West Cumbria Health Improvement Plan

Baseline Assessment

2008-2010

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Acknowledgements

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Executive Summary

The purpose of this report is to inform the priorities and actions in the revised and renamed Floor Target Action Plan for West Cumbria. It outlines differences in health in West Cumbria as compared to England as well as differences in health within West Cumbria itself.

The Health of People Living in West Cumbria

- **Life expectancy for men and women in West Cumbria is still lower than the England and Wales average figure**
- **All age all cause mortality rates in Allerdale and Copeland have fallen compared to England and Wales and although the gap has closed slightly, it is still not enough**
- **Allerdale and Copeland are predicted to achieve their Local Area Agreement (LAA) targets for premature circulatory disease and cancer rates. However, the most deprived areas of Allerdale and Copeland are predicted not to reach their LAA targets**
- **The main causes of the low level of life expectancy in West Cumbria are deaths from circulatory disease, cancers, respiratory disease and accidents and suicides.**
- **Overall Allerdale and Copeland have experienced a decline in premature deaths from cancer, but the gap in cancer rates is starting to increase between the most deprived areas of Allerdale and Copeland and each district as a whole**
- **The number of people claiming Incapacity Benefit has fallen in both Allerdale and Copeland during the last 4 years**

The Causes of Ill Health

- **Between 2004-2006 predictions show that smoking will have killed 360 men and 230 women in Allerdale, and 230 men and 150 women in Copeland**
- **Levels of healthy eating in West Cumbria are similar to the national average, but they appear to be markedly lower in the most deprived areas**
- **Physical Activity rates are comparable to Cumbria overall**
- **Binge drinking in both Allerdale and Copeland is significantly higher than the national average**
- **The rate of teenage pregnancy in Copeland has risen dramatically to 49.8 per thousand**
- **Within the deprived locality in West Cumbria the percentage of social housing is considerably higher than the Cumbria average**
- **In West Cumbria 7% of households are in fuel poverty**

Priority Areas for Action

Key Actions for Early Intervention

- **Contribute to the development of at risk registers for cardiovascular disease in GP practices**
- **Work with locality partnerships in the most deprived areas to implement outreach activities to identify people at risk**
- **Build capacity for partner organisations, including primary care to deliver healthy living lifestyle support (e.g. decreasing fuel poverty, stop smoking)**
- **Deliver the 'Self Care for You' programme in West Cumbria which supports hard to reach groups to make healthy lifestyle changes**

Key Actions to Reduce Smoking

- **Work with partners to reduce the availability of cheap tobacco products**
- **Build community capacity to support wider provision of smoking cessation (e.g. through pharmacies)**
- **Promote peer support in smoking cessation – through Self Care for You and Health Trainers Programmes**

Key Actions to Reduce Alcohol Misuse

- **Work with partners to reduce the number of children who drink alcohol, and the amounts of alcohol drunk**
- **Work with partners to increase knowledge of how much is too much, and of alcohol related harms**
- **Equip people with better coping skills and also tackle stress producing conditions in the first place**
- **Work with partners to distribute and use Calling Time materials in all licensed premises**

Key Actions to Improve Nutrition, Increase Physical Activity and Reduce Obesity

- ♥ **Support the local implementation and development of the National Child Measurement Programme (NCMP)**
- ♥ **Support partner agencies in developing healthy eating policies and adopting healthy catering guidelines**
- ♥ **Contribute to the development of Healthy Weight Healthy Lives Strategy**
- ♥ **Contribute to the development of a Healthy Stadia Programme**

Key Actions to Reduce Deaths from Accidents

- ♥ **Contribute to the development of multi-agency Cumbria-wide Child Accident Prevention Strategy**
- ♥ **Support the development of safer walking and cycling**
- ♥ **Work with a range of agencies to reduce slips, trip and falls in older people**
- ♥ **Identify opportunities to work with the agriculture and construction industries to reduce accidents**
- ♥ **Use data collected from Accident and Emergency Departments to inform commissioning processes**

Key Actions to Reduce Suicide and Improve Mental Health

- ♥ **Contribute to the development of a multi-agency implementation plan for suicide prevention strategy**
- ♥ **Undertake health needs assessment in Haverigg Prison in partnership with prison staff and locality commissioners**

Key Actions to Reduce Infant Mortality

- ♥ **Support the roll out a programme to increase breastfeeding rates**
- ♥ **Work with partners to improve access to ante-natal care**
- ♥ **Work with partners to reduce smoking rates in pregnant women**

Key Actions to Reduce Teenage Pregnancy

- ♥ **Work with partners to improve access to sexual health services for young people**
- ♥ **Support the development of integrated contraceptive and sexual health services in localities**
- ♥ **Work with partners to pilot primary care led sexual health services**
- ♥ **Develop links with worklessness agenda – improving jobs, higher education, raising aspirations**

Key Actions to Support Worklessness

- ♥ **Support the development of the role of primary mental health care teams in tackling worklessness**
- ♥ **Contribute to the development of a healthy workplace programme with major local employers including the NHS and local authorities**
- ♥ **Ensure that health improvement activities are accessible to and reflect the needs of the workless population**
- ♥ **Increase employers' awareness of mental health issues with regard to employment**

Key Actions to Support and Enable Change

- ♥ **Support the development of a Healthy City approach for West Cumbria to strengthen leadership and capacity for health improvement delivery in local government and key partners (including employers**
- ♥ **Contribute to the development of social marketing techniques to better support people in improving their own health**
- ♥ **Develop a network of health trainers across West Cumbria**

West Cumbria Health Improvement Plan

Baseline Assessment

Introduction

This baseline assessment of health inequalities was originally commissioned by the West Cumbria Healthy Communities Group and formed the basis of the West Cumbria Floor Target Action Plan. Following on from a Health Impact Assessment, the purpose of this report is to inform the priorities and actions in this revised Health Improvement Plan. Life expectancy rates in West Cumbria are below the England and Wales average and there are large differences in life expectancy between areas within West Cumbria. Therefore the primary focus of this health improvement plan is to determine action required to achieve improvements in the health of the population of West Cumbria with respect to the rest of England and to improve the health of the most disadvantaged areas within West Cumbria. Progress towards these objectives is monitored through targets laid out in Public Service Agreements (PSA), the Local Area Agreement (LAA) and the West Cumbria Strategic Partnerships Future Generations Plan (2007). The West Cumbria Strategic Partnership has identified 4 key priority localities where deprivation is a key issue – Cleator Moor, Maryport, Whitehaven and Workington.

This report outlines the causes of the difference in health status between West Cumbria and England, the causes of health inequality within West Cumbria 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 West Cumbria differ from England as a whole?**
- **How much does the health of people in the most disadvantaged areas of West Cumbria differ from the district as a whole?**
- **What are the 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 West Cumbria and to what extent are they related to the effectiveness of health services in diagnosing and treating these conditions early?**

The Population of West Cumbria

West Cumbria consists of the two local authority areas of Allerdale and Copeland. Allerdale lies at the northern end of West Cumbria and has a population of 94,300 with Copeland being at the southern end with a population of 70,300 (ONS, 2006). Almost 20% of the Allerdale population is made up of those over 65 years old, 3% higher than nationally. Both Allerdale and Copeland have a lower than national percentage of those in the 20-39 year age group. This could be due to many factors including out migration and falling birth rates.

The graph shown in Figure 1 shows that in both local authorities, the percentage of those over 50 years is marked more than in England and Wales. Projections for the future indicate that numbers of over 65's are to increase steadily and those in the younger, working age groups are set to decline.

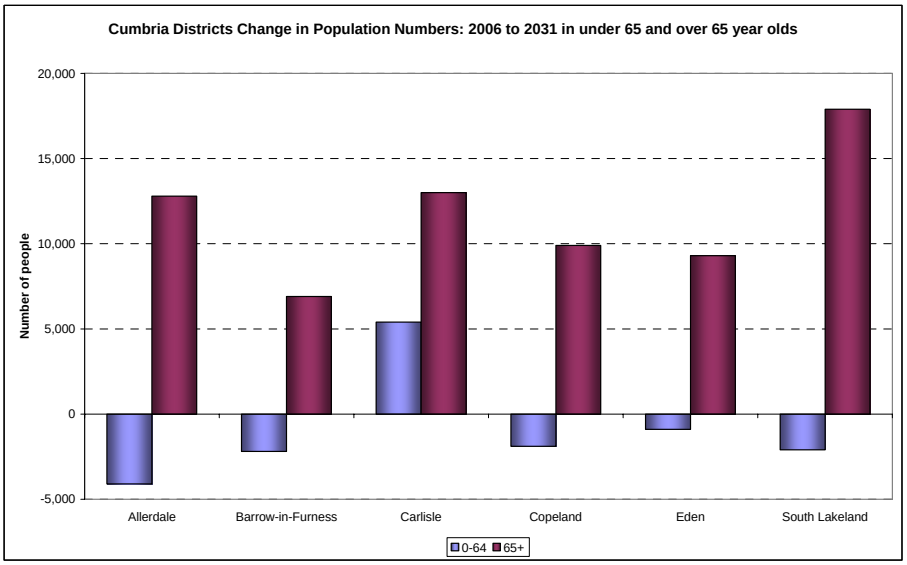


Figure 1 (Source: Office of National Statistics, 2006)

What are the 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 (Graham, 2007). Areas with better economic, housing, crime, education and environmental indicators have better health. For example data released in June 2006 (Office of National Statistics), shows that someone living in Moss Bay, Allerdale had a life expectancy of 71.8 years whilst across in Eden's Greystoke ward, life expectancy was 91.3 years – a difference of just under 20 years. (Director of Public Health, Annual Report 2008). Health inequalities refer to these systematic differences in health that are related to social

differences rather than being determined biologically (Whitehead & Dahlgren, 2007).

The determinants of health can be looked at in 4 main layers as shown in Fig 2. 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 (Whitehead & Dahlgren, 1991). Action across all these levels is needed to reduce health inequalities.

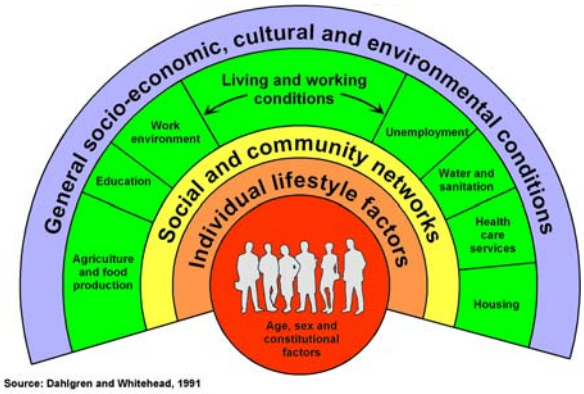


Fig 2 (Source: Dalhgren and Whitehead 1991)

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, 2007), which measures indicators across each of these areas 1= most deprived, 354= least deprived). Figure 3 shows (in red) the most deprived 20% of areas within West Cumbria

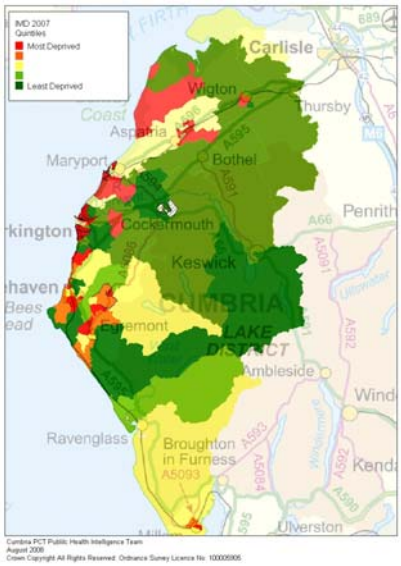


Fig 3 (Source: Cumbria PCT Health Intelligence Team, 2008)

Allerdale has risen 14 places to 119th, and Copeland has declined 6 places to 78th. This shows an improvement for Allerdale, but a decline for Copeland. There are however, wide differences in deprivation within West Cumbria. In tackling health inequalities, some action will need to take place across the district, others will need to target the most deprived areas and specific groups.

The Health of People in West Cumbria

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.

Over the last 15 years there has been a steady improvement in life expectancy in West Cumbria compared with England and Wales. However, the gap between England and Wales rates and West Cumbria male life expectancy has narrowed until the two most recent period (2003-2005 and 2004-2006). Male life expectancy in both Allerdale and Copeland has not increased as quickly as the England and Wales average. The trend for female life expectancy has been very inconsistent and the gap has also started to increase slightly in the two most recent periods. (see figures 4 and 5 below)

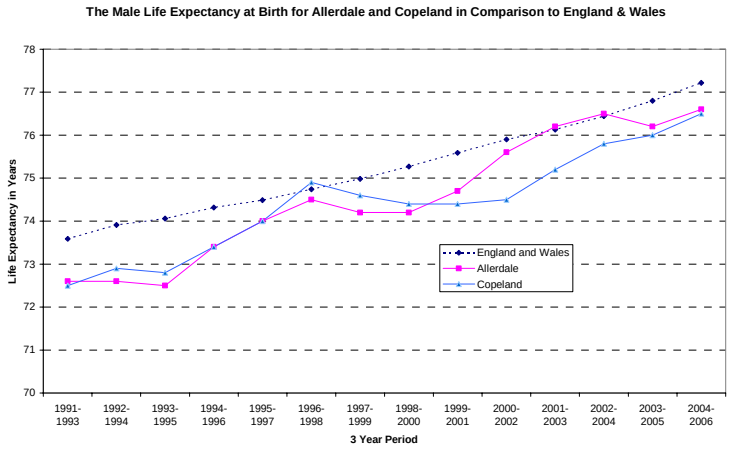


Fig 4 (Source: Office of National Statistics, 2007)

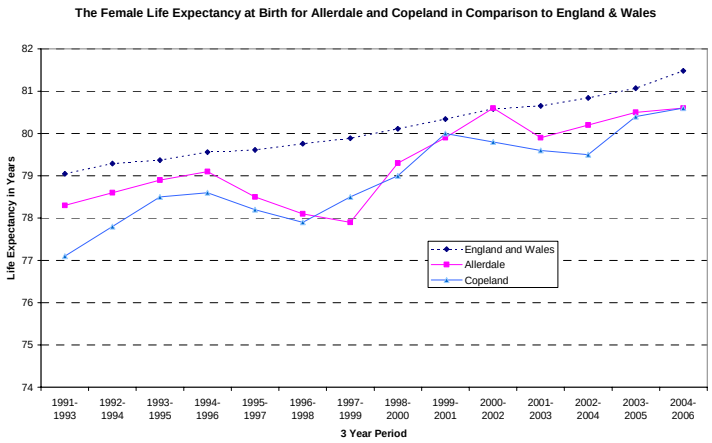


Fig 5 (Source: Office of National Statistics, 2007)

When taken down to ward level the gap between the deprived wards in West Cumbria, and the Cumbria average is more apparent, particularly in the priority localities (Figures 6 and 7). For example, in Allerdale the life expectancy in Seaton is 81 years of age, compared to Moss Bay with a life expectancy of 71.8 years of age. Similarly, in Copeland life expectancy in Hillcrest is 85 years compared to 74 years in Sandwith.

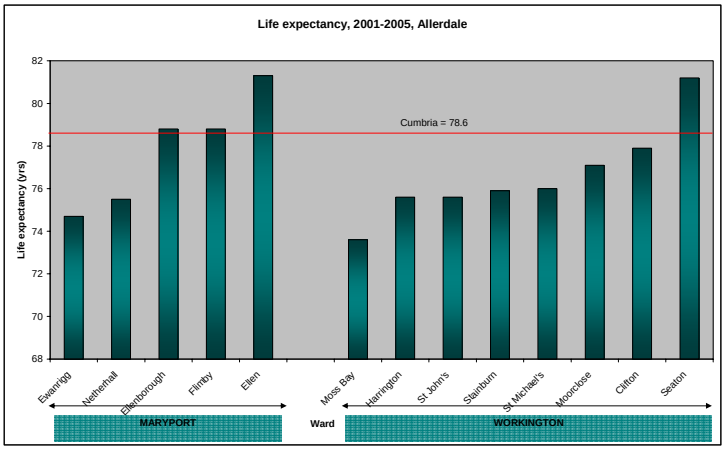


Fig 6 (Source: Office of National Statistics, 2007)

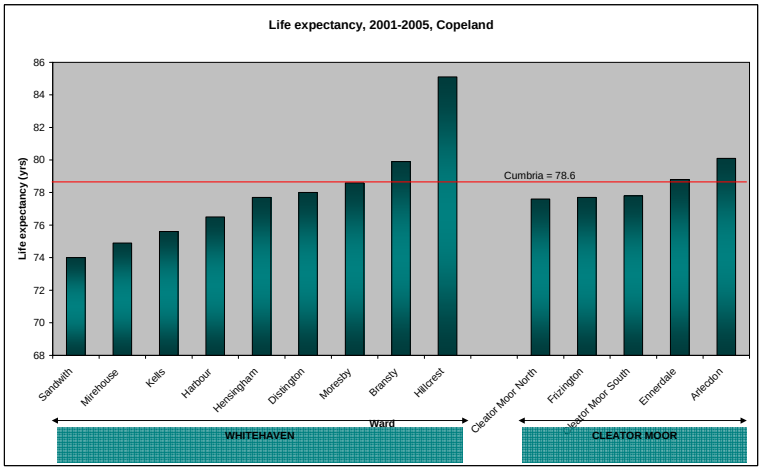
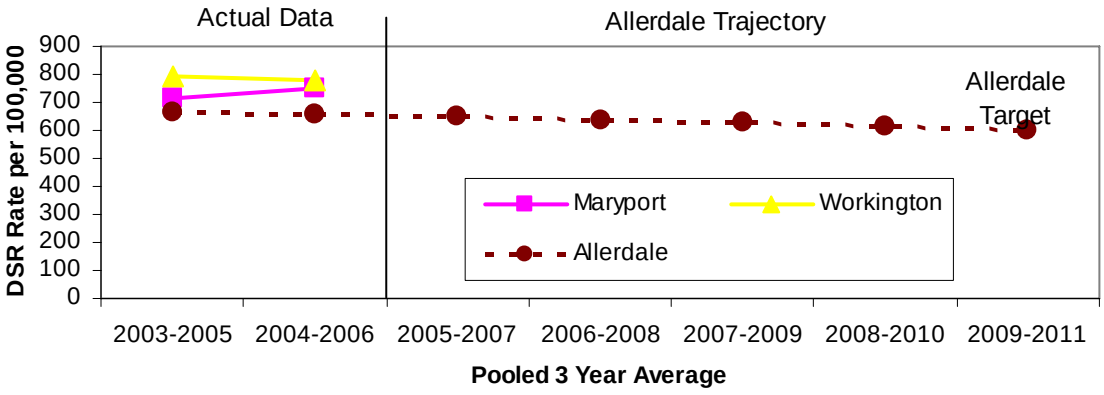


Fig 7 (Source: Office of National Statistics, 2007)

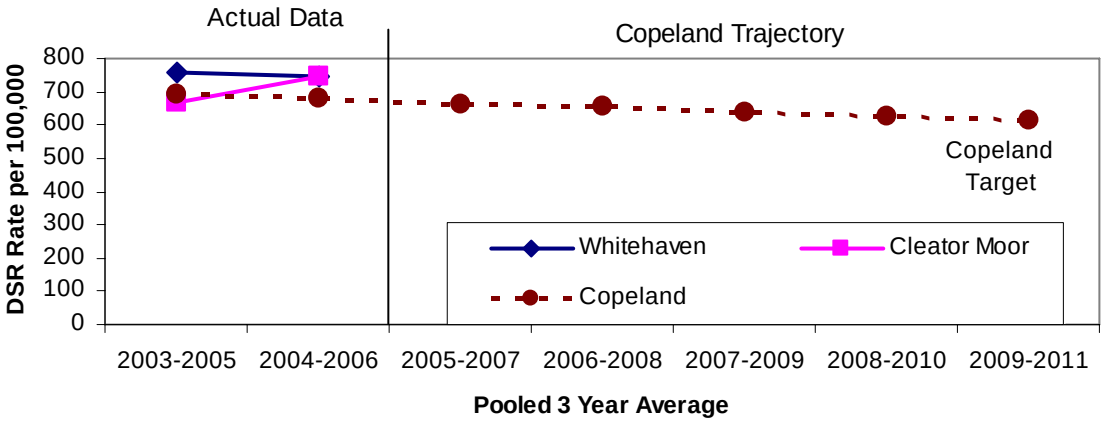
Life expectancy is not always well understood as a concept. In Local Area Agreements (LAA), all-age all-cause mortality rates have been used as an indicator as it is easier to interpret locally and correlates well with life expectancy. Data is also available earlier. All cause mortality refers to the number of death in an area as a proportion of the population in that area, and is often used as a proxy measure for life expectancy. In order for the districts to achieve their LAA mortality targets the all age all cause mortality needs to improve in the locality areas.

Figures 8 and 9 below show the trend in all age all cause mortality per 100,000 people from 2003 – 2006 for Allerdale and Copeland respectively, with emphasis on the localities identified by the LSP. The trajectory that will need to be achieved between 2007 and 20011 is given in red. It is clear from these graphs that for Allerdale, the rate for the Maryport locality is rising and although the rate for Workington is declining it is not reducing at a sufficiently fast enough rate to reach the target. For Copeland, the Cleator Moor rate is rising and the Whitehaven rate remains relatively stable. It would, therefore, appear that if this current trend continues in the long term the 2010 mortality target in the Local Area Agreement will not be met.

All Age All Cause Mortality Rates in Allerdale: By Planning Locality



All Age All Cause Mortality in Copeland: By Planning Locality



Figures 8 & 9 (Source: Office of National Statistics, 2007)

Long Term Limiting Illness

Mortality is not the only measurement of the health of people living in West Cumbria; we also need to consider whether people are suffering from long term illness. In the 2001 census 37.1% of households in Allerdale and 37.5% of households in Copeland included one or more persons with a long term limiting illness as compared to 34% nationally. In Allerdale in 2001 for men it was 8% lower than England average and in Copeland for men it was 7% less than the England average. For women in both Allerdale and Copeland it was 6% less than the England average. The highest burden of long term limiting illness appears to be in Allerdale – St Michael's, Mossbay and Moorclose, Copeland – Distington, Harbour, Mirehouse and Sandwith. Although the differences in terms of mortality between West Cumbria and the rest of the country are large, the differences in terms of long term limiting illness are much larger.

Long Term Limiting Illness and Incapacity Benefit Claims

In 2006 out of all the local authorities in England, Allerdale and Copeland had 7.9% of people of working age claiming incapacity benefits (IB), compared to 7.2% for both Cumbria and England and Wales. The main types of disability reported by people claiming incapacity benefit were mental health and musculoskeletal problems .

Nature of ill health or disability of people on incapacity benefit in West Cumbria (2007)

	Allerdale %	Copeland %
Mental, behavioural	36	37
Musculoskeletal	19	22
Respiratory or Circulatory	9	9
Nervous system	6	6
Injury, poisoning	8	6
All other	22	20

(Source: Department for Work & Pensions, May 2007)

Incapacity Benefit Claims and 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 disease (Lopez, 2007).

In West Cumbria mental health is a particular problem. In 2007, 36% of those claiming incapacity benefits were claiming for a mental health or behavioural disorder. Figures 10 & 11 show the percentage of people by ward in Allerdale and Copeland claiming IB due to mental health issues.

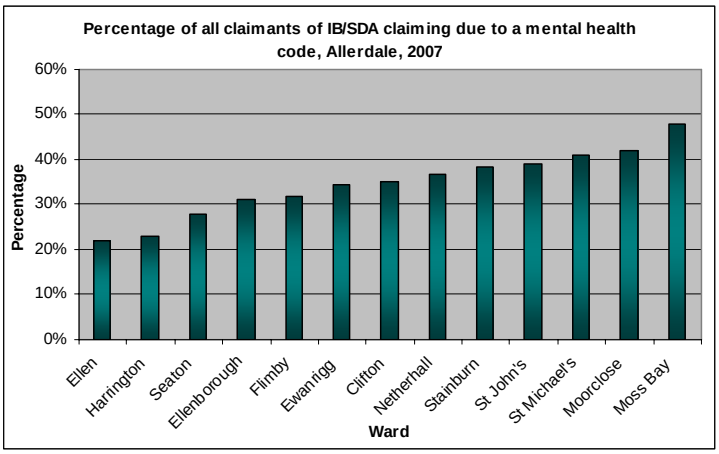


Figure 10 (Source: Department for Work & Pensions, May 2007)

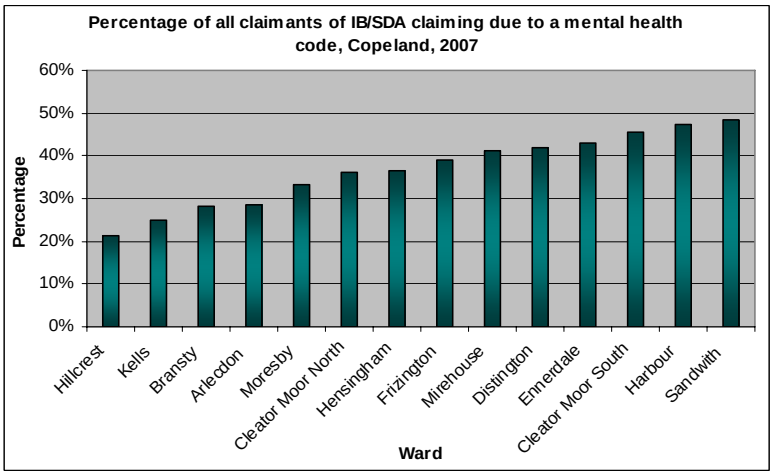


Figure 11 (Source: Department for Work & Pensions, May 2007)

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 or overall socio-economic conditions.

Nationally in 2002-2004 infant mortality was 19% higher in routine and manual groups. Improvements in socio-economic 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 (Department of Health, 2007). 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.

Between 2004-2006, there were 13 infant deaths in Allerdale and 7 in Copeland. Both rates are lower than the national average of 5 in every 1,000, but Copeland is considerably lower than Allerdale

As mentioned above one of the main factors contributing to infant mortality is low birth weight, often due to immaturity. Figures 12 & 13 shows the proportion of babies born under weight in each ward. Allerdale has a slightly lower rate than Cumbria as a whole (6.6%), Harrington Moorclose and Mossbay show rates of over 8% with Harrington being the highest at 9.8%. In Copeland the rate is slightly higher than the Cumbria average with Cleator Moor North, Sandwith and Arlecdon showing rates of over 9%, with Cleator Moor North being the highest at 9.8%

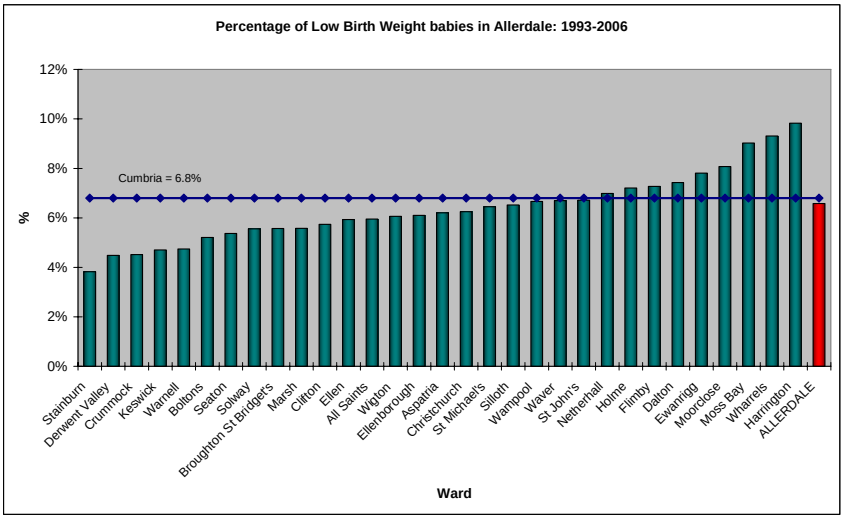


Figure 12 (Source: Office of National Statistics, 2007)

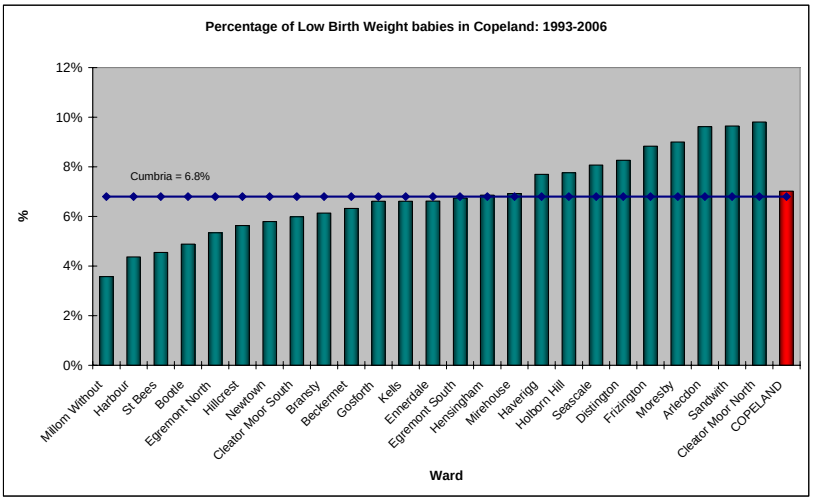


Figure 13 (Source: Office of National Statistics, 2007)

What are the main diseases causing the low level of life expectancy in West Cumbria?

Most of the difference between life expectancy in West Cumbria and the average for England as a whole is related to 3 main groups of diseases and conditions; circulatory disease, cancer and respiratory diseases (Chronic Obstructive Pulmonary Disorder - COPD). Figures 14 & 15 shows the proportion of the gap in life expectancy that is attributed to these causes.

However, it seems that in Allerdale and Copeland external causes also account for a considerable gap in life expectancy. This is reflected in the Public Service Agreement Targets to reduce accidents and suicides

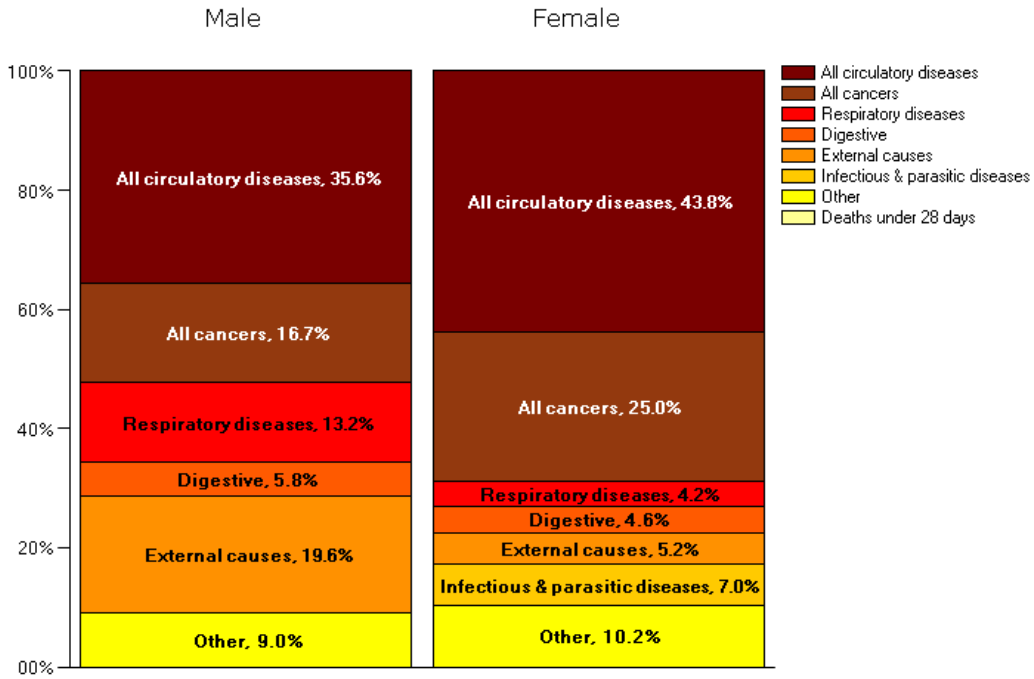


Fig 14 The proportion of the gap in life expectancy between Allerdale and England attributable to each disease category (Source: Association of Public Health Observatories, 2007)

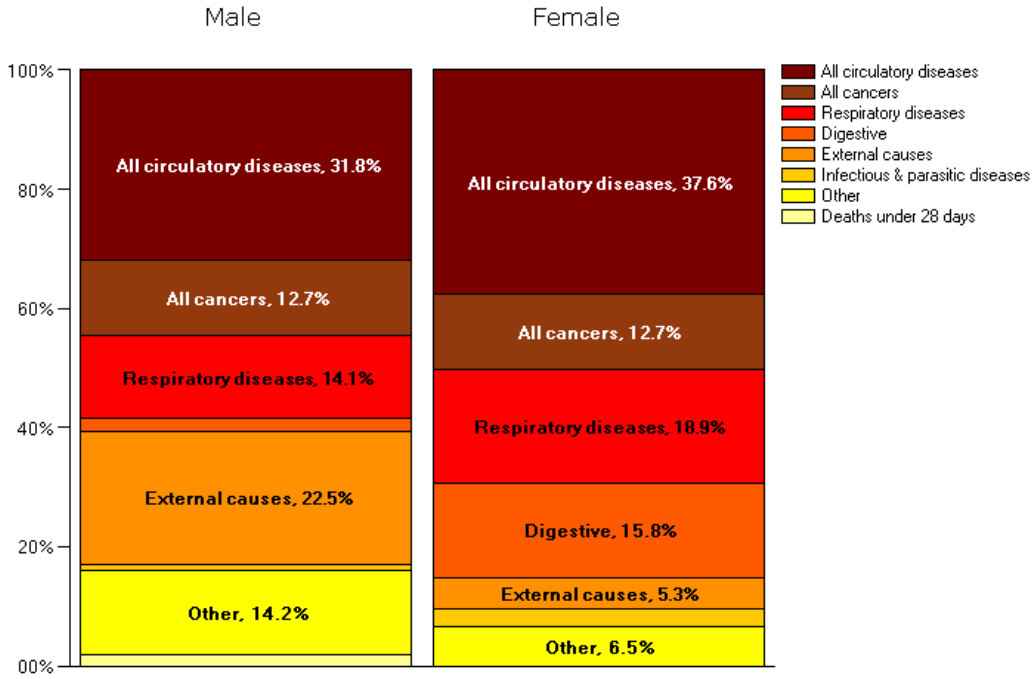


Fig 15 The proportion of the gap in life expectancy between Copeland and England attributable to each disease category (Source: Association of Public Health Observatories, 2007

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.

Circulatory Disease

In Allerdale, mortality from circulatory disease accounts for 35.6% of the gap in male life expectancy and 43.7% in female life expectancy, between the most deprived quintile in the district and the England average (Figure 14)

In Copeland, mortality from circulatory disease accounts for 31.8% of the gap in male life expectancy, and 37.6% of the gap in female life expectancy, between the most deprived quintile in the district and the England average (Figure 15)

Overall, Allerdale has experienced a marked decline in premature deaths from circulatory disease and the district is now at the national average. The decline has been slower in Copeland, which is still higher than the national average. The gap in circulatory mortality rates is starting to increase between the most deprived areas of Copeland and Allerdale and each district as a whole. This trend is demonstrated in Figures16 and 17 below. The prediction is that Allerdale and Copeland will achieve the overall 2010 LAA mortality target. However, the most deprived areas of both districts will not achieve the 2010 circulatory disease target.

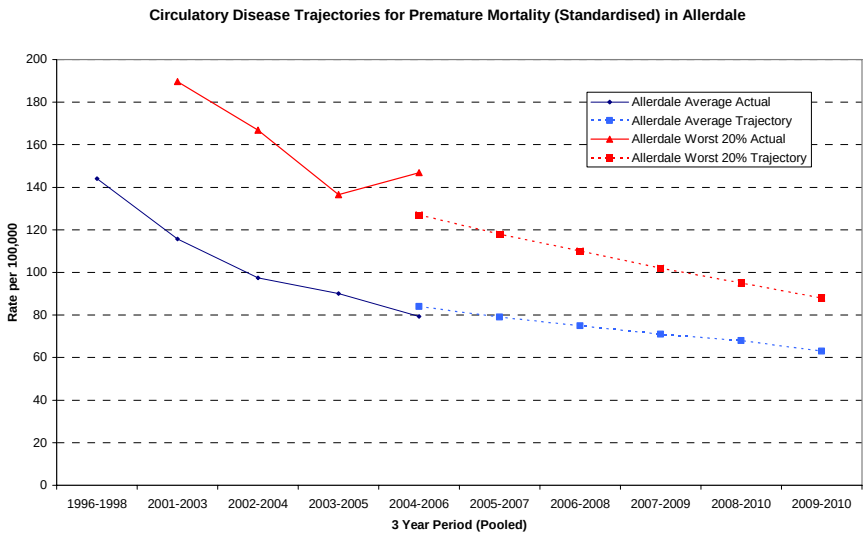


Figure 16 – The gap in Circulatory Disease mortality between the most deprived areas of Allerdale and the district as a whole - Under 75s. (Source: Association of Public Health Observatories, 2007)

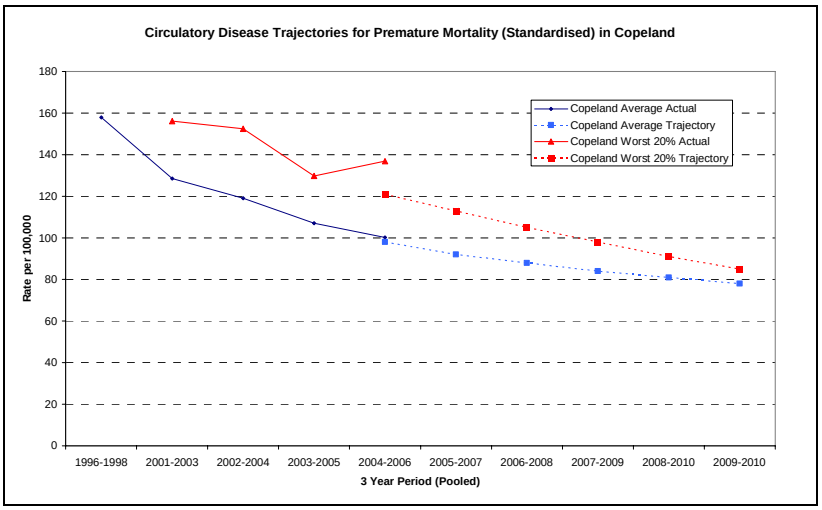


Figure 17 - The gap in Circulatory Disease mortality between the most deprived areas of Copeland and the district as a whole - Under 75s. (Source: Association of Public Health Observatories, 2007)

Cancer

Overall, Allerdale has experienced a marked decline in premature deaths from cancer and the district is now above the national average. The decline has been slower in Copeland which is similar to the national average. The gap in cancer rates is starting to increase between the most deprived areas of Copeland and Allerdale and each district as a whole. This trend is demonstrated in Figures 18 and 19. The prediction is that Allerdale and Copeland will achieve the overall 2010 LAA mortality target. However the most deprived areas of both districts will not achieve the 2010 cancer target.

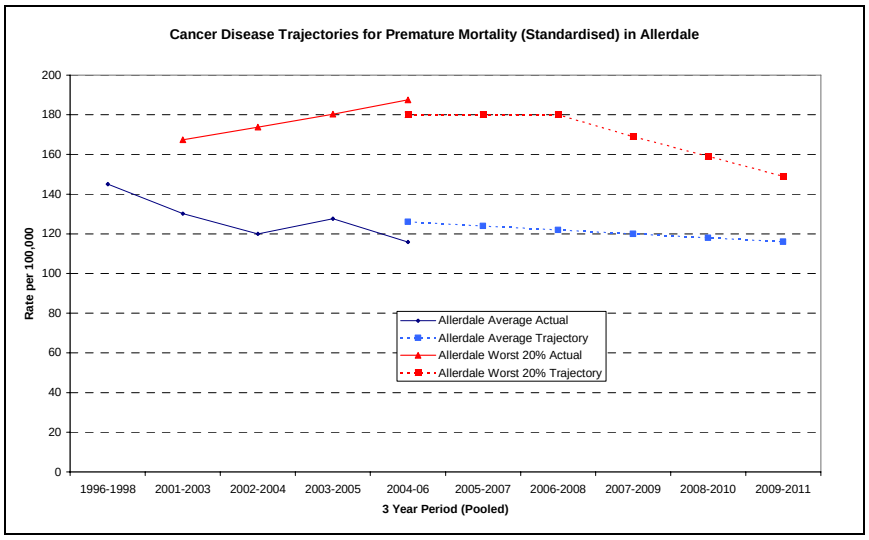


Figure 18 - The gap in Cancer mortality between the most deprived areas of Allerdale and the district as a whole - Under 75s. (Source: Association of Public Health Observatories, 2007)

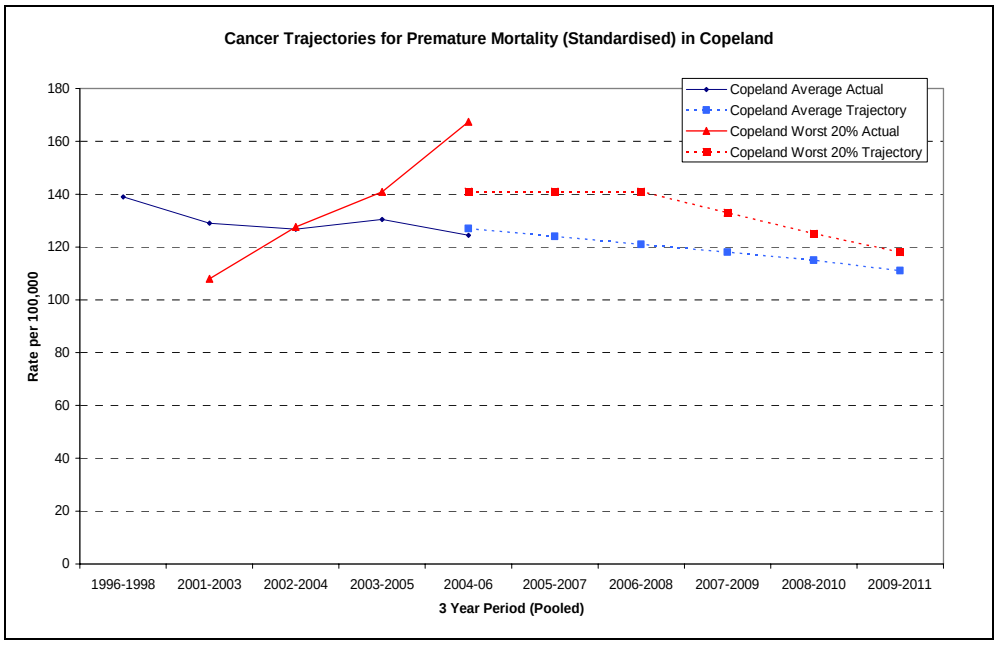
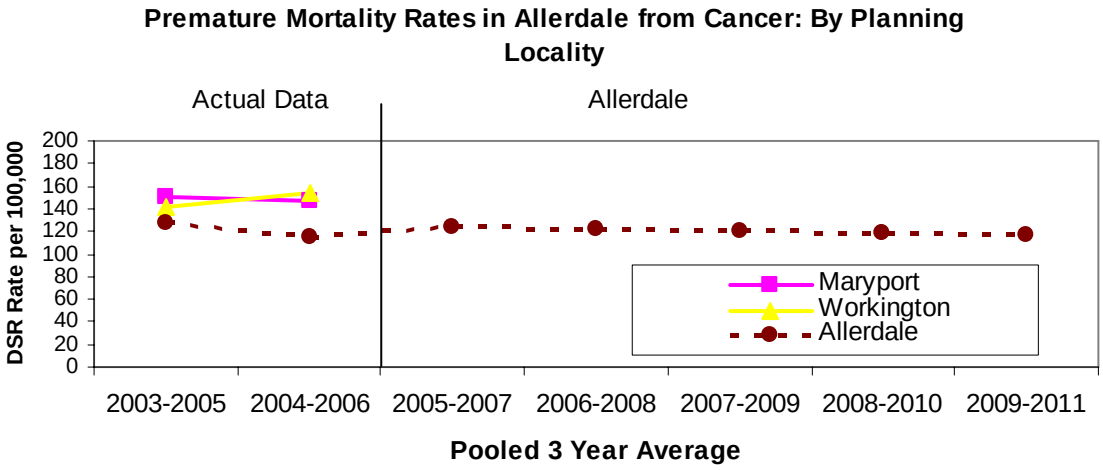


Figure 19 - The gap in Cancer mortality between the most deprived areas of Copeland and the district as a whole - Under 75s. (Source: Association of Public Health Observatories, 2007)

Figure 20 over the page shows the Directly Age-Standardised Rate(DSR) for premature cancer deaths by planning locality, and gives an indication of the trajectory for each local authority.



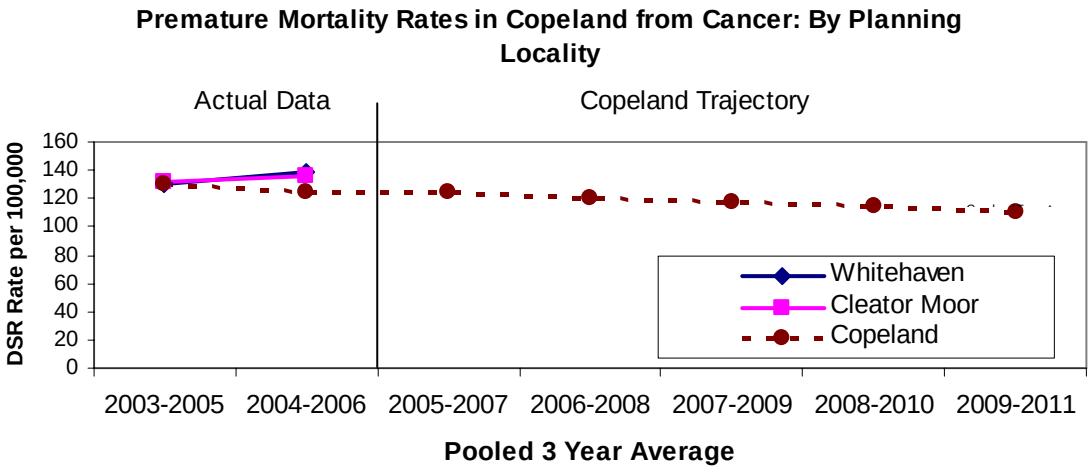


Figure 20 (Source: The Information Centre for Health and Social Care, Jan 2008)

Which types of cancer are contributing to this high mortality?

The tables below show the number of deaths between 2004 and 2006 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 2003 and 2005 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.

Types of Cancers*:
Allerdale Males

	Deaths <75			Registrations <75		
	Observed	SMR	Sig	Observed	SMR	Sig
All cancers	253	109	*n.s*	425	86	☺
Lung	73	122	*n.s*	73	101	
Colorectal	26	104	*n.s*	60	93	
Prostate	16	93	*n.s*	64	53	☺
Oesophagus	18	113	*n.s*	18	103	
Stomach	15	163	*n.s*	27	170	☹
Bladder	9	134	*n.s*	24	115	
Leukaemia	6	84	*n.s*	7	49	
Malignant Melanoma	..	78	*n.s*	6	36	☺
Skin (other than MM)	..	210	*n.s*	147	123	☹

Allerdale Females

	Deaths <75			Registrations <75		
	Observed	SMR	Sig	Observed	SMR	Sig
All cancers	200	105	*n.s*	504	104	
Lung	45	118	*n.s*	47	101	
Colorectal	19	119	*n.s*	58	137	☹
Oesophagus	8	154	*n.s*	6	93	
Stomach	6	153	*n.s*	12	186	
Bladder	..	116	*n.s*	6	92	
Leukaemia	..	48	*n.s*	..	35	
Malignant Melanoma	..	116	*n.s*	22	113	☹
Skin (other than MM)	..	0	*n.s*	128	142	

* Deaths: 2004-2006
SRRs: 2003-2005

☹ statistically significantly worse than the national average
☺ statistically significantly better than the national average

(Source: The Information Centre for Health and Social Care, Jan 2008)

In Allerdale, registration rates of all cancers in men are better than nationally, as are prostate and malignant melanoma. In women, registration rates of colorectal cancer and malignant melanoma are worse then the national average. Death rates are not statistically significant, although this does not necessarily mean they are not higher. Statistical significance may be difficult to achieve due to small numbers.

Copeland Males

	Deaths <75			Registrations <75		
	Observed	SMR	Sig	Observed	SMR	Sig
All cancers	182	111	*n.s*	345	98	
Lung	46	109	*n.s*	57	112	
Colorectal	22	125	*n.s*	58	127	
Prostate	17	142	*n.s*	45	54	☺
Oesophagus	12	107	*n.s*	12	97	
Stomach	7	108	*n.s*	20	178	☹
Bladder	..	77	*n.s*	11	75	
Leukaemia	7	138	*n.s*	10	98	
Malignant Melanoma	14	124	*n.s*	14	115	
Skin (other than MM)	118	139	*n.s*	118	139	☹

Copeland Females

	Deaths <75			Registrations <75		
	Observed	SMR	Sig	Observed	SMR	Sig
All cancers	135	102	*n.s*	358	106	
Lung	27	102	*n.s*	31	97	
Colorectal	11	99	*n.s*	42	143	☹
Oesophagus	..	55	*n.s*	..	45	
Stomach	7	255	*n.s*	12	268	☹
Bladder	..	..	*n.s*	..	89	
Leukaemia	..	102	*n.s*	..	66	
Malignant Melanoma	..	218	*n.s*	16	116	
Skin (other than MM)	..	..	*n.s*	85	136	☹

* Deaths: 2004-2006
SRRs: 2003-2005

☹ statistically significantly worse than the national average
☺ statistically significantly better than the national average

(Source: The Information Centre for Health and Social Care, Jan 2008)

In Copeland, registration ratios of prostate cancer are significantly higher than the national average. Stomach cancer and skin cancer (excluding Malignant Melanoma) are higher in both males and females. Colorectal cancer registration rates are higher in females.

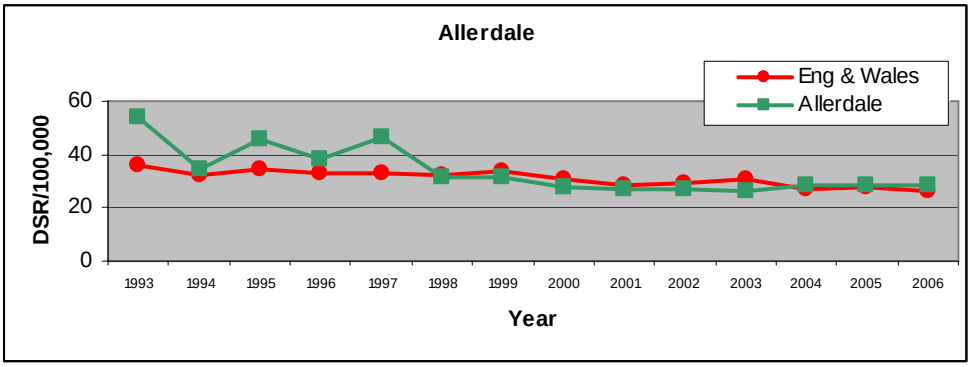
The level of mortality from cancer is likely to reflect the number of new people developing the disease and the length of time they survive once they have been diagnosed.

Respiratory Disease - Chronic Obstructive Pulmonary Disorder (COPD)

Chronic Obstructive Pulmonary Disorder (COPD) is the name for a collection of lung diseases including bronchitis, emphysema and chronic obstructive airways disease. COPD is one the most common respiratory diseases in the UK, and most commonly affects people over the age of 40. It causes 30,000 deaths a year in the UK and usually occurs as a result of damage to the lungs, usually through smoking.

Although not a Public Service Agreement target it would appear that respiratory disease (COPD) accounts for significant gap in life expectancy in West Cumbria (see Figures 14 & 15).

Figure 21 below shows the trend in mortality from respiratory disease (COPD, bronchitis and emphysema) all ages, since 1993. Allerdale and Copeland's rates are both decreasing, but up until 2000 the gap between the localities and England and Wales had been quite considerable. Changes in treatment and lifestyle factors are likely to be the impetus for this decrease in death rates. Copeland, however, is still slightly higher than nationally with a noticeable gap appearing from 2002 onwards. It is common knowledge that respiratory diseases are heavily linked to deprivation because of the influence of lifestyle factors. Respiratory diseases account for almost 20% of the gap in life expectancy between the most and least deprived areas of Copeland.



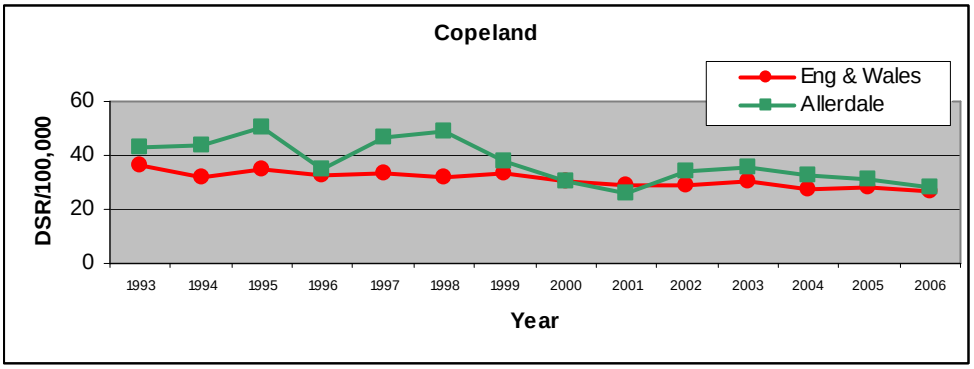


Figure 21 (Source: The Information Centre for Health and Social Care, 2007

External causes

In Figures 14 and 15 it showed that external causes also accounted for a significant gap in life expectancy. Accidents and suicides account for 19.6 % of the gap in life expectancy between men in Allerdale and the England average, with 22.5% gap for men in Copeland.

Accidents

Accidents are responsible for 10,000 deaths a year across England. Accidental injury heads the league tables of causes of death among children and young people in England, Europe and America. It puts more children in hospital than any other cause. Accidental injury has in the past been one of the most neglected areas for preventive action, the commissioning of research and the education and training of health professionals. The Government White Paper Saving Lives: Our Healthier Nation has set a target to reduce the death rates from accidents by at least one fifth and to reduce the rate of serious injury from accidents by at least one tenth by 2010 - saving up to 12,000 lives in total. This is reflected at a local level in the Cumbria LAA which has two targets relating to accidents.

Overall accidents rates are higher in Allerdale and Copeland compared to the national average. Around 30 people each year in Allerdale die from accidents compared to 17 in Copeland.

Figures 22 and 23 show the target for both Allerdale and Copeland

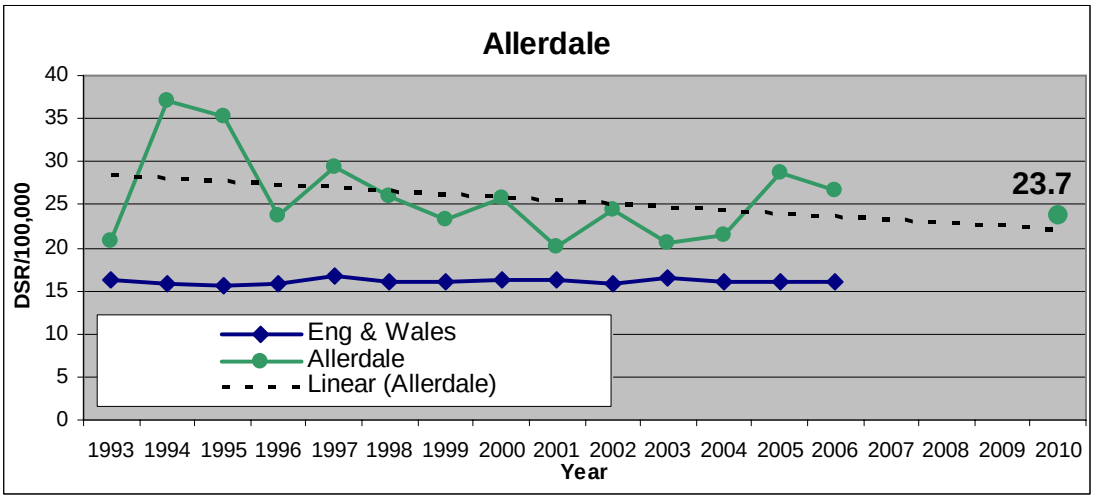


Figure 22 All age mortality from accidents (VO1-X59 1993-2006, with 2010 targets (Source: National Centre for Health Outcomes Development)

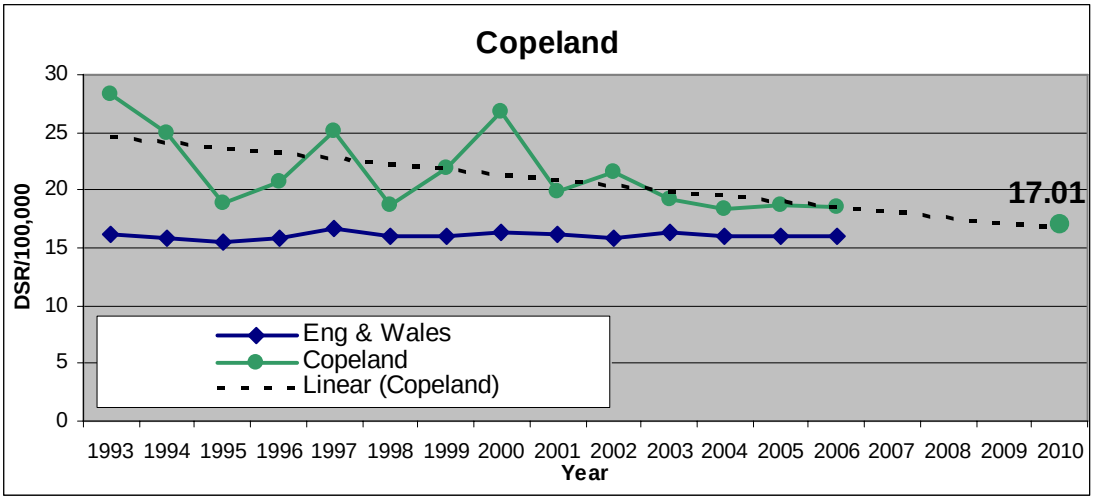


Figure 23 All age mortality from accidents (VO1-X59 1993-2006, with 2010 targets
Source: National Centre for Health Outcomes Development

In terms of years of life lost, those causes of accidental deaths with the greatest contribution are road traffic accidents (52%), poisoning (23%) and falls (10%). Road accidents are more common in young men and falls are a common cause of death for those over 65 years old.

Suicides

In the original Floor Target Action Plan reference was made to the impact of health inequalities in relation to accidents and suicides. 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.

Figure 24 shows the suicide trend for Allerdale. In 1993 the rate in Allerdale, of 19.0, was almost twice the national average of 9.6. This fell dramatically to a level of 4.5 in 2001. Currently the rate is 11.3, again above the national figure. If the current trend continues Allerdale will not achieve its target rate of 7.4 by 2010. However, the chart shows an overall downward trend.

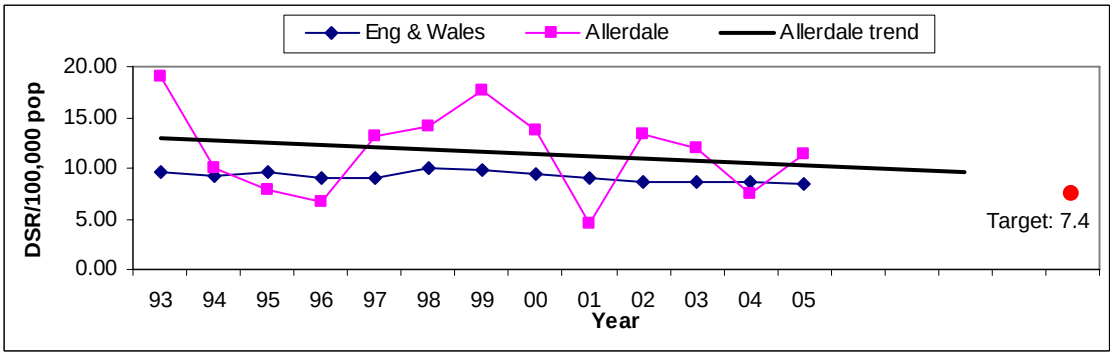


Figure 24 (Source: The Information Centre for Health and Social Care, 2007)

Figure 25 shows the suicide trend for Copeland. Suicides peaked in 1994 at a rate of 17.9. Since then rates have fallen to a level of 7.7 for 2005, just below the national average. If the current trend continues Copeland will achieve its target rate of 8.9 by 2010 as shown by the downward trend.

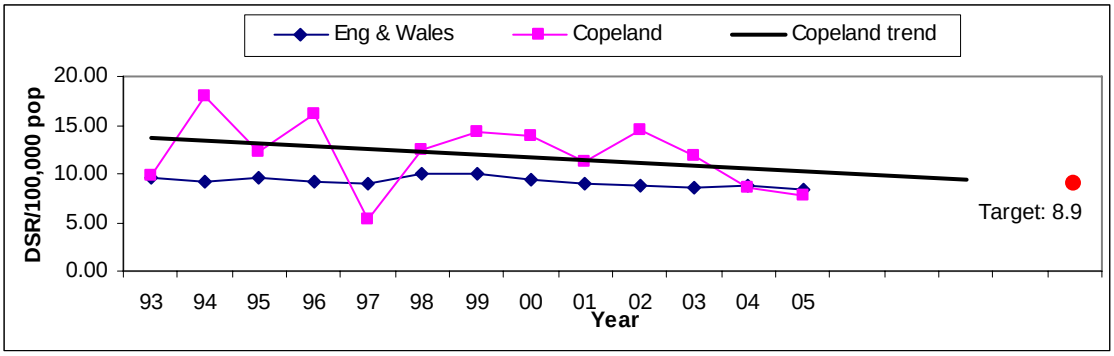


Figure 25 (Source: The Information Centre for Health and Social Care, 2007)

N.B. The small numbers involved make it difficult to ascertain statistical significance and can often lead to fluctuating rates

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

There are six main behavioural risk factors that contribute to poor health and health inequalities: diet, physical exercise, smoking, alcohol consumption, teenage pregnancy and breast feeding. Figure 26 shows how each of these behavioural risk factors can have an impact on the disease and conditions discussed earlier. The following section will look at the current situation with each of these risk factors in West Cumbria

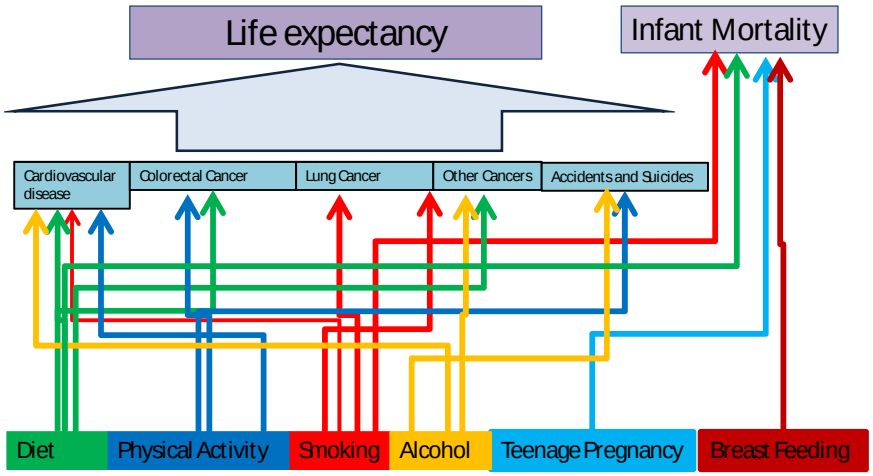


Figure 26

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 (ASH, 2007). Smoking in pregnancy is estimated to increase infant mortality by about 40% (Department of Health, 2007).

It is predicted that smoking kills approximately 360 men and 230 women in Allerdale, and 230 men and 150 women in Copeland, over a three year period (2004 to 2006). As a result the LAA target is to reduce smoking prevalence in Allerdale and Copeland from 23% of adults in 2003 to 21% in 2010, and from 34% to 26% in the 20% most deprived area Super Output Areas. Figure 27 shows that the smoking rates tend to be higher in the most deprived areas of Cumbria and West Cumbria in particular.

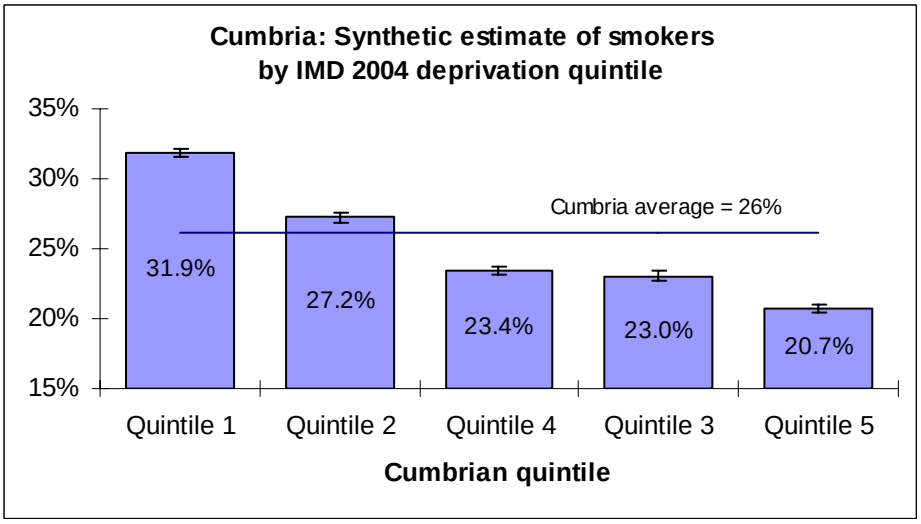


Figure 27 (Source: Association of Public Health Observatories, 2008)

The number of people quitting smoking at 4 weeks tends to be used as proxy for this smoking indicator. This is due to the fact that it is very hard to access population data that is accurate on smoking rates – patients will not admit to smoking to their family doctor. During the period from 1st April to 30th September 2007, 104 people in Allerdale and 162 people in Copeland had successfully given up smoking 4 weeks after setting a quite date. The age and sex of these people is shown in figures 28 and 29. The majority of people giving up smoking appear to be female and over 45 years of age.

Allerdale	Male	Female	Both Sexes
<18	1	0	1
18-34	5	13	18
35-44	7	9	16
45-59	14	24	38
60+	14	17	31
All ages	41	63	104

Figure 28 - Four Week Smoking Quitters in Allerdale (1st April to 30th September 2007)

Copeland	Male	Female	Both Sexes
<18	0	0	0
18-34	7	24	31
35-44	10	22	32
45-59	23	41	64
60+	11	24	35
All ages	51	111	162

Figure 29 - Four Week Smoking Quitters in Copeland (1st April to 30th September 2007)
(Source: Cumbria Smoking Cessation Service, 2007)

Please note that NHS Cumbria is currently trying to increase the capacity of the smoking cessation service in the county so that more people can access the service with greater ease. More people in the most deprived areas, where rates are higher in the first place, would then benefit from being able to stop smoking

Obesity and Diet

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 (Department of Health, 2005). Similarly high levels of salt will increase the risk of circulatory disease (Scientific Advisory Committee on Nutrition, 2003). 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 (World Cancer Research Fund, 2006). Deaths in babies under 28 days are more common in women who are underweight, overweight or obese before they conceive (Department of Health, 2007).

In West Cumbria it is estimated that in Allerdale 26% of adults were eating the recommended 5 or more portions of fruit and vegetables per day in 2006, and in Copeland this rose to 27% (MORI, 2006). These figures indicate that Allerdale and Copeland are slightly higher than the national average of 25% (Department of Health, 2007). However, in the Cumbria Quality of Life Survey (2006) 15% of people in the Neighbourhood Management area of South Workington reported eating 5 or more portions of fruit or vegetables per day, with 19% in the South Whitehaven Neighbourhood Management area reporting the same. Levels of healthy eating in West Cumbria are similar to the national average, but they appear to be markedly lower in the most deprived areas.

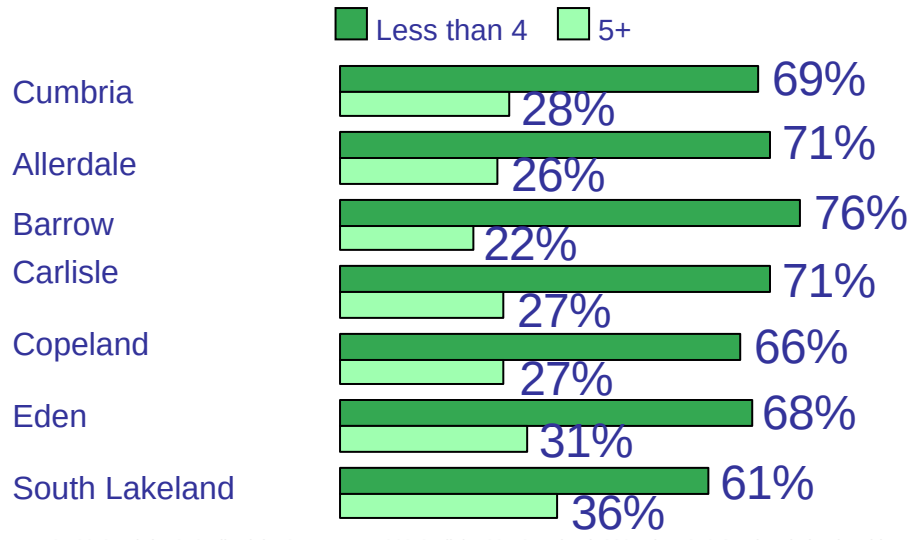


Figure 30 (Source: Cumbria Quality of Life Survey, 2006)

Figure 31 shows the QOF prevalence of obesity by practices in towns. QOF (Quality Outcomes Framework) is a voluntary annual reward and incentive programme for all GP surgeries in England, detailing practice achievement results, and obesity data is included as a register under the QOF Scheme.

In Allerdale 9.4 % of the GP practice's populations are registered under QOF as obese, with 9.6% in Copeland. This is somewhat higher than the England average of 7.2% and the Cumbria average of 7.7%

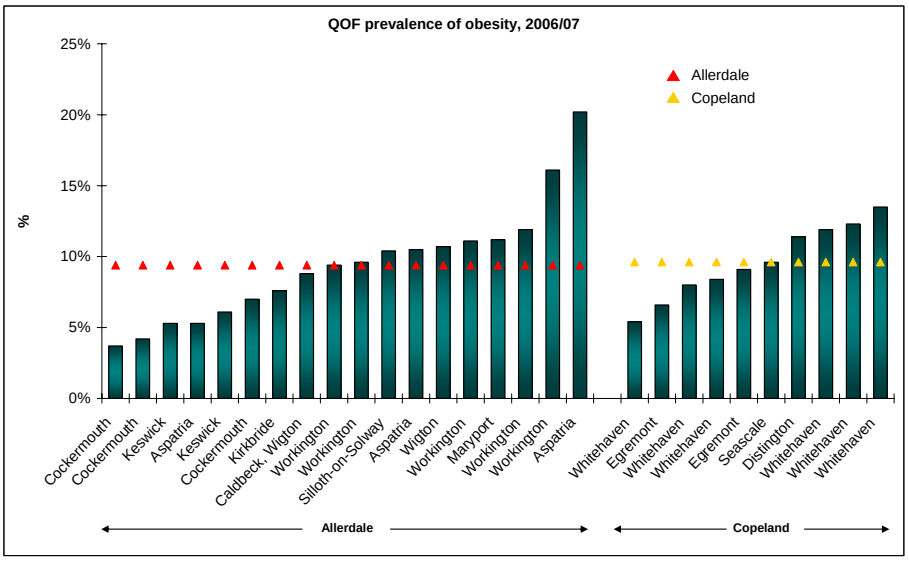


Figure 31 (Source: Quality Outcomes Framework Database, 2008)

When practices are accumulated and values calculated for towns, the highest prevalence is found in Aspatria, Maryport, Wigton, Workington and Distington (all 11%) see table below. West Cumbria alone is considerably higher than the England average for QOF registered obesity.

Town	Prevalence
Cockermouth	4%
Keswick	6%
Egremont	7%
Kirkbride	8%
Whitehaven	8%
Caldbeck, Wigton	9%
Seascale	10%
Silloth-on-Solway	10%
Aspatria	11%
Maryport	11%
Wigton	11%
Workington	11%
Distington	11%

(Source: Quality Outcomes Framework Database, 2008)

Obesity and Physical Activity

Adults who are physically active have a 20-30% reduced risk of premature death (Department of Health, 2004). Physical activity has an effect on cardiovascular risk, it reduces the risk of some cancers such as colorectal cancer, and it reduces the incidence of falls and osteoporosis in the elderly, and has been shown to reduce depression, stress and anxiety Department of Health, 2004).

The Cumbria Quality of Life Survey (2006) estimated that just over half of Cumbrian residents (53%) exercise moderately at least four times a week and just under half 46% take vigorous exercise at least once a week. Across the Neighbourhood Management areas in West Cumbria the rate of moderate exercise is comparable to Cumbria overall but strenuous exercise is less common.

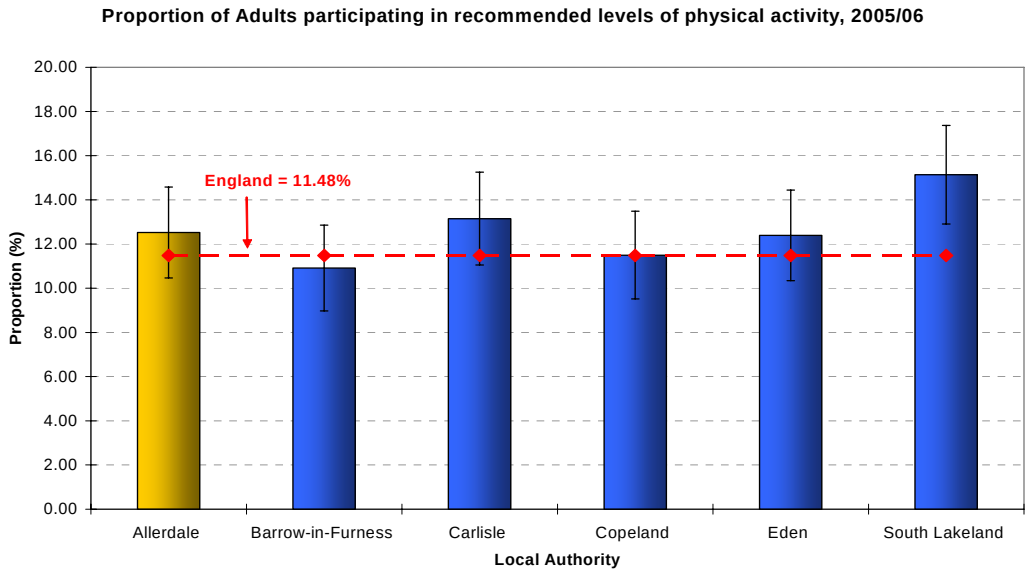


Fig 32 (Source: Cumbria Quality of Life Survey, 2006)

Alcohol

High levels of alcohol consumption will increase your risk of several cancers (liver, oral pharynx, 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 (MORI, 2006), Figure 33, 10% of adult reported drinking over the recommended weekly limit. It is estimated that in 2003-2005, 22.5% of adults in Allerdale and 24.4% of adults in Copeland binge drink. This is significantly higher than the national average of 18% (Neighbourhood Statistics, 2006), with Copeland being highest among all the districts in Cumbria.

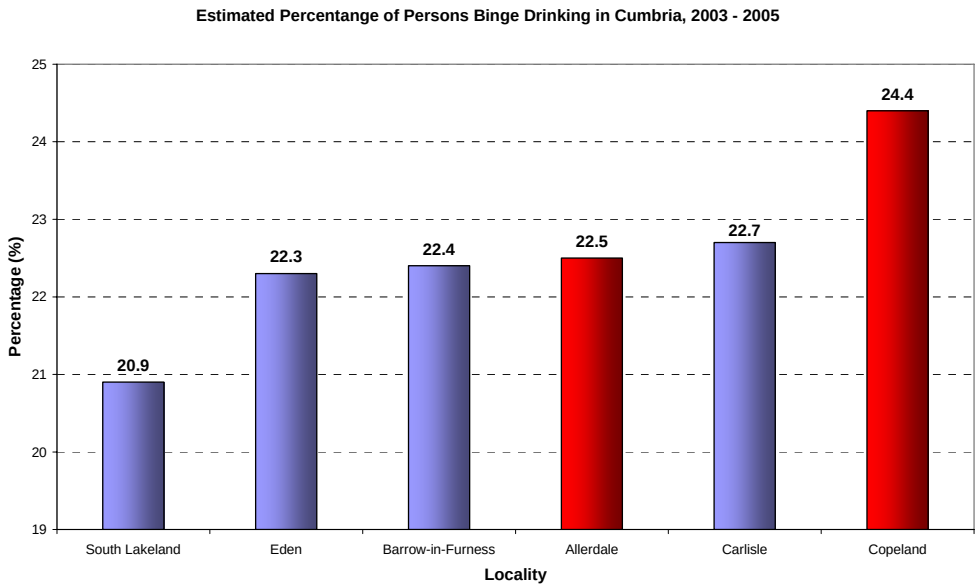


Figure 33 (Source: Synthetic estimates of healthy lifestyle behaviours at ward level, 2000-2002, Health and Social Care Information Centre)

In Allerdale, only 3 wards are under the national average and in Copeland there is only one. In Copeland, the highest level of binge drinking is over 30% (Harbour = 31%). (Figures 34 & 35)

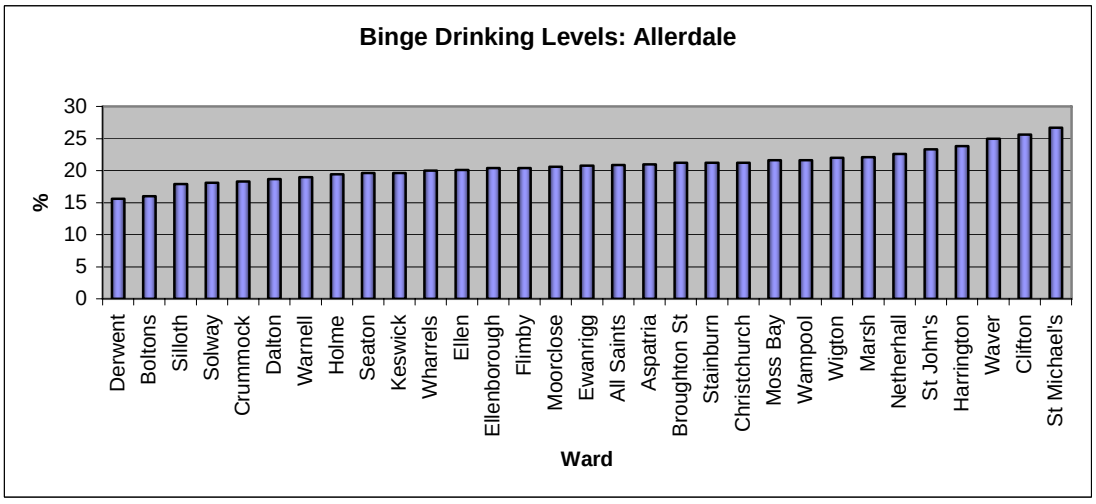


Figure 34 (Source: Synthetic estimates of healthy lifestyle behaviours at ward level, 2000-2002, Health and Social Care Information Centre)

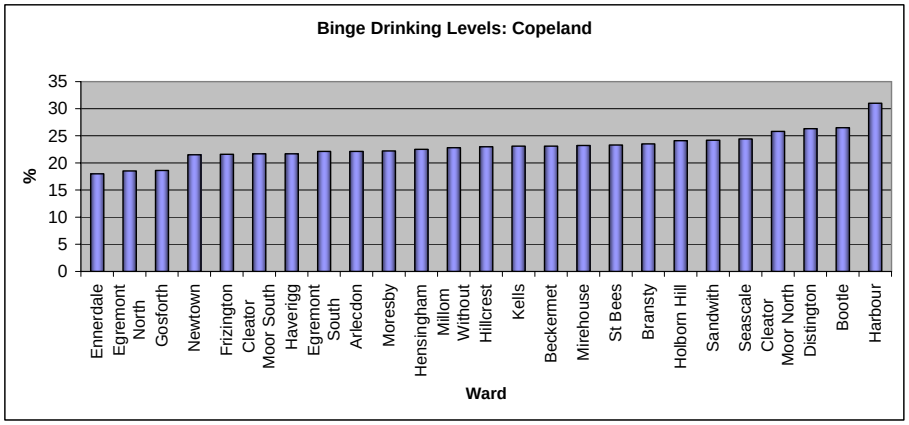


Figure 35 (Source: Synthetic estimates of healthy lifestyle behaviours at ward level, 2000-2002, Health and Social Care Information Centre)

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 (Health Development Agency, 2004). Breast feeding rates tend to be lower in teenage mothers and they are more at risk of having babies with low birth weight (Health Development Agency, 2004). 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 (Department of Health, 2007). Reducing teenage pregnancy is a government priority and a national target has been set to:

Reduce by at least 50% the conception rate amount under 18's

Rates of teenage pregnancies in Allerdale are lower (32.7) than both the Cumbria (35.3) and national average (40.4) However, in Copeland the rate has risen dramatically to 49.8 per 1,000. (Figures 36 & 37)

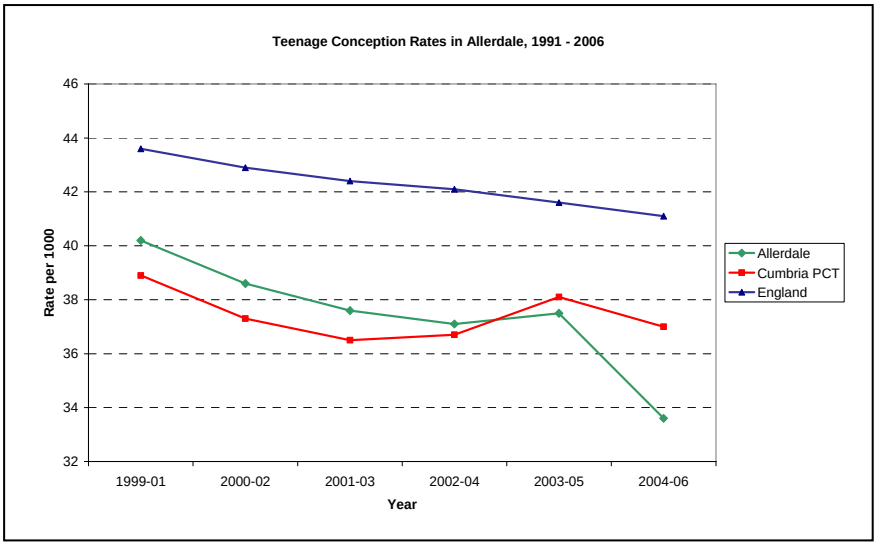


Figure 36 (Source: Office of National Statistics, 2008)

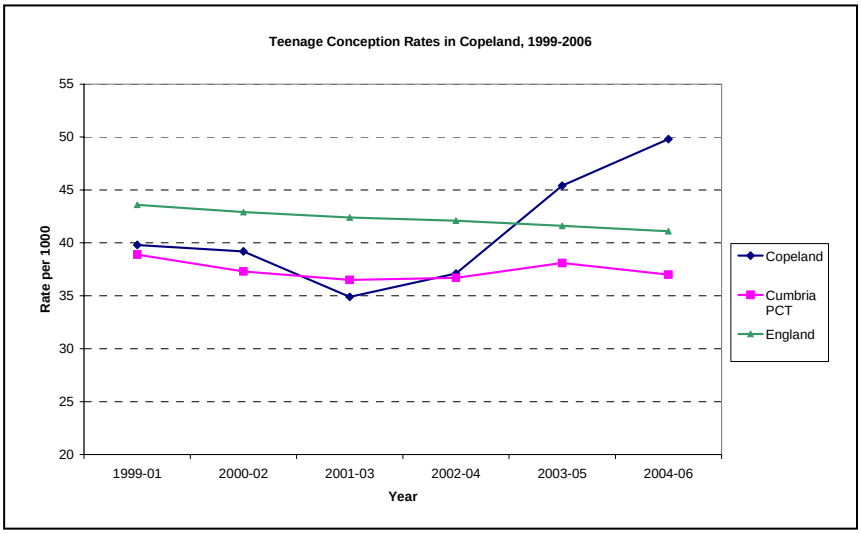


Figure 37 (Source: Office of National Statistics, 2007)

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 socio-economic 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 different between socio-economic groups (University College of London, 2004). 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.

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 (Wilkinson, 2005). 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 affect health (University College of London, 2004). The access we have to physical activity opportunities 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 West Cumbria has been dominated by industry, with the decline in mining and steel production, employment levels fell. Following this large numbers of people went onto incapacity benefits (IB)

rather than unemployment benefits. Consequently West Cumbria has continued to have a significant proportion of people on IB nationally.

In 2006 in West Cumbria there were 8065 people on Incapacity Benefit (IB), which represents 7.9% of the working age population, in the area. One explanation of the high level of IB is that it reflects hidden employment, in the sense that they would probably be in work in a genuinely fully employed economy (Beatty C, 2007). 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 (Beatty, 2007).

	Working Age Population	IB claims	%
Cumbria	304100	21745	7.2%
Allerdale	57400	4235	7.4%
Copeland	44200	3830	8.7%
Eng & Wales	33322700	2397995	7.2%
West (Allerdale & Copeland)	101600	8065	7.9%

Fig 38 (Department for Work and Pensions, 2007)

Incapacity Benefit

The original Health Floor Action Target aimed to reduce the numbers of people claiming Incapacity Benefit, and the numbers claiming Income Support as a lone parent, by 20% in the 10 most deprived wards in Allerdale and Copeland by 2010. Figure 39 shows that the percentage of people claiming incapacity benefit peaked in both Allerdale and Copeland during 2003 and has started to fall in both Allerdale and Copeland. This fall in the numbers of people claiming incapacity benefit should correlate with a resulting increase in the life expectancy across both areas.

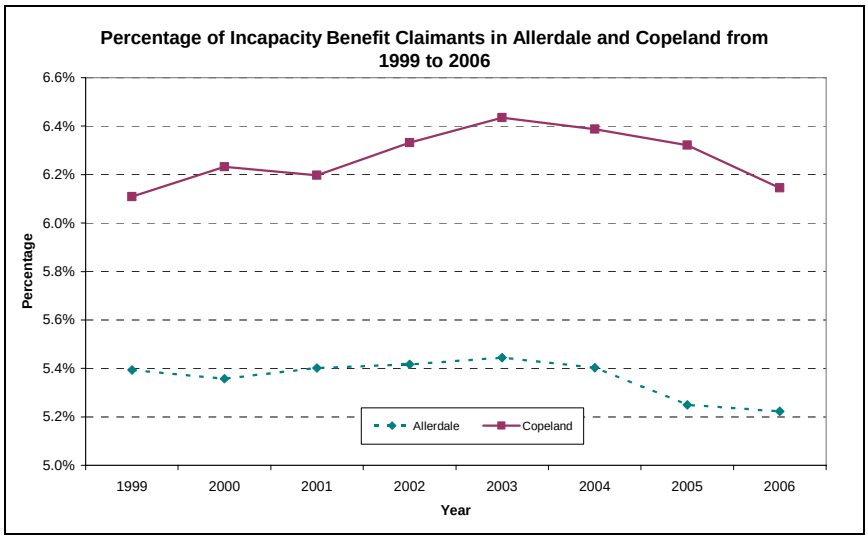


Figure 39 – The Percentage of People Claiming Incapacity Benefit in West Cumbria (Source = NOMIS, DWP 2008)

Overall the number of people on incapacity benefit has fallen by 125 in Allerdale. Figure 40 below shows that in some wards the numbers of people claiming incapacity benefit has fallen and in others has increased.

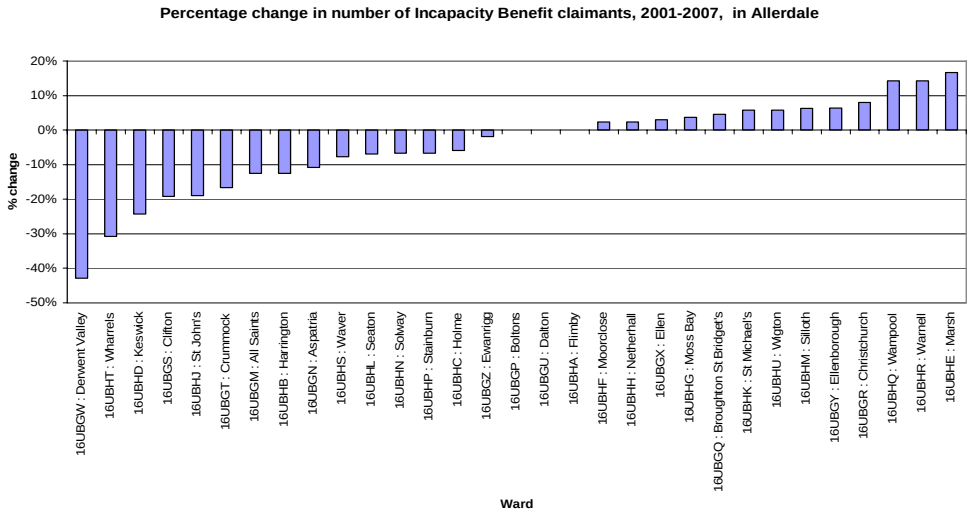


Figure 40 – The Percentage change in the number of incapacity claimants in Allerdale Council Wards between 2001 and 2007 (Source = NOMIS, DWP 2008)

Overall, the number of people on incapacity benefit has fallen by 25 in Copeland. Figure 41 shows that in some wards the numbers of people claiming incapacity benefit has fallen and in others has increased.

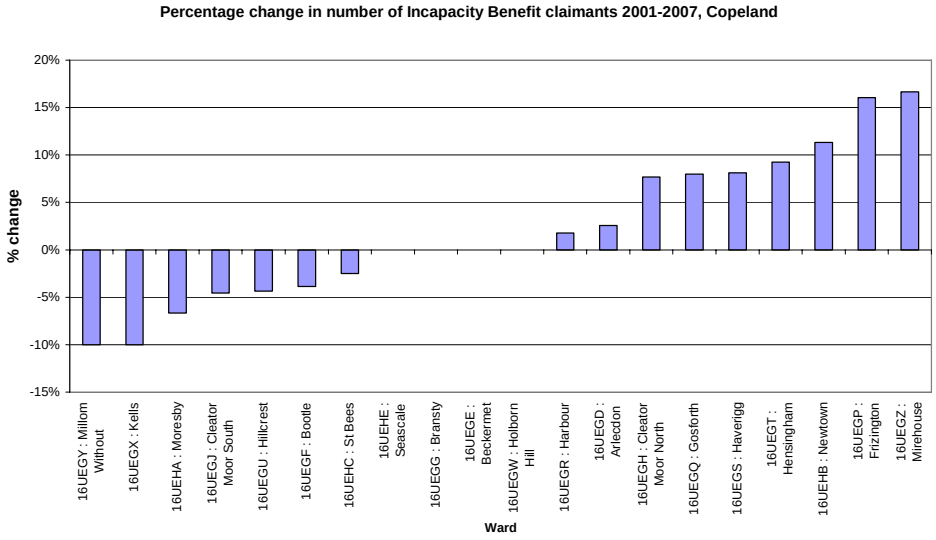


Figure 41 – The Percentage change in the number of incapacity claimants in Copeland Council Wards between 2001 and 2007

Housing

The relationship between poor housing and ill health has long been recognised. Poor housing is related to several conditions, including circulatory diseases, respiratory disease and mental health (World Health Organisation, 2004). Vulnerable groups, including the elderly, the very young and those suffering from long-term ill health are particularly at 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.

Figures 42-45 shows the percentage of social housing in the areas of deprivation within West Cumbria. In the majority of wards within these areas the percentage of social housing is considerably higher than the Cumbria average of 16% with some areas experiencing three times the percentage of social housing, as compared to Cumbria.

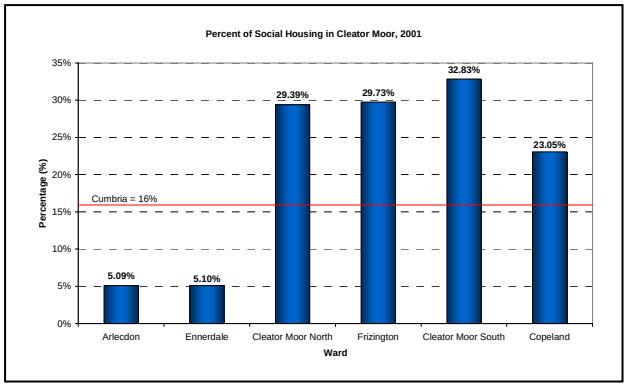


Fig 42

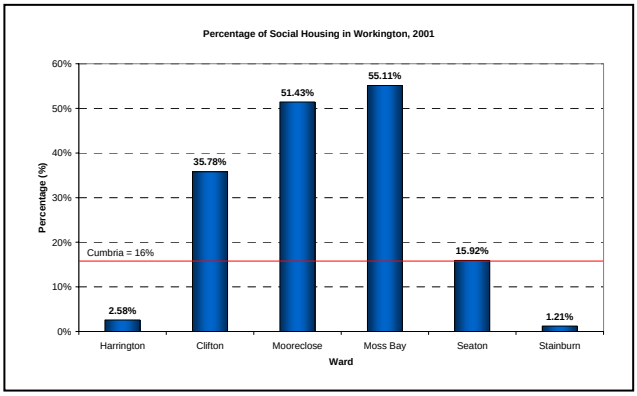


Fig 43

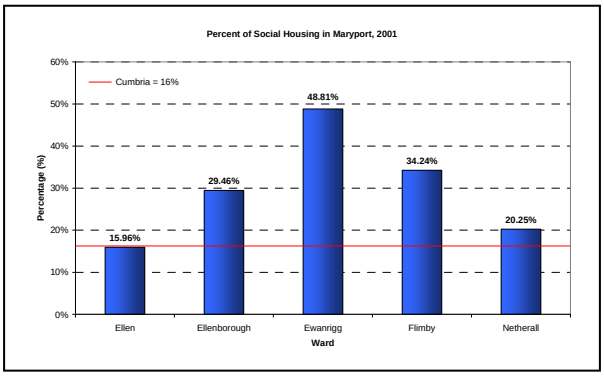


Fig 44
(ONS, 2001 Census)

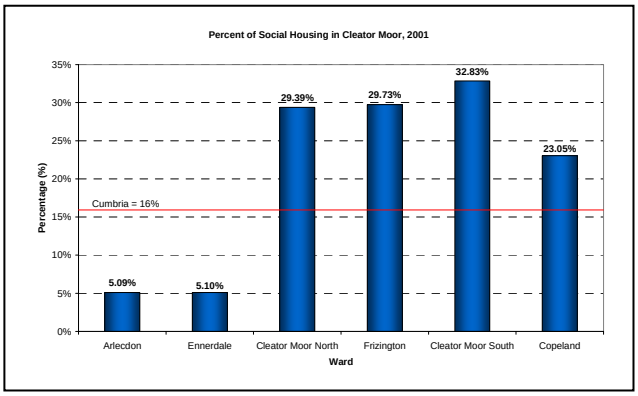


Fig 45

Fuel Poverty

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 (Department for Communities and Local Government, 2007).

A household is said to be in fuel poverty if it needs to spend more than 10% of its income on fuel to maintain a satisfactory heating regime (usually 21 degrees for the main living area, and 18 degrees for other occupied rooms). Fuel poverty is caused by the interaction of a number of factors, but three specifically stand out. These are: energy efficiency status of the property, cost of energy and household income.

In West Cumbria 7% of household are in fuel poverty compared to 6% nationally. Workington and Whitehaven are both just above the Cumbria average (7.1%)

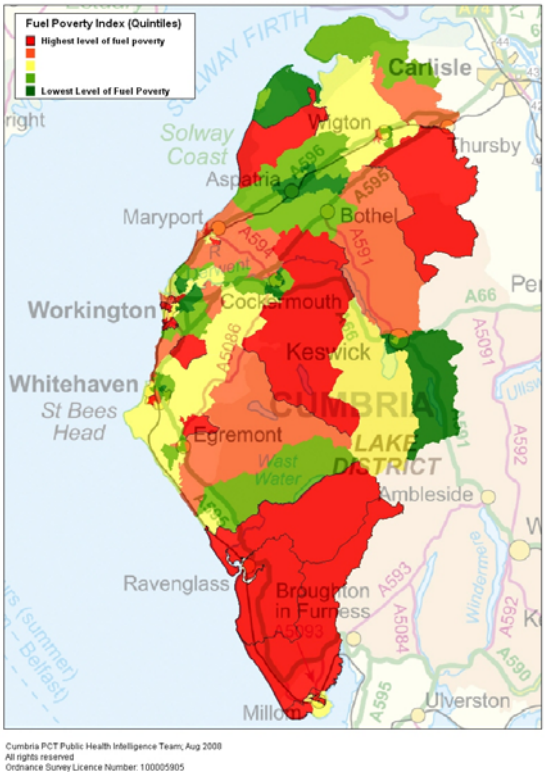
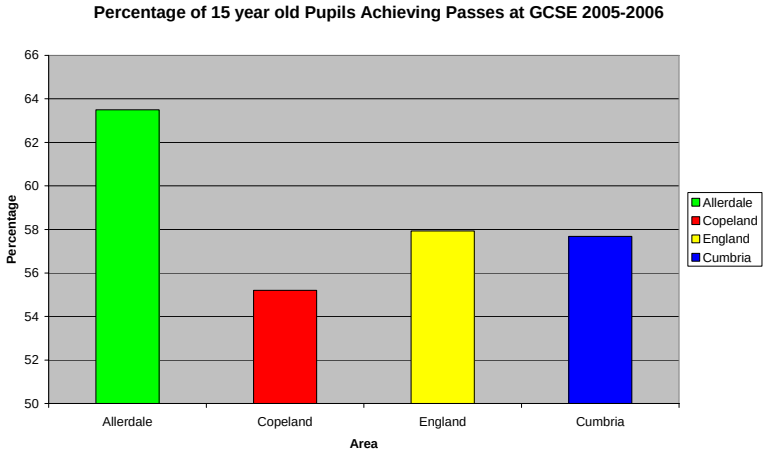


Fig 46
Source: English Fuel Poverty Indicator Centre for Sustainable Energy, 2001 census

In Allerdale 8.5% of houses have no central heating, with 8.7% having no central heating in Copeland. This is comparable to the national average.

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 Allerdale are slightly higher than the average for Cumbria in terms of the proportion of 16 year olds that achieved 5 or more GCSE's (see graph below), with Copeland being below the Cumbria average.



(Source: Office of National Statistics, 2007)

Low educational attainment levels of adults have been shown to have a negative effect and vice versa. Better education is associated with higher employment rates and fewer transitions out of employment in later life. The important distinction is between having no qualifications and having qualifications of O level or greater(Belkesaune et al, 2008) Figures 47 – 50 shows the percentage of adults with no or low qualifications in the priority localities.

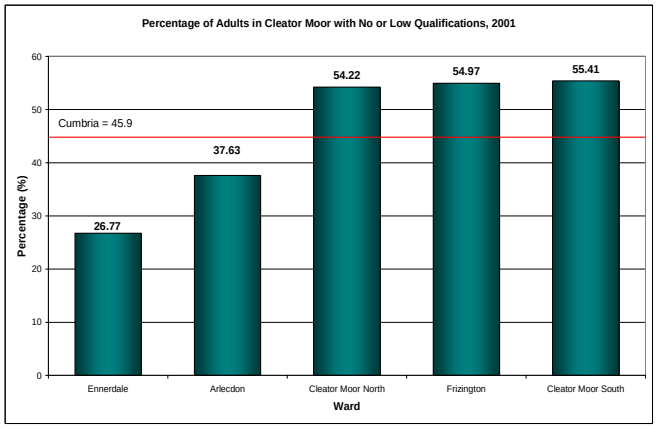


Fig 47

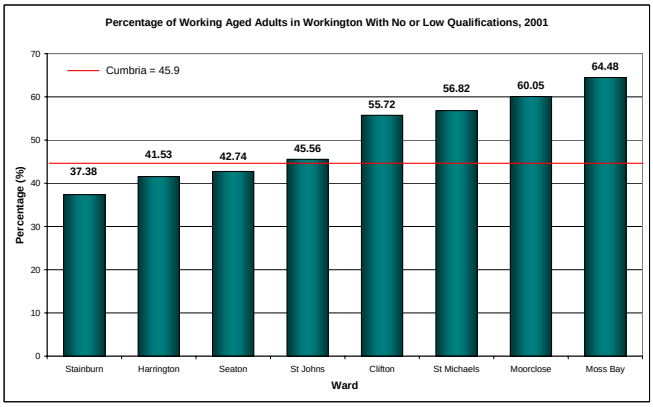


Fig 48

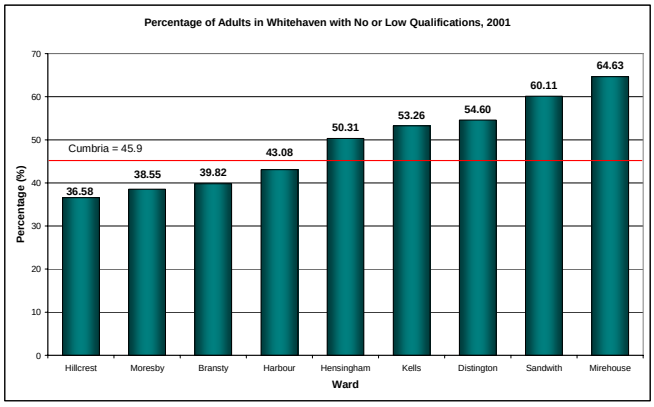


Fig 49

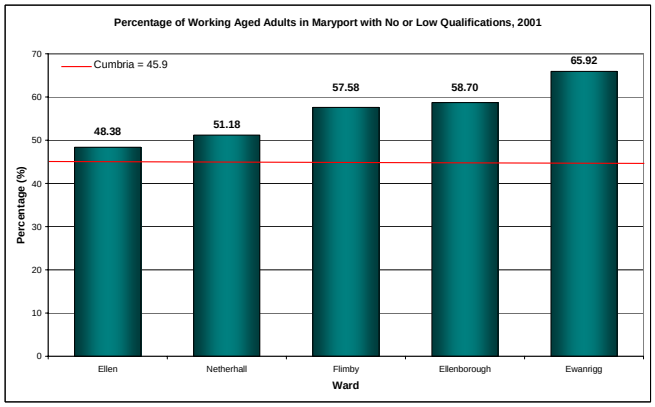


Fig 50

(Source: Office of National Statistics, 2001)

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