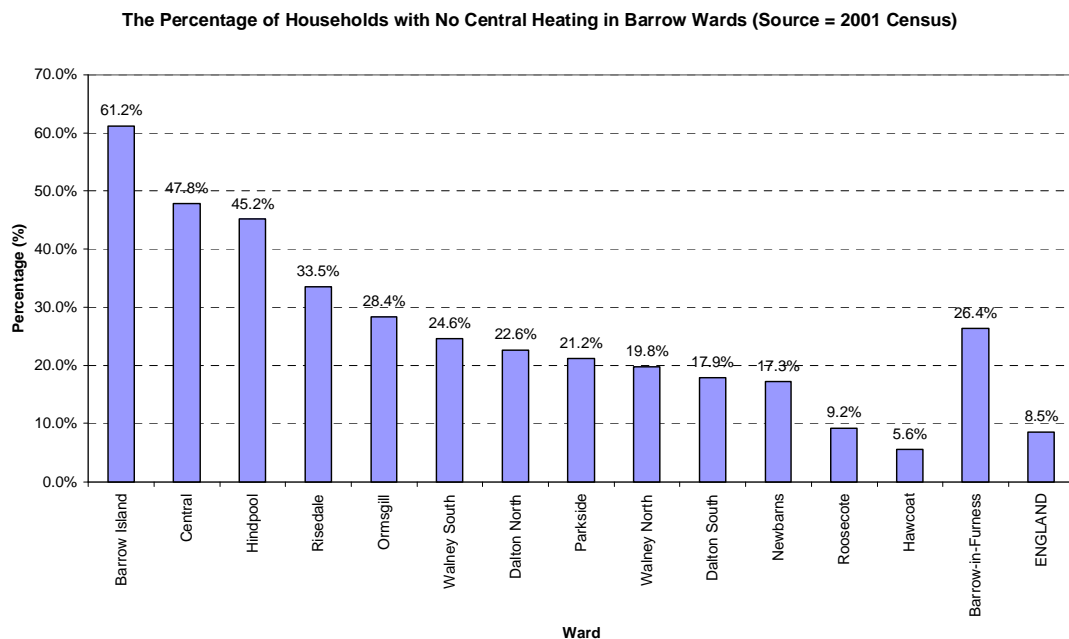


Figure 36 Percentage of households with no central heating (source: ONS census)

11.3 Education

Education plays a major role in influencing health inequalities. Enhanced education is likely to lead to health gains both directly (through the adoption of health promoting behaviours such as eating nutritious food, exercising and not smoking) and indirectly (through a greater likelihood of employment).

The educational achievements of pupils in Barrow are slightly better than the average for England in terms of the proportion of 15 year olds that achieved 5 or more GCSEs (see Figure 37). There has been an increasing trend in this indicator over recent years.

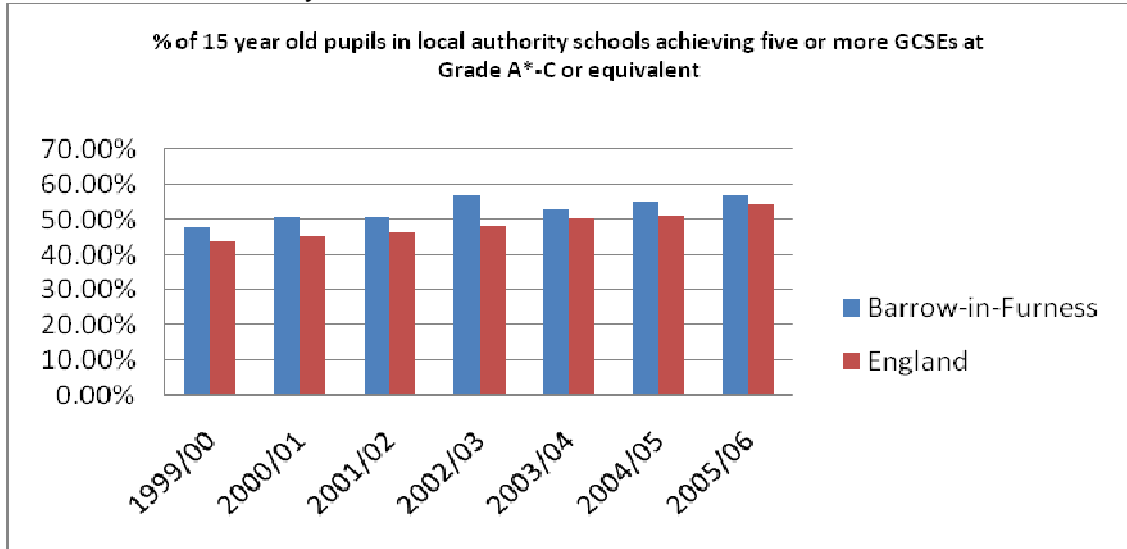


Figure 37 Proportion of pupils achieving 5 or more GCSEs Barrow and England.(Source: DCLG)(41)

The overall picture in terms of employment, housing and education in Barrow, appears to be positive, with improvements being made. However there is likely to be a lag between socioeconomic improvements and health gain. It may also be the case that improvements in the average for the borough do not necessarily reflect improvements in the most disadvantaged areas. An important aspect of the health improvement plan will be to ensure that these developments in social and economic conditions are translated into health gains for the most disadvantaged groups.

12 What effect might interventions have in preventing premature deaths in Barrow?

It is difficult to assess precisely what effect any specific interventions will have on life expectancy within this time frame. The number of lives saved can be modelled for some interventions, to give an indication of what is achievable, some examples are given below...

Reducing smoking prevalence

In Barrow reducing the smoking prevalence each year by 2% over the next 4 years (i.e. 23% in 2008, 21% in 2009, 19% in 2010, 17% in 2011) would prevent approximately 40 premature deaths (42). About 10 of these would be from circulatory disease and about 14 from cancers. This would work out at about 10 deaths prevented per year in during the target period.

Primary prevention of circulatory disease.

Identifying 6000 people with previously undiagnosed hypertension (4000 men 2000 women), treating their hypertension and providing Statin treatment for 3000 people (2000 men and 1000 women) would save about 10 lives per year between 2009-2011(9).

Secondary prevention of coronary heart disease.

Increasing the number of people with coronary heart disease, receiving optimum treatment by 20% in Barrow could save an estimated 11 deaths per year(43).

Colorectal cancer screening

There is little information on the impact of interventions to reduce cancer deaths. Colorectal cancer screening is being introduced this year in Barrow. It is likely that this would only result in approximately 1 life saved per year in Barrow(44).

13 Summary of findings

The health of people living in Barrow-in-Furness.

- Life expectancy for men in Barrow is on average 2 years less than for England as a whole. At current trends Barrow will not meet the national health inequalities target by 2010.
- A boy growing up in Central ward today could expect to die on average 8 years younger than the national average, if the current mortality rates continued.
- Bringing life expectancy in Barrow up to the target level would mean preventing about 70 premature deaths each year.
- The burden of chronic ill health in Barrow is very large. 45% of households include one or more person with a long term limiting illness as compared to 34% nationally(45). 14 % of the working age population are on incapacity benefit. 35% of these people are unable to work because of mental health or behavioural problems.
- Although infant mortality is not higher than the national average, there has been an increasing trend in Barrow since 1998. Nationally infant mortality was decreasing during this time.
- The main causes of the low level of life expectancy in Barrow are deaths from circulatory diseases, cancers, suicides and accidents, which are all significantly higher than the national average. If the rate that people are dying from these conditions in Barrow was reduced to the national average, this would reduce the gap in life expectancy for men from 2 years to just 6 months and for women from 8 months to 3 months.
- The rate of premature mortality from circulatory disease in Barrow has declined fairly consistently over the past 10 years, and it is likely that the LAA target for Barrow will be met. These declines have been most pronounced in the most 20% deprived areas of Barrow.
- The rate of premature mortality from Cancer in Barrow was declining until 2001-2003. Since then there has been no noticeable decline, if the recent trend continues, the national 2010 target for Barrow will not be met.

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Cancer mortality has remained fairly constant in the most deprived 20% of areas over recent years.

- Mortality from colorectal cancer and Mesothelioma is significantly higher than the national average in Men living in Barrow.
- Survival from some cancers particularly lung cancer is lower than is found nationally.
- The number of suicides in 15-44 year old men in Barrow has been rapidly increasing in recent years.
- Mortality from accidents in Barrow is 50% higher than nationally and has been increasing and if this trend continues the 2010 target will not be met.

The causes of ill health

- Indicators of the level of smoking, healthy eating, misuse of alcohol, and physical activity are all slightly worse for Barrow than the national average.
- In the neighbourhood management area, just over a third of people smoke and only 14% of people eat the recommended 5 portions of fruit and vegetables per day.
- In 2007 only 1 in 5 of babies born to mothers living in Hindpool were being breastfed by the time they left hospital.
- There are however some indications of improvements in socioeconomic conditions, such as employments, education and housing in recent years, although these are still below national levels

The potential impact of interventions

- Reducing smoking prevalence by 2% each year would prevent about 40 deaths over the next 4 years.
- Identifying people at risk and ensuring that people with circulatory disease are given optimum treatment could result in 20 fewer deaths per year.

Priority areas for action.

- To improve life expectancy in Barrow there will need to be action to reduce the number of deaths from circulatory disease, cancer, suicides and accidents. In terms of cancer and accidents this will require action to alter the current trend.
- Actions will need to focus on improving the health of men in Barrow.
- These improvements will need to occur across all areas in Barrow, but be most pronounced in the most deprived areas.
- This will mean that some actions, particularly those related to cancer, will need to be targeted at the most deprived 20% of areas as shown in Figure 4.
- In the short term priority actions will need to focus on:
 - Improving the early diagnosis and treatment of cancer and circulatory disease.
 - Reducing smoking, improving diet, increasing physical activity and reducing excessive alcohol consumption.
 - Preventing accidents particularly in young men
 - Improving mental health and preventing suicides
 - Helping people with disabilities and chronic ill health into work.

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