NHS Dudley

Unequal Dudley

A Source Book on Health Inequalities in Dudley

Dudley Public Health

Dudley Metropolitan Borough Council

Annual Report of the Director of Public Health - 2010

Contribution to the Joint Strategic Needs Assessment for Dudley

Contents

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Introduction and Recommendations

Health outcomes in Dudley are unjust. But, you may say, don't the newspapers tell us that we are all living longer nowadays? Well, yes that's true; life expectancy in Dudley has increased from 77.7 years to 80.0 on average over the last two decades. The trouble is that this improvement has been uneven. Some groups have done better than others; and the poorest have improved the least. Health outcomes in Dudley are socially patterned and the differentials are stark. Men from the most deprived areas live, on average, 9 years less than men from the most affluent and women 6 years. We can locate the origins of this in the social conditions that people face and the life chances they are afforded. These, though deep and persistent, are not irremediable. As a society, we can change the way we organise and run ourselves. We can choose to value activities that lead to fair outcomes higher than those which don't. We can choose to invest our time and national resource in activities which support fairer outcomes in health. We can choose to put in place measures which change social conditions and let all of our children start life from a level playing field.

We need to recognise, though, that there is a complex interplay between social conditions; the lifestyles we lead; our genetic inheritance and the services available to treat illness which may arise. We can observe a social gradient in Dudley in distribution of lifestyle risk factors; in mental wellbeing; in the uptake of many (though not all) preventative services and in access to health care.

In this Annual Report I present a wide range of data and analyses undertaken by Dudley Public Health to help us all understand the nature, scope and depth of health inequalities in Dudley. The principal author of this needs analysis is Angela Moss, Senior Public Health Information Specialist and to whom I am grateful for the thoroughness and clarity of the data exposition. (The responsibility for any errors and for recommendations remains with me). The report is structured to relate to Sir Michael Marmot's review of health inequalities for England – 'Fair Society, Healthy Lives'. These data, together with the formidable body of evidence on what works and what can be done to reduce health inequalities, which Sir Michael amassed, have been used to develop Dudley Borough's 2010 Strategy for Tackling Health Inequalities. I am presenting the full data set, in public, to inform and support further detailed work on implementation of the Strategy.

The fact that, on average, men in Netherton and Woodside live 10 years less than men in Halesowen South is a fact that should both scandalise and galvanise. We should all continue to be shocked by the lack of equity in health outcomes shown in the data I present here. I intend that this should galvanise us all into action – national government, local politicians, local policy makers, officers, local communities.

I RECOMMEND that the Dudley Health Inequalities Strategy 2010 – 15 should be implemented in full; and that an annual monitoring report be produced and made publicly available for all to judge the progress of agencies and communities in tackling this deep and troubling problem. The analyses I present here are only of use if they lead on to action and results. In both his global and his England reports on social inequality, Professor Marmot quotes Pablo Neruda. I can do no better than echo the call:

' Rise up with me against the organisation of misery'

Valerie A Little
Director of Public Health

1. Background

What is Health inequality?

There are four main definitions of health:

1. Health is the absence of illness (Negative)
2. Health is functional ability (can carry out daily function) (Negative)
3. Health is equilibrium: The mind, body and spirit are all connected and need to be in sync for good health. (Positive)
4. Health is freedom: can do what I want to do. (Positive)

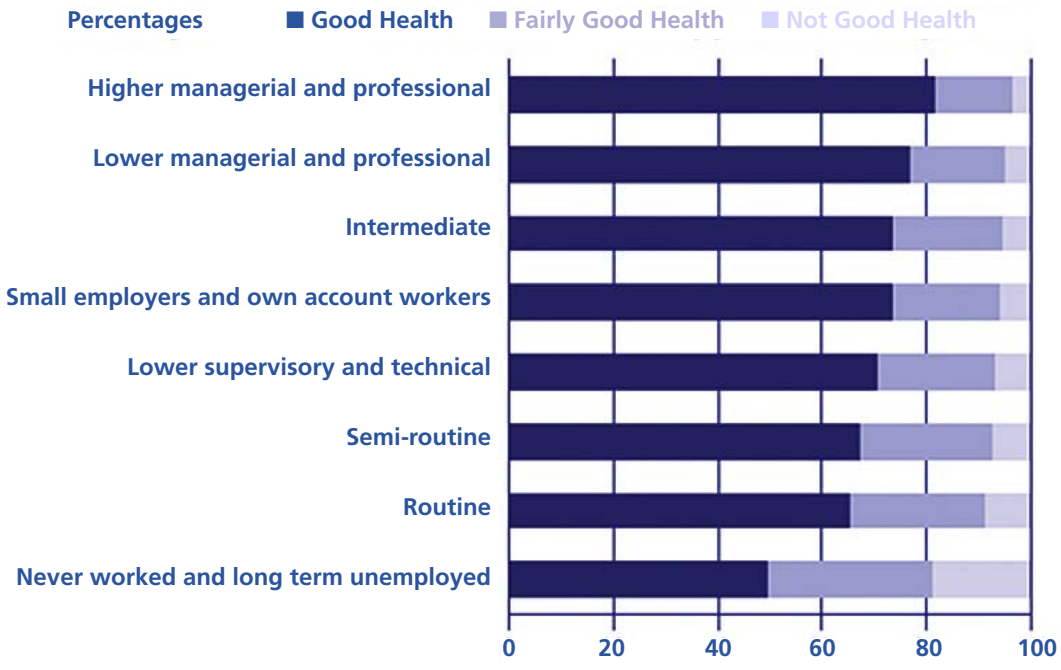
Whatever the definition, there is a fundamental understanding that individuals should have equal opportunity to good health. Health is difficult to measure; what would be good health to one person maybe poor to another. The Census 2001 had two questions in it related to health: general health and limiting long-term illness.

Although these questions are related they do measure different dimensions of health, but they both show a social gradient (Figure 1 and 2).

Health has more often been demonstrated using either all age all cause mortality, infant mortality or life expectancy at birth. There are also many markers of socio-economic status including income, education, occupation (NS-SEC), area based measures which take information from individuals and households and aggregate them at area level (e.g. England's Index of Multiple Deprivation (IMD)) (Graham, 2009).

Self-assessed general health (age standardised): by NS-SEC, 2001, UK

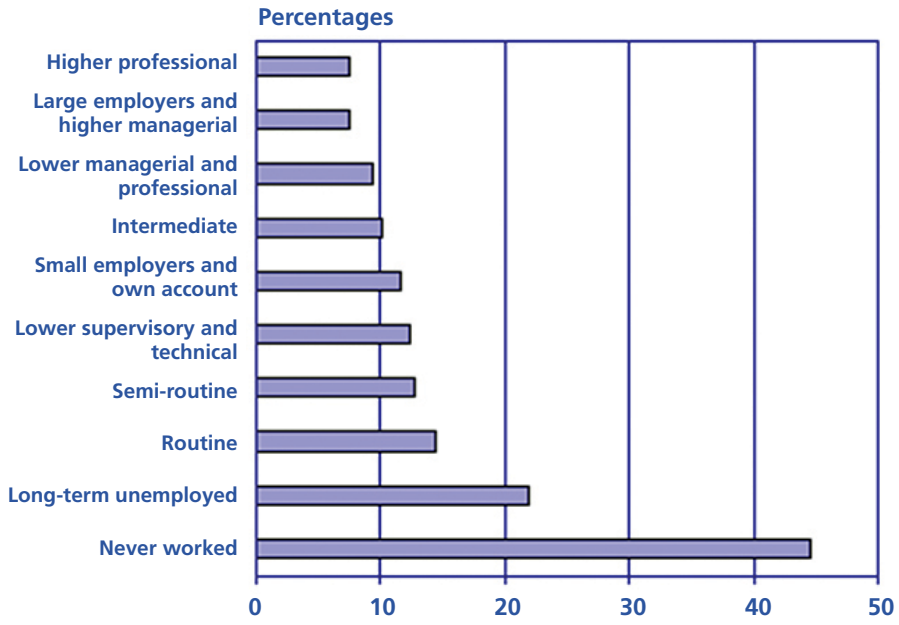
Figure 1



Source: http://www.statistics.gov.uk/cci/nugget.asp?id=1325

Figure 2

Age-standardised rates of long-term illness or disability which restricts daily activities: by NS-SEC, April 2001, England & Wales

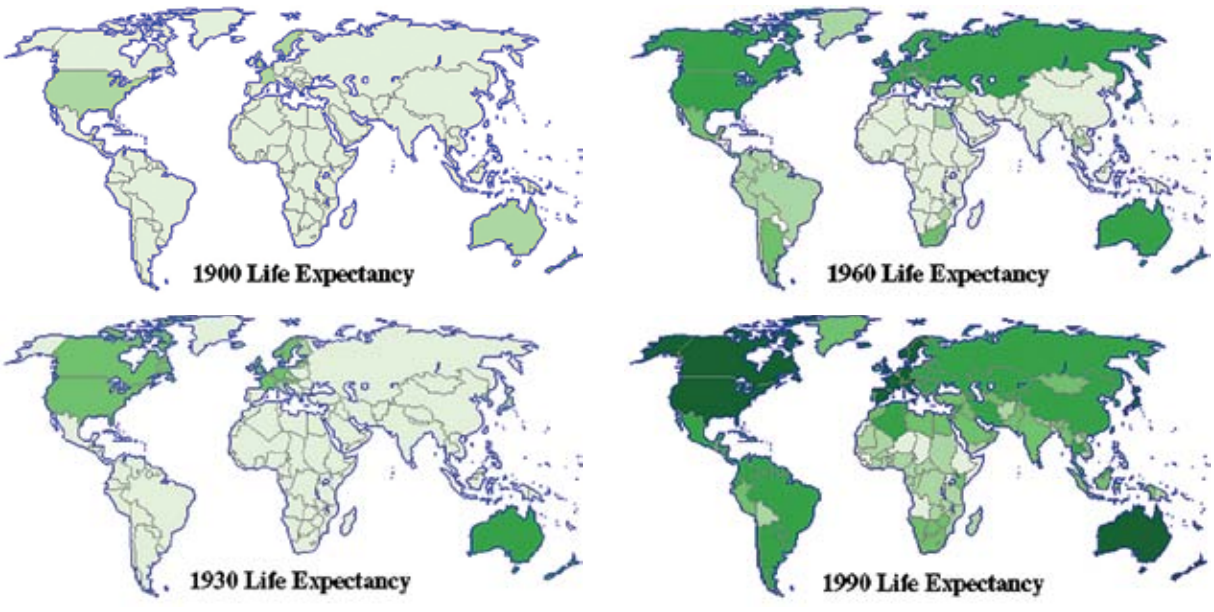


Source: http://www.statistics.gov.uk/cci/nugget.asp?id=916

There have been dramatic increases in life expectancy over the last century across the countries of the world (Figure 3). But there are still large differences in life expectancy between countries. Health inequalities exist relative to income across countries, and these are much reduced once a certain level of income is achieved (Figure 4). Wilkinson and Pickett, (2009) observed that all countries with time continue to experience improvements in life expectancy but the richest countries do not require more wealth to do this so the curve shifts upwards. They conclude that although good health is related to wealth, there is a point beyond which increasing wealth has no further impact on health.

Figure 3

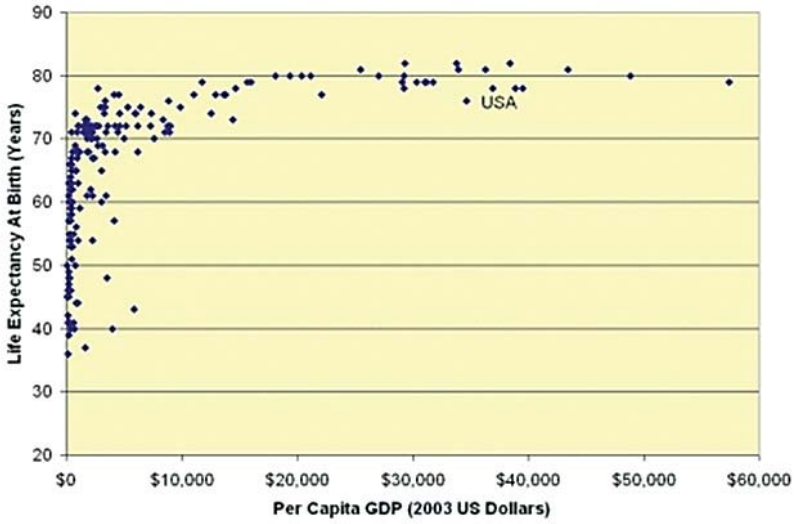
Changes in life expectancy at birth from 1900 to 1990 across the world



Source: Historical Atlas of the Twentieth Century. Matthew White 1998, http://users.erols.com/mwhite28/life-exp.htm

Relationship between gross domestic product and life expectancy at birth for a range of world countries

Figure 4



Source: Statistics on Gross Domestic Product (GDP) Correlations, http://filipspagnoli.wordpress.com/stats-on-human-rights/statistics-on-gross-domestic-product-correlations/#8

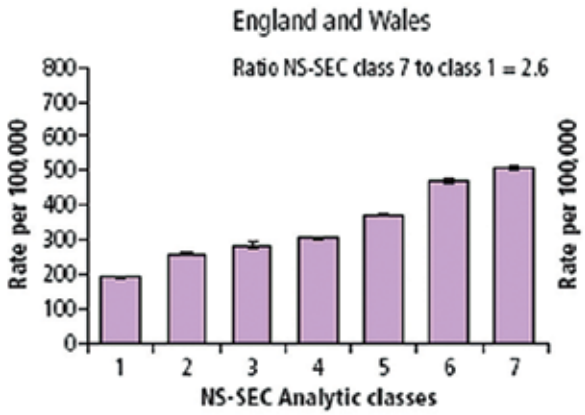
When causes of death are considered a shift from the diseases of poverty (infectious diseases) common in developing countries to conditions associated with later life such as heart disease is seen. This is known as 'epidemiological and health transition' (Gray, 2001, p.127, cited in Bury and Gabe, 2004). In more affluent countries the diseases which were more common in the rich such as heart disease, obesity, '…have reversed their social position to become more common in the poor.' (cited by Wilkinson and Pickett, 2009, p.10).

For countries that have reached a certain level of income there is little difference in life expectancy but there is, within any of them, the same positive relationship between income and life expectancy (Wilkinson and Pickett, 2009; Graham, 2000). There are inequalities in health between social groups and there is also a social gradient across the groups (Figure 5). The social gradient exists for both men and women. Over time in England there is a tendency for the health inequalities (HI) gap to be widening particularly for men (Figure 6).

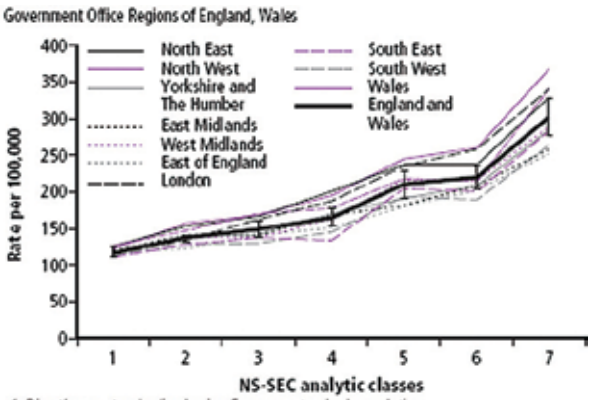
"In more affluent countries the diseases which were more common in the rich such as heart disease, obesity, '…have reversed their social position to become more common in the poor.'"

Figure 5

Age-standardised mortality rates[1] from all causes of death by NS-SEC, men aged 25–64, 2001–03



Age-standardised mortality rates[1] by NS-SEC analytic class[2] women aged 25–59, 2001–03



1 Directly age-standardised using European standard population.
2 NS-SEC assigned by the 'combined' method whereby if married the most advantaged class of either the woman or her husband is used to represent the woman's classification. Adjustments for the under-recording of death have been applied as described in Methods.

NB. NS-Sec analytic class 1 is Higher managerial and professional occupations and 7 is routine occupations. Source: Siegler et al. (2008) and Langford et al. (2009)

Figure 6

Source: Office of National Statistics (2007)

In 2004 the Health and Well-being Partnership of Dudley was tasked with the production of a borough wide strategy to reduce health inequalities as a response to the government's announcement in 2001 of new national targets to reduce health inequalities by 10% by 2010. This resulted in the strategy report "Closing the gap – Tackling health inequalities in Dudley (July 2005)". Following a Department of Health National Support team Health Inequalities visit to Dudley in July 2009, Dudley Health and Well-being Partnership have embarked on reviewing and refreshing the Health inequalities strategy for Dudley. This needs assessment will carry out an analysis of health inequalities across the borough, and their wider determinants such as employment, housing, education and crime.

In November 2008, the Secretary of State for Health commissioned an independent review to propose the most effective evidence based strategies for reducing health inequalities in England. Professor Sir Michael Marmot Chaired the review and in early 2010 "Fair Society, Healthy Lives" (Marmot, 2010) was published.

The review had four tasks:

1. Identify, for the health inequalities challenge facing England, the evidence most relevant to underpinning future policy and action.
2. Show how this evidence could be translated into practice.
3. Advise on possible objectives and measures, building on the experience of the current PSA target on infant mortality and life expectancy.
4. Publish a report of the Review's work that will contribute to the development of a post-2010 health inequalities strategy.

The key messages of the Marmot review focused in the following areas:

- Reducing health inequalities is a matter of fairness and social justice. Premature death in England as a result of health inequalities accounts for a loss of between 1.3 and 2.5 million extra years of life.
- Action should focus on reducing the gradient in health.
- Health inequalities result from social inequalities, and action should be across all the social determinants of health.
- Focusing solely on the most disadvantaged will not reduce health inequalities sufficiently. Actions must be universal across the gradient but proportionate to the level of deprivation.
- Actions to reduce health inequalities will benefit society in many ways particularly economic benefits in reducing losses from illnesses.
- Tackling social inequalities in health and tackling climate change must go together.
- Reducing health inequalities will require action on six policy objectives:
  - Give every child the best start in life
  - Enable all children young people and adults to maximize their capabilities and have control over their lives.
  - Create fair employment and good work for all.
  - Ensure healthy standard of living for all.
  - Create and develop healthy and sustainable places and communities.
  - Strengthen the role and impact of ill health prevention.
- Delivering these policy objectives will require action by central and local government, the NHS, the third and private sectors and community groups.
- Effective local delivery will require the empowerment of individuals and local communities.

> "Give every child the best start in life"

2. Methodology

The analysis looks to examine the inequalities that exist between Dudley and England, and across the borough at 2001 Census ward level and by deprivation quintile. Analysis has included time series, deprivation quintiles and scatter plots.

Time series

Time series analysis allows the reader to consider whether, for example, the gap in life expectancy between the most and least deprived areas of Dudley seen today has been narrowing or widening over recent times. This can be applied to many factors contributing to health inequalities and allows for the prioritisation of services to best address the need.

Deprivation quintiles

Postcodes from both the Public Health mortality dataset and hospital admissions were matched to their respective lower super output area (LSOA) and the corresponding index of multiple deprivation 2007 (Noble et al., 2008) score and national ranking was applied to each. The Dudley LSOAs IMD 2007 ranking was then allocated to the national quintiles. This allows for analysis of the internal inequalities and also to provide a measure of the scale of the inequalities. The aim of this type of analysis is to assist in prioritising which inequalities to focus on.

Internal inequality gradients and values have been calculated from the analysis for the least deprived quintile as a proportion of the most deprived quintile and the value is the absolute difference. An inequality gradient of greater than one indicates that the most deprived area is experiencing an inequality compared to the least deprived area (gradient >1 the most deprived areas are doing worse than the least deprived areas). The opposite is true for values less than one.

Scatterplots

These graphs plot the deprivation percentage ranking for the area or GP practice population on the x axis, which runs from least deprived to most deprived at 100%. The health indicator e.g. cancer mortality is plotted on the y axis. A regression line of best fit is then plotted for the series to give the relationship between the health indicator and deprivation. The correlation coefficient is shown on the graph so that the strength of the correlation can be considered – a value of zero means there is no relationship, whilst a value of one means there is a perfect relationship. A positive value means that the health indicator increases with deprivation and for a negative value the opposite is true.

3. Data

Data for this report have come from a variety of sources, and each table or figure clearly describes the data source. Data in all cases have been for the latest possible date at July 2010. For some types of health data there may be a lag between occurrence and publication of consolidated data. Data have either been reported for single years or, in the case when analysed at a lower geography to avoid the issue with small numbers, the data have been reported across either three or five years.

Data have been reported mainly as directly standardised rates. Standardising the rates allows for any differences in age and sex distribution between two areas of comparison and make for a more valid comparison than the use of crude rates. Direct standardisation was to the European standard population in five year age bands.

4. Report Structure

The remainder of the report is structured into sections to cover the main issues raised in the Marmot review:

- The demography and social inequality present across the Dudley Borough
- The Social Determinants of Health covering Early Years, Employment, income, Housing and climate change.
- Leadership and partnership
- Community engagement
- The health behaviour chapter examines available data on the prevalence of those behaviours that have an impact on health and well-being.
- The health outcomes chapter examines a range of data on health outcomes including incidence and mortality data as well as general indicators of health including life expectancy and fertility.
- Primary care services.

5. Dudley Context

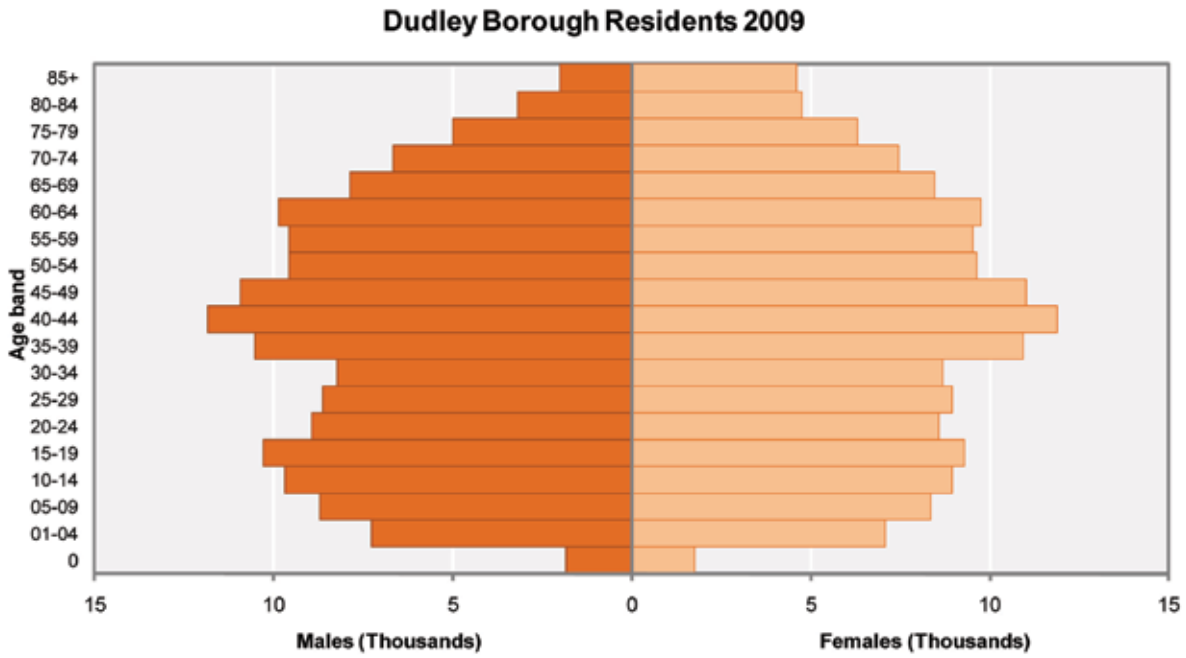
In order to be able to start to address health inequalities in Dudley it is necessary to understand the people of Dudley and the context in which they go about their daily lives.

Demographics

The resident population of Dudley Borough is estimated in the Office of National Statistics mid-year 2009 estimates to be 306,600 and its distribution by five year age band and gender is given in Figure 5.1. The population distribution across the 24 wards in the borough are given on a map of Dudley against a backdrop of the indices of multiple deprivation (2007) national deciles (Figure 5.2). The age profile is markedly different between the more affluent wards around the periphery of the borough where over 25% of the population are over 60 and the more deprived central areas of the borough where more than 60% are under 45. Castle & Priory, St. Thomas, Lye and Wollescote and Netherton and Woodside have more than 20% of their population under 15 years of age. Figure 5.4 shows the population for age 15 and under and the population over working age by lower super output area and this highlights that there are areas within wards where these sub-population groups differ from the ward average. These are of particular interest when considering service distribution to address health inequalities.

Population estimate by age group and gender for Dudley residents, 2009

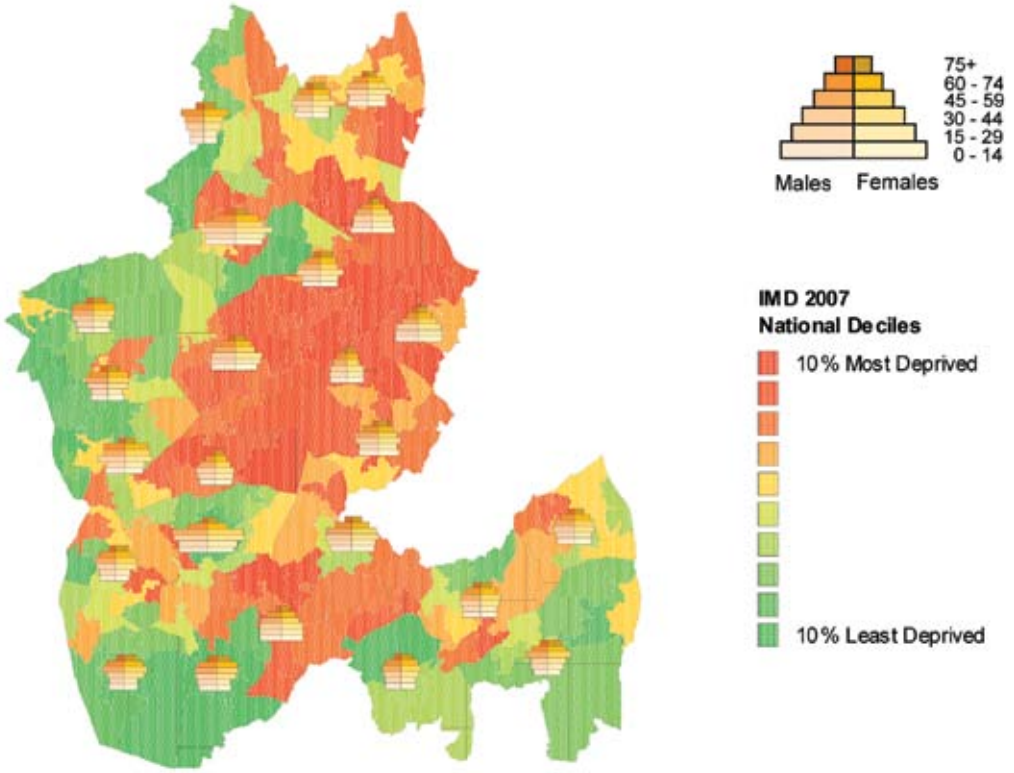
Figure 5.1



Source: ONS Mid-year Population estimates 2009

Figure 5.2

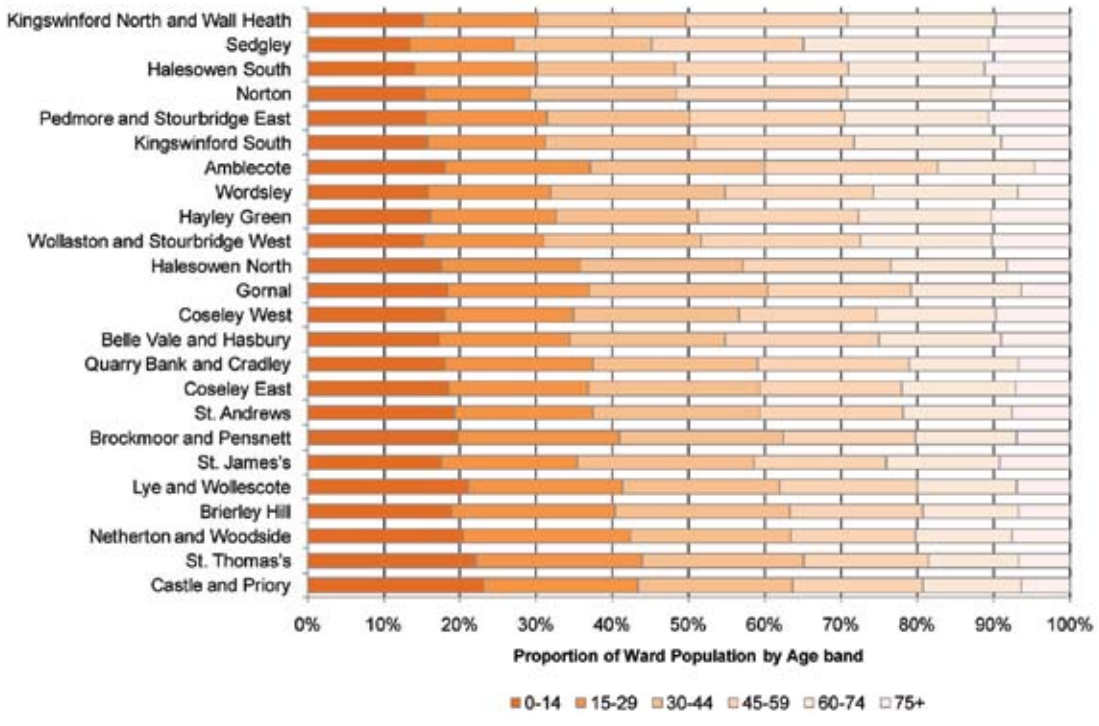
Population pyramids – 2001 Census Ward area mid -2007 population estimates



Department of Communities and Local Government Indices of Deprivation, 2007. ONS mid-year population estimates, 2007
Boundary data ©Crown Copyright 2008 and Ordnance Survey Licence No. 100019918

Figure 5.3

Population mid-2007 estimates by 2001 Census ward presented in order of IMD 2007 rank



Source: ONS Small Area Population Estimates

Proportion of the population by lower super output area

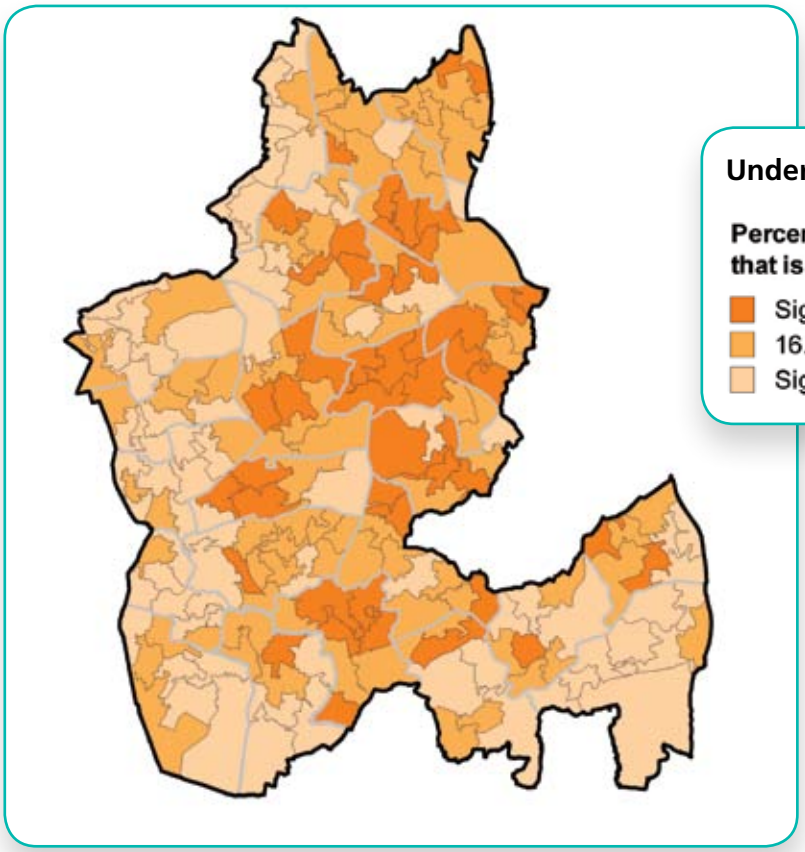


Figure 5.4

Under 15 years of age

Percentage of the total population that is below working age (aged 0-15)

- Significantly higher than Dudley >21.0%
- 16.9 - 21.0%
- Significantly lower than Dudley <16.9%

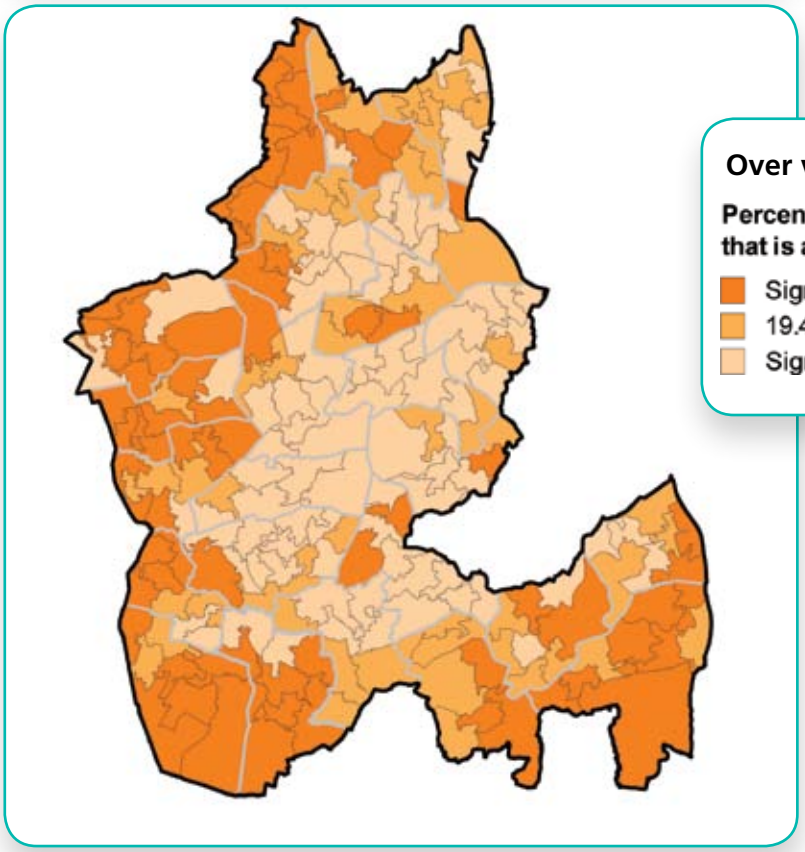


Figure 5.4

Over working age

Percentage of the total population that is above the working age (aged 60/65+)

- Significantly higher than Dudley >23.8%
- 19.4 - 23.8%
- Significantly lower than Dudley <19.4%

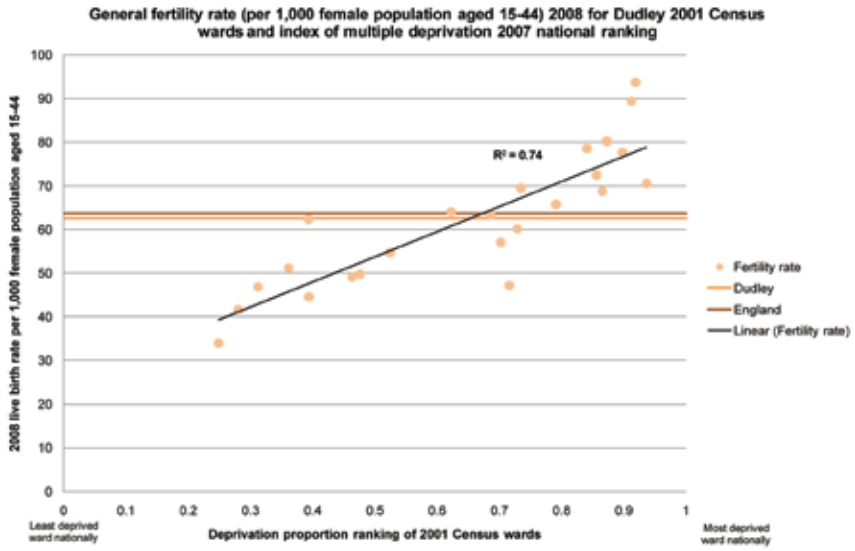
Source: ONS experimental LSOA mid-2009 population estimates

Fertility and population projections

Figure 5.5 shows that the general fertility rate in 2008 for Dudley is similar to that for England, but within Dudley (2001 Census Wards) there is a wide variation in fertility rate and this is strongly related to deprivation, being highest in the most deprived areas of Dudley. Fertility rates have increased a little in the last five years both in Dudley and England overall.

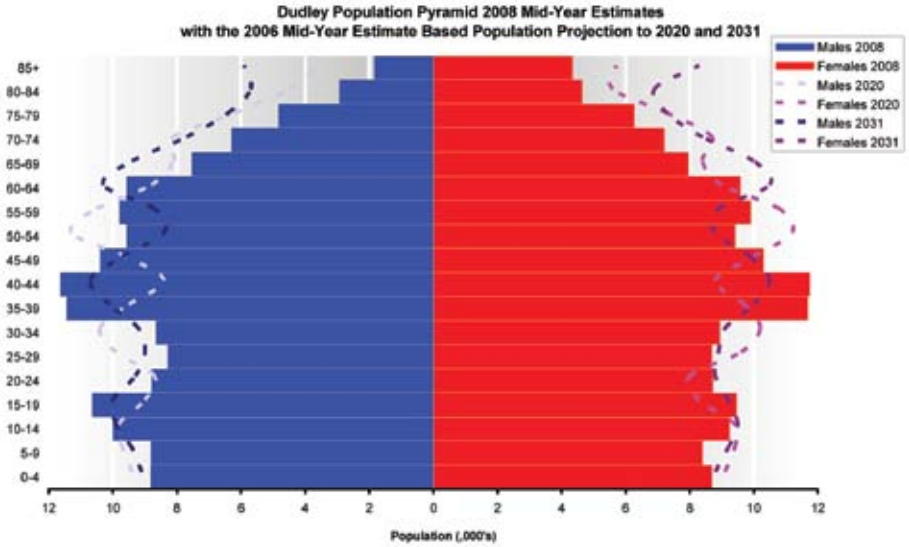
A number of factors contribute to population change, birth and death rates and migration. The first two of these are recorded with relative accuracy, whilst migration estimates are more difficult. The Office of National Statistics, produce population estimates and projections each year, and for Dudley the population is projected to rise by 2.6% above 2008 population by 2020. The majority of this change is attributed to the upward trend in natural change over the last five years. The populations' demographic is projected to change most dramatically with increases in those aged over 65 (Figure 5.6).

Figure 5.5



Source: Department of Communities & Local Government Indices of Deprivation 2007; Public Health Annual District Births Dataset, ONS

Figure 5.6



Source: Source:ONS mid-year population projections 2008

Ethnicity

Estimates of the population by ethnic group are now published by ONS. These are experimental statistics and are subject to change as methodologies are changed, but within these limitations they offer an update to that produced from the 2001 Census. In 2001 the Black and Minority Ethnic group (BME) proportion of the Dudley population was estimated at 6.3% or 19,700 people. In 2007, this is estimated to have risen to 8.7%, an increase of approximately 9,000 people from BME groups. This is a little below the England rate increase of 3.3%. The increase is balanced partly by a reduction of 6,500 white (comprising mainly white British, no change in white Irish and an increase in white other), during the same period. The increase in the other white group is accounted for by new migrants, mainly from Poland (National Insurance Number registrations to Adult Overseas Nationals entering the UK). There has also been an increase in the Bangladeshi, Black African and Chinese. Dudley displays less ethnic diversity than England (11.8% BME), but it does have sub-areas of greater ethnic diversity.

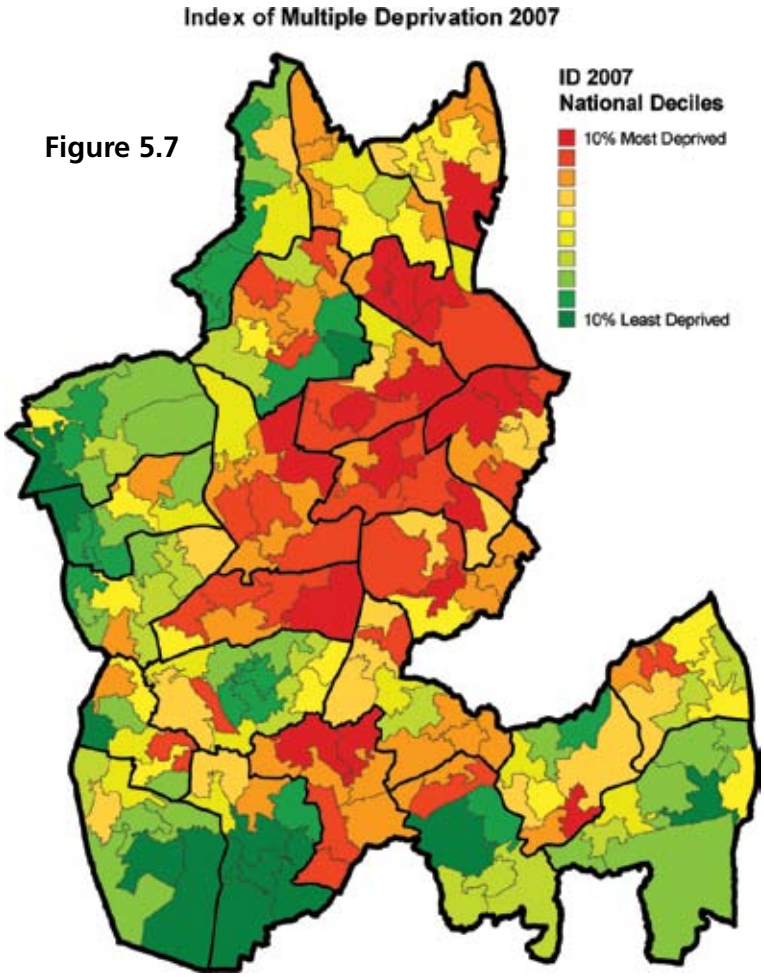
The annual school census 2008 (PLASC) showed that 15.9% of pupils in Dudley schools are from BME backgrounds, compared to the estimate of 8.7% for the population as a whole. This is a reflection of the younger age profile of the BME population compared with that of the overall population.

Economic and social inequality

The national indices of deprivation (IMD) calculated by the Department of Communities & Local Government were revised from the previous 2004 edition in 2007. Nineteen out of the 202 lower super output areas in Dudley are ranked as being within the most deprived 10% of all LSOAs nationally, with 40% of the LSOAs in Dudley being within the most deprived 30% of all LSOAs nationally. At the opposite end of the scale 12 out of the 202 LSOAs in Dudley are ranked within the least deprived 10% of all LSOAs nationally.

The index of multiple deprivation, is made up of a number of domains (income, employment, health, education, housing, living environment and crime). These are developed from specific variables and then combined into a single index for every super output area (SOA) nationally (Figure 5.7). What is clear from the map is that there are pockets of deprivation that exist particularly within more affluent areas. This juxtaposition can have a further negative psychosocial impact.

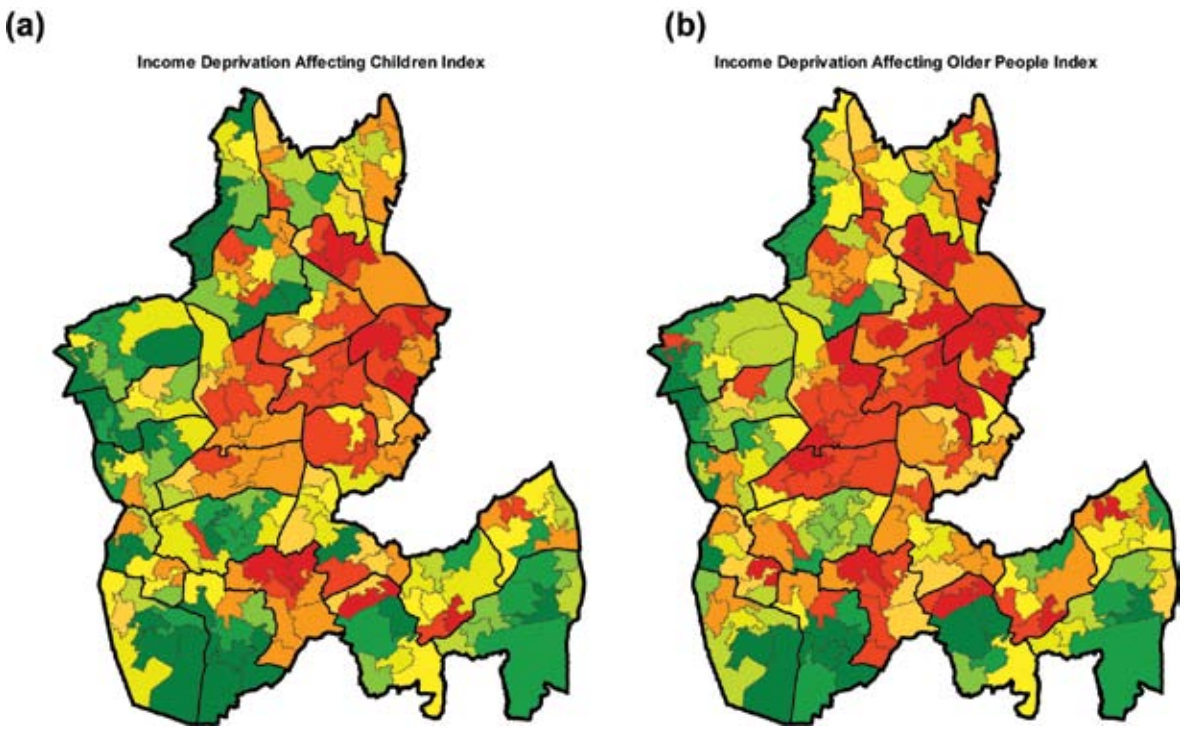
Figure 5.7



Source: Department of Communities & Local Government Indices of Deprivation 2007

The two maps below (Figure 5.8), show income deprivation as it affects children (a) and older people (b). The three maps (Figures 5.7 and 5.8 (a) and (b)) are very similar, although the child poverty map has fewer areas in the most deprived 10%. Income deprivation appears to have a larger impact for older people. The deprived areas on all three maps are mainly found in an area running from Castle & Priory in the northern part of the borough through Netherton, St. James, St. Thomas and St. Andrews to Brockmoor & Pensnett and Brierley Hill in the central part of the borough. There is also a cluster of deprived SOAs in Lye, with a further few scattered throughout the borough and these seem to be more strongly associated with older people.

Figure 5.8



Source: Department of Communities & Local Government Indices of Deprivation 2007

6. Social Determinants of Health

The Early Years

There is evidence in the literature as presented in The Marmot Review, Fairer Society, Healthy Lives (2010) that 'what a child experiences during the early years lays down a foundation for the whole of their life.'

Physical and cognitive development influences educational attainment, economic participation and health. Research using longitudinal studies particularly, the national birth cohorts of 1946 and 1958 have related childhood social position to adulthood social position and health (Davey-Smith, 2003) and this has become known as the life-course approach to the impact of material deprivation (neo-materialist). Figure 6.1 shows the biological effects of birthweight on brain development and how these interact with social position to influence cognitive development (Marmot, 2010).

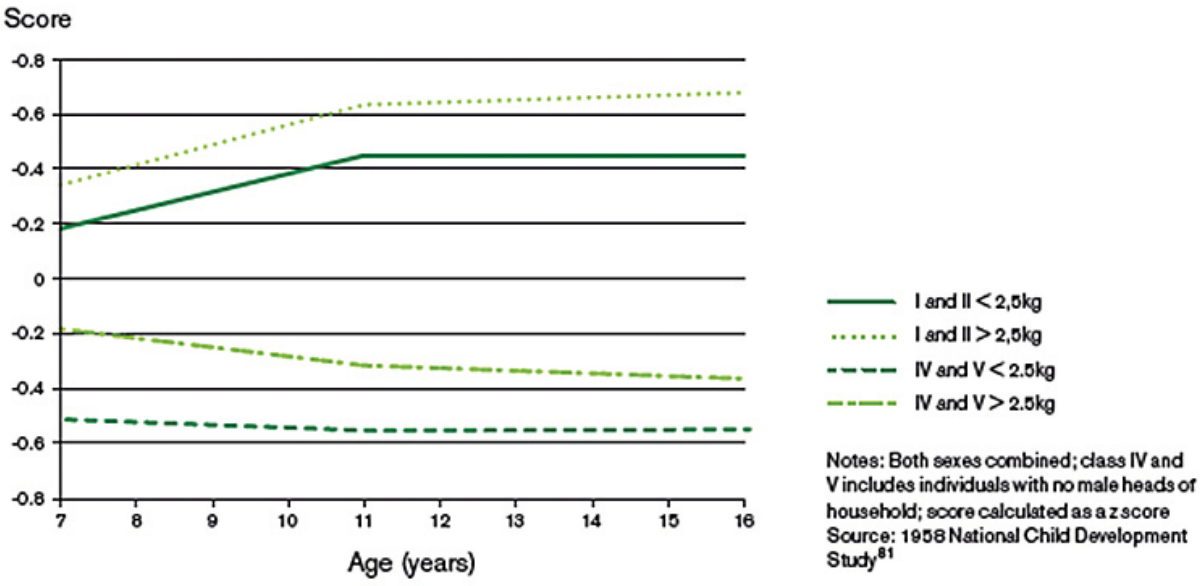
Pre-school influences remain evident even after 5 years spent in full time primary school (Figure 6.2). Children who do not develop fully in the early years are not 'school ready' and this impacts on their subsequent educational attainment and hence economic participation and health. Children of educated or wealthy parents may score poorly in tests but will still catch up, whereas children with worse off parents are very unlikely to do so and there is no evidence that early entry into schooling reverses this pattern.

The key set of interacting factors which impact on educational outcomes are:

- Birth weight
- Post-natal depression
- Being read to every day
- Having a regular bed time at age 3.

Maths scores from ages 7 – 16 years by birthweight and social class at birth, 1958 National Child Development Study.

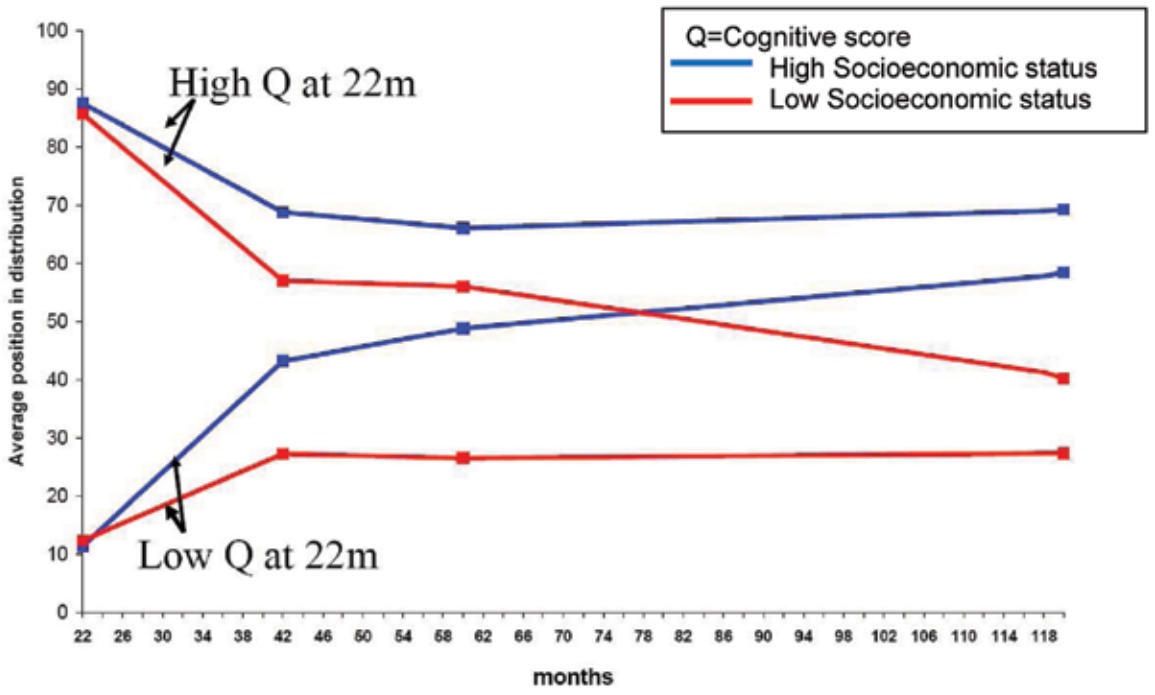
Figure 6.1



Notes: Both sexes combined; class IV and V includes individuals with no male heads of household; score calculated as a z score
Source: 1958 National Child Development Study[81]

Figure 6.2

Inequality in early cognitive development of children in the 1970 British Cohort Study, at age 22 months to 10 years



Source: Feinstein, L. (2003) 'Inequality in the Early Cognitive Development of British Children in the 1970 Cohort', *Economica* (70) 277, 73-97

Early Years: What do we know in Dudley

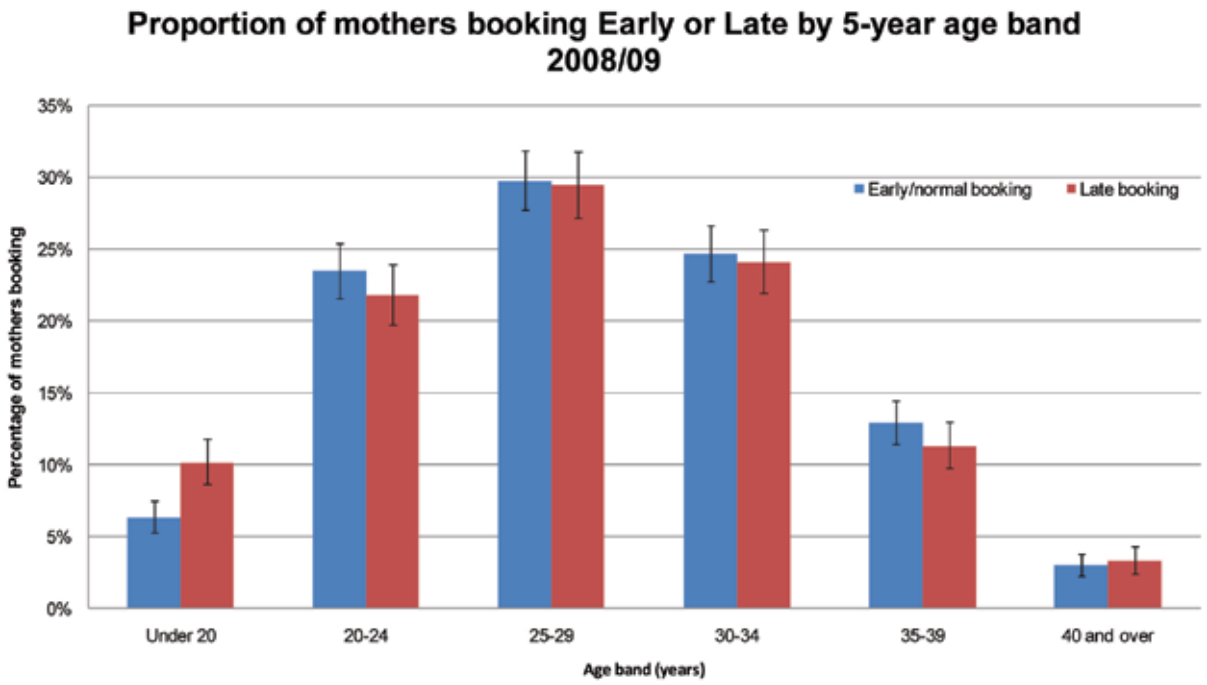
Maternal health and antenatal care:

There is an apparently high rate of late booking for antenatal care in Dudley especially among women from minority ethnic communities. Data from Dudley Group of Hospitals Foundation Trust and Royal Wolverhampton NHS Trust indicates that in 2009-10 only 64% of pregnant women had had an assessment of their health and social care risks and needs by 13 weeks. An analysis of maternity bookings for Dudley GP registered women booking at Dudley Group of Hospitals between 01/04/2008 and 31/03/2009 (n=3447) showed that 55.7% booked at less than 13 weeks. The proportion booking late (>=13 weeks) was significantly higher in the under 20 age group (Figure 6.3).

Late booking was also significantly more prominent in the black and minority ethnic groups (BME), particularly the mixed and Asian groups (Figure 6.4).

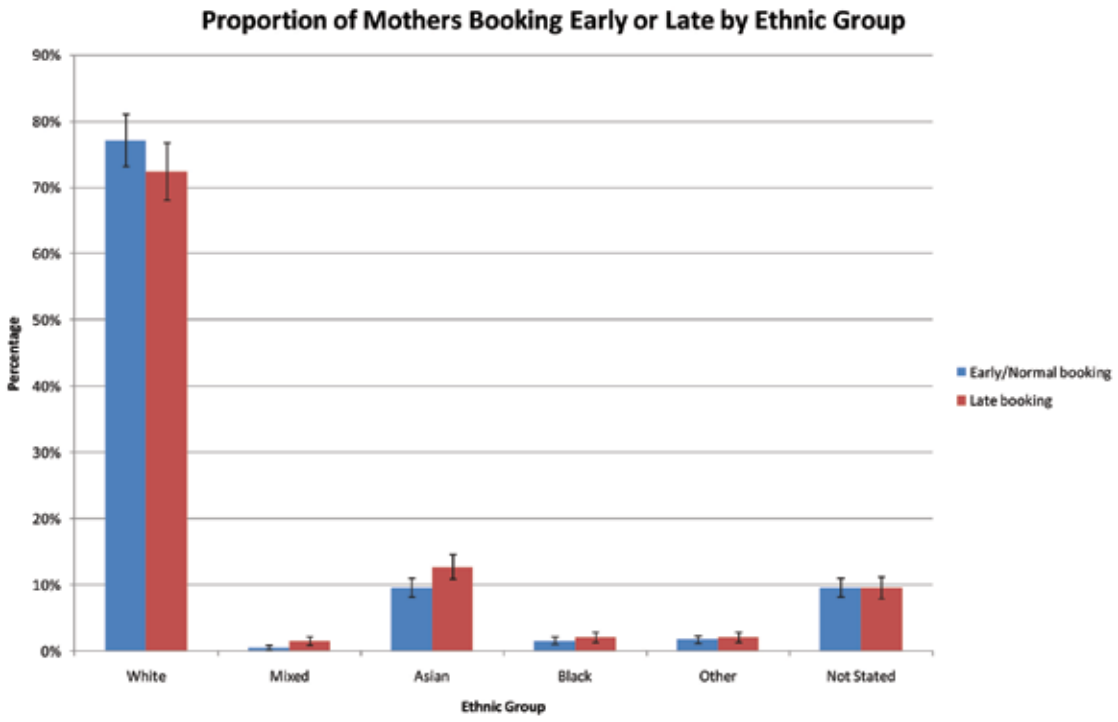
There is a tendency for a higher proportion of late bookers to be from the 40% most deprived nationally, though this was not statistically significant (Figure 6.5). In the under 20 age band approximately 45% are from the 20% most deprived nationally areas of Dudley and approximately 85% of this age band are from the 40% most deprived nationally areas of Dudley. There was no significant difference between the early and late bookers in the age band. Figure 6.6 shows the proportion of late bookers by 2001 Census Ward

Figure 6.3



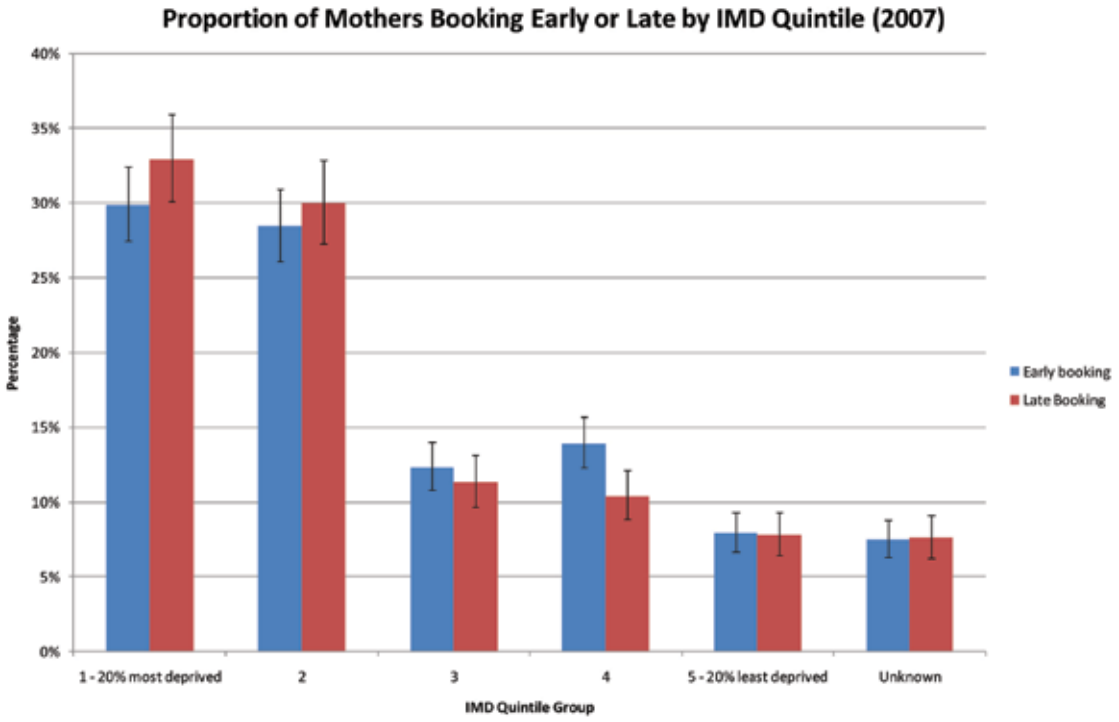
Source: The Dudley Group of Hospitals NHS Foundation Trust

Figure 6.4



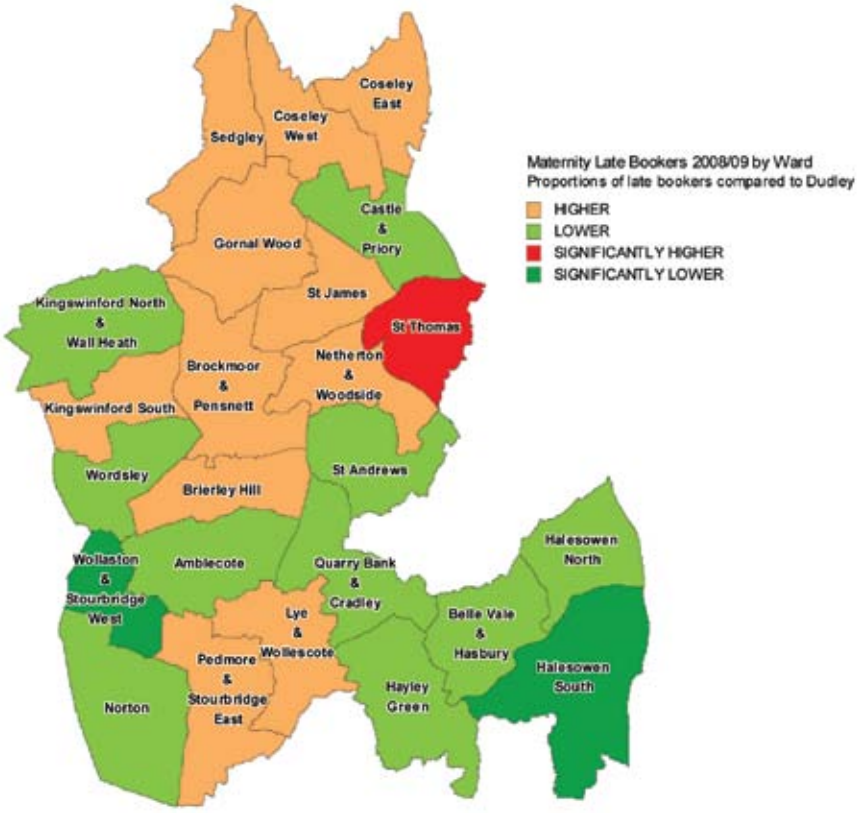
Source: The Dudley Group of Hospitals NHS Foundation Trust

Figure 6.5



Source: The Dudley Group of Hospitals NHS Foundation Trust

Figure 6.6

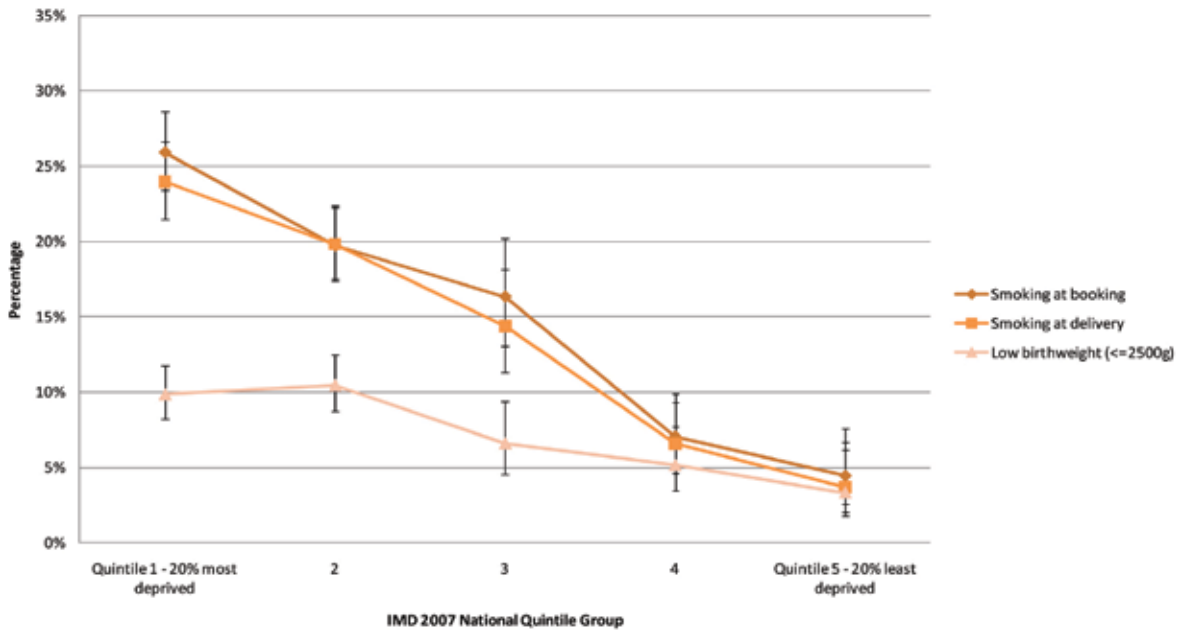


Source: The Dudley Group of Hospitals NHS Foundation Trust

In terms of birth outcomes late bookers had a significantly lower mean birth weight. Dudley's smoking in pregnancy rate at the time of birth is not different from the West Midlands average and is declining, but in 2009/10 there were almost a fifth of mothers (18.3%) smoking at delivery. From the late booker dataset it was also possible to show that smoking in pregnancy and low birthweight (<= 2500 g) are strongly related to deprivation (Figure 6.7). Dudley Stop Smoking Service is provided to pregnant mothers and during the period September 2009 to August 2010, 819 pregnant women were referred to the service and of these 222 set a quit date (27.1%) with a 60.8% 4 week quit success. This is equivalent to 16.5% of pregnant women referred having a successful 4 week quit status. There was a strong negative gradient; referrals being highest in the most deprived quintile. The proportion of pregnant women setting a quit date and their quit success were lower in the most deprived quintile though this was not statistically significant.

Figure 6.7

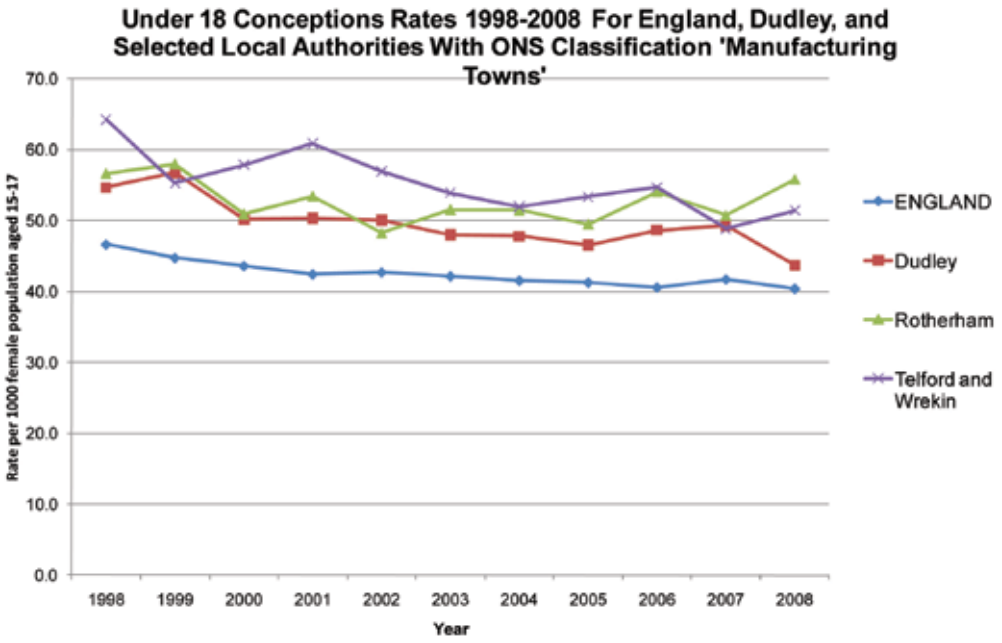
Proportion of Dudley GP registered mothers smoking at booking and delivery and the proportion of low birthweight babies by IMD quintile at Dudley Group of Hospitals 2008/09



Source: The Dudley Group of Hospitals NHS Foundation Trust

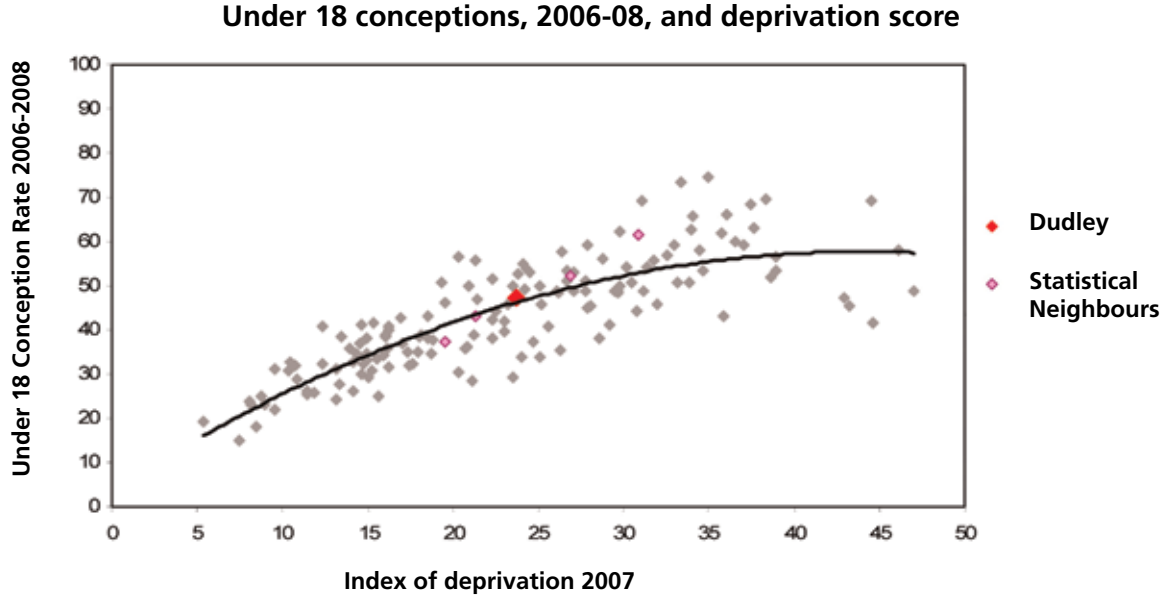
Under 18 conception rate for Dudley is declining slowly but remains above the England rate (Figure 6.8). The under 18 years conception rate for the three years 2006-2008 was 47.2 per 1,000. There were 827 conceptions over the three years, 50% of which were births (414). So there are an average of 138 births to teenage mothers in Dudley each year. Under 18 conception rates are strongly associated with deprivation both nationally and locally (Figure 6.9). Despite all areas having a 10 year strategy in place to underpin the national target of a 50% reduction in teenage conceptions by 2010, progress towards this has been slow. There is evidence that both the young mother and child have poorer health and wellbeing outcomes and hence services are required to address these needs.

Figure 6.8



Source: Office for National Statistics, Teenage Pregnancy Unit

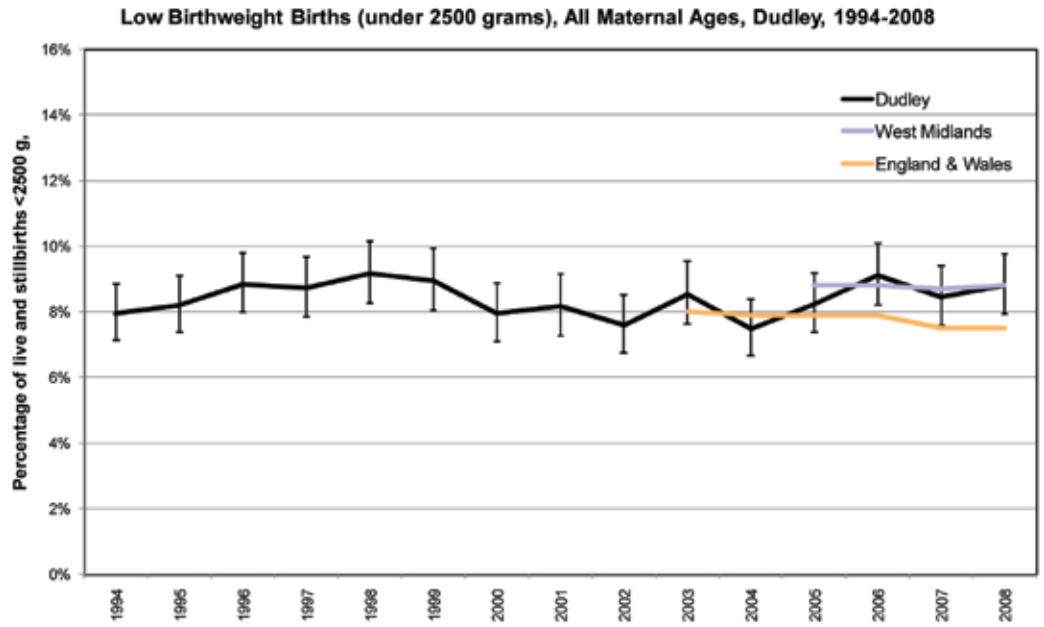
Figure 6.9



Source: Office for National Statistics, Teenage Pregnancy Unit and ID2007, Department for Communities and Local Government

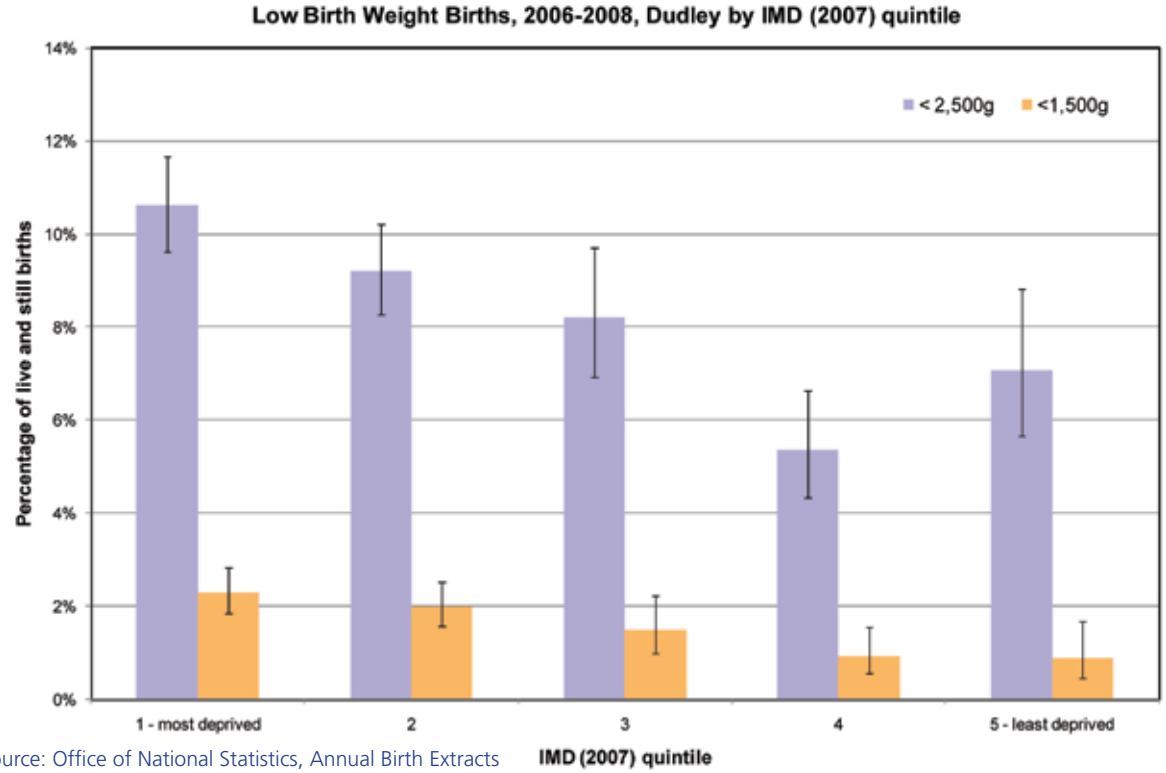
At 8.8% the proportion of low birthweight babies in Dudley is significantly higher than England and Wales (figure 6.10). 1.6% are of very low weight (<1500g). There is evidence of a social gradient in low birthweight in Dudley (Figure 6.11).

Figure 6.10



Source: ONS birth registrations, NCHOD

Figure 6.11



Source: Office of National Statistics, Annual Birth Extracts

Post natal depression

There is limited information on the prevalence of postnatal depression, but a meta-analysis of studies in resource-rich countries found the incidence to be 12-13% (O'Hara and Swain, 1996) which would equate to approximately 7,300 women of child-bearing age (15 to 44 years) in Dudley. Four systematic reviews identified key risk factors to be: history of any psychopathology (including history of previous PND), low social support, poor marital relationship, and recent life events (O'Hara and Swain, 1996; Beck, 1996; Wilson et al., 1996; Robertson et al., 2004).

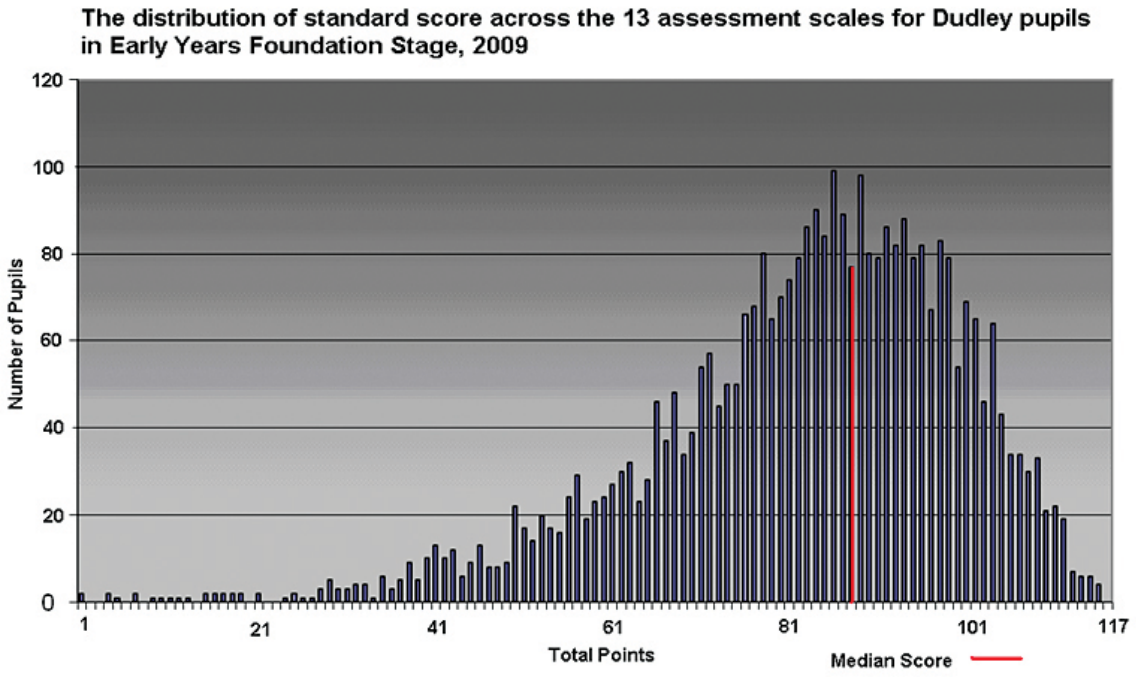
Early Cognitive development

Data on children's attainment at the Early Years Foundation Stage (EYFS), which is assessed at reception year in primary school, is available. The data for Dudley children for 2009 show a skewed distribution (Figure 6.12) with a mean standard score of 85.3 and a median standard score of 88.0. This compared to standard scores of mean 86.9 and median 90.0 for England. There was evidence of a social gradient in median scores with the most deprived quintile scoring 80 and the least deprived quintile scoring 90.

Parenting

Dudley has developed a multi-agency parenting support and family learning strategy (2009) and in the development of this undertook an audit of formal manual-based parenting support within the Borough. There are currently no readily available data on the number of families in receipt of these programmes, the number of sessions delivered or outcome of the intervention.

Figure 6.12

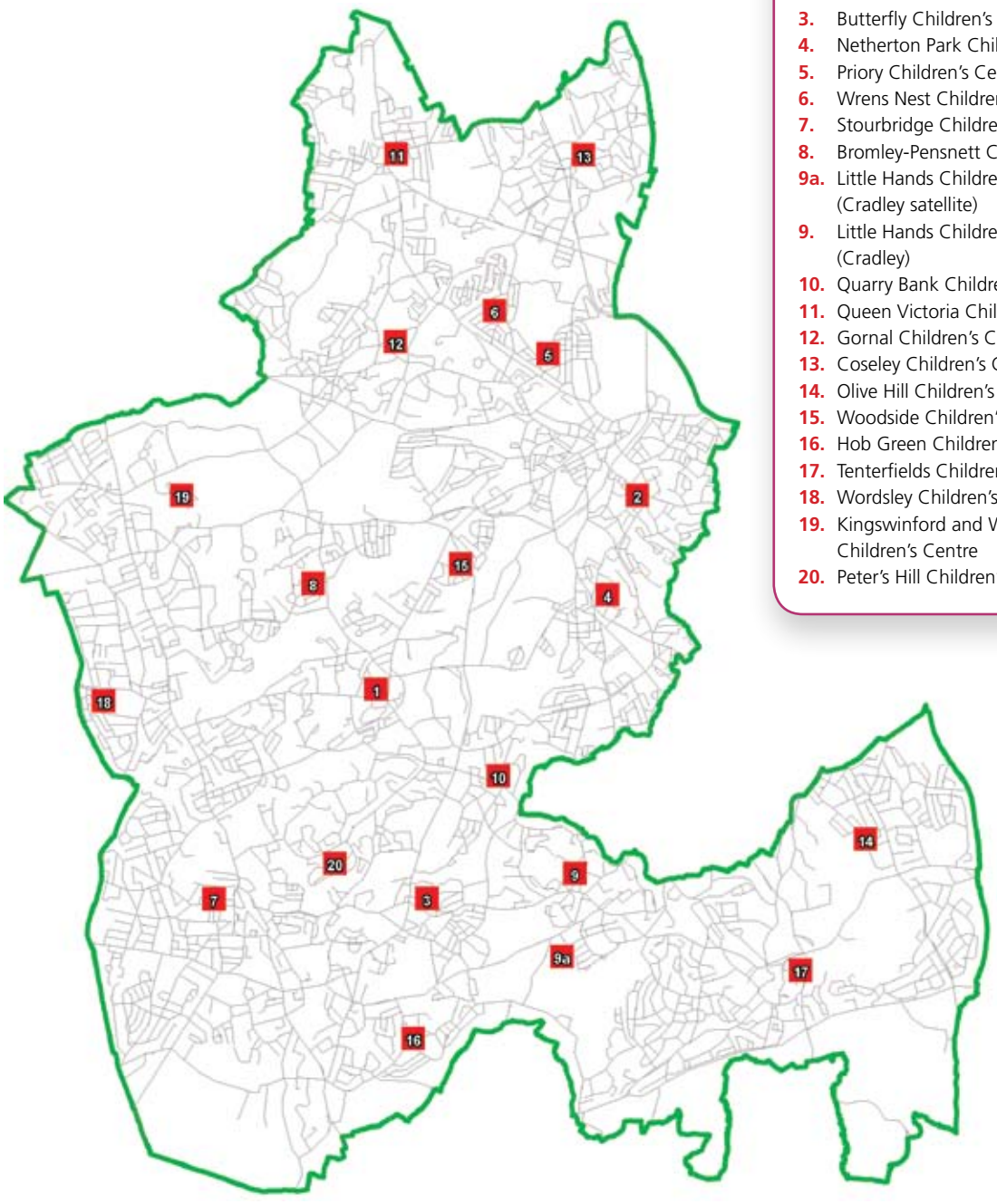


Source:Dudley MBC

Surestart Children's Centres

These centres are intended to be service hubs where children under 5 and their families receive integrated services and information. There are now 20 Children's Centres across the Borough, providing access to a range of services. Figure 6.13 shows a map of the Dudley Children's Centres.

Figure 6.13



Children's Centres

1. Brierley Hill Children's Centre
2. Kates Hill & Sledmere Children's Centre
3. Butterfly Children's Centre
4. Netherton Park Children's Centre
5. Priory Children's Centre
6. Wrens Nest Children's Centre
7. Stourbridge Children's & Family Centre
8. Bromley-Pensnett Children's Cetre
9a. Little Hands Children's Centre (Cradley satellite)
9. Little Hands Children's Centre (Cradley)
10. Quarry Bank Children's Centre
11. Queen Victoria Children's Centre
12. Gornal Children's Centre
13. Coseley Children's Centre
14. Olive Hill Children's Centre
15. Woodside Children's Centre
16. Hob Green Children's Centre
17. Tenterfields Children's Centre
18. Wordsley Children's Centre
19. Kingswinford and Wall Heath Children's Centre
20. Peter's Hill Children's Centre

Fair Employment and Good Work for All

As elsewhere, unemployment levels in Dudley reflect the prevailing economic conditions. Figure 6.14 shows unemployment levels from 1992 -2010 as measured by Job Seekers Allowance claimants (Note from August 10th 2010 all rates downloaded are as % of age 16-64 for males and females previously age 16-64 for men and 16-59 for women thus the percentage shows a reduction from previous levels).

The impact of the most recent recession has been sharper in Dudley than in the West Midlands and Great Britain.

If this is analysed by deprivation quintile (Figure 6.15) it can be seen that since May 2008, there has been an increasing trend in the proportion of people claiming JSA across all deprivation quintiles, but this trend increased at a faster rate in the more deprived areas. There has been an increase of over 3% in the most deprived quintile, compared with an increase of 1.5% in the least deprived quintile over the same time period from May 2008 to May 2009.

Figure 6.14

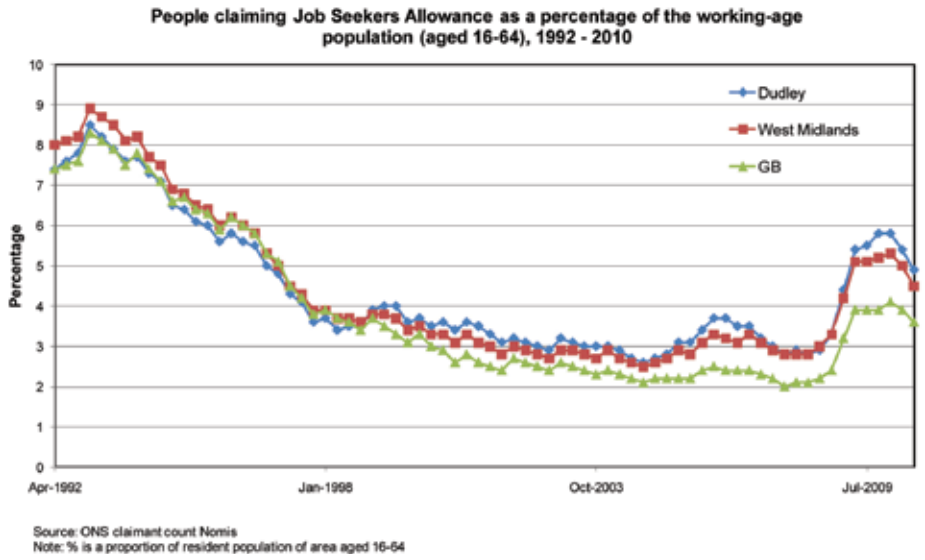
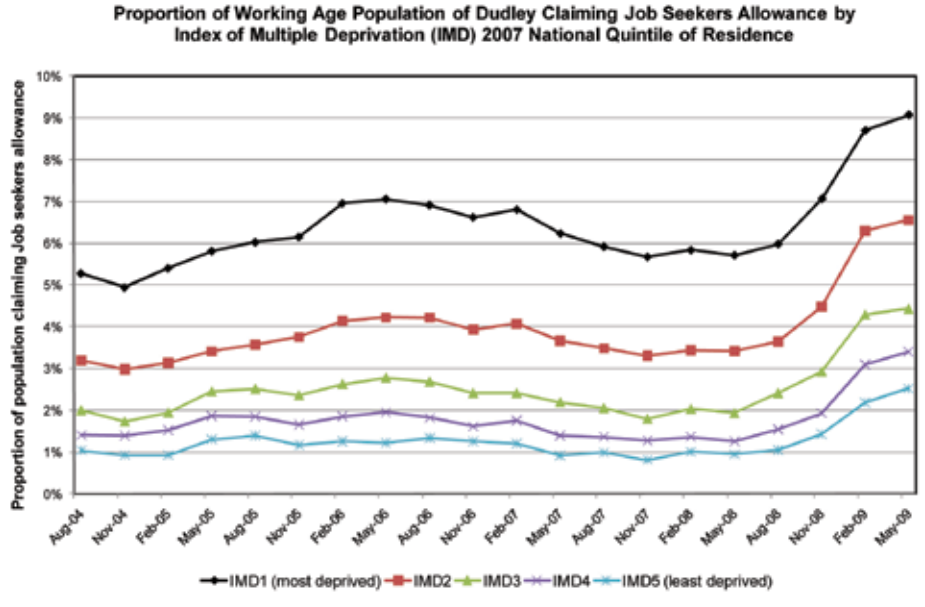


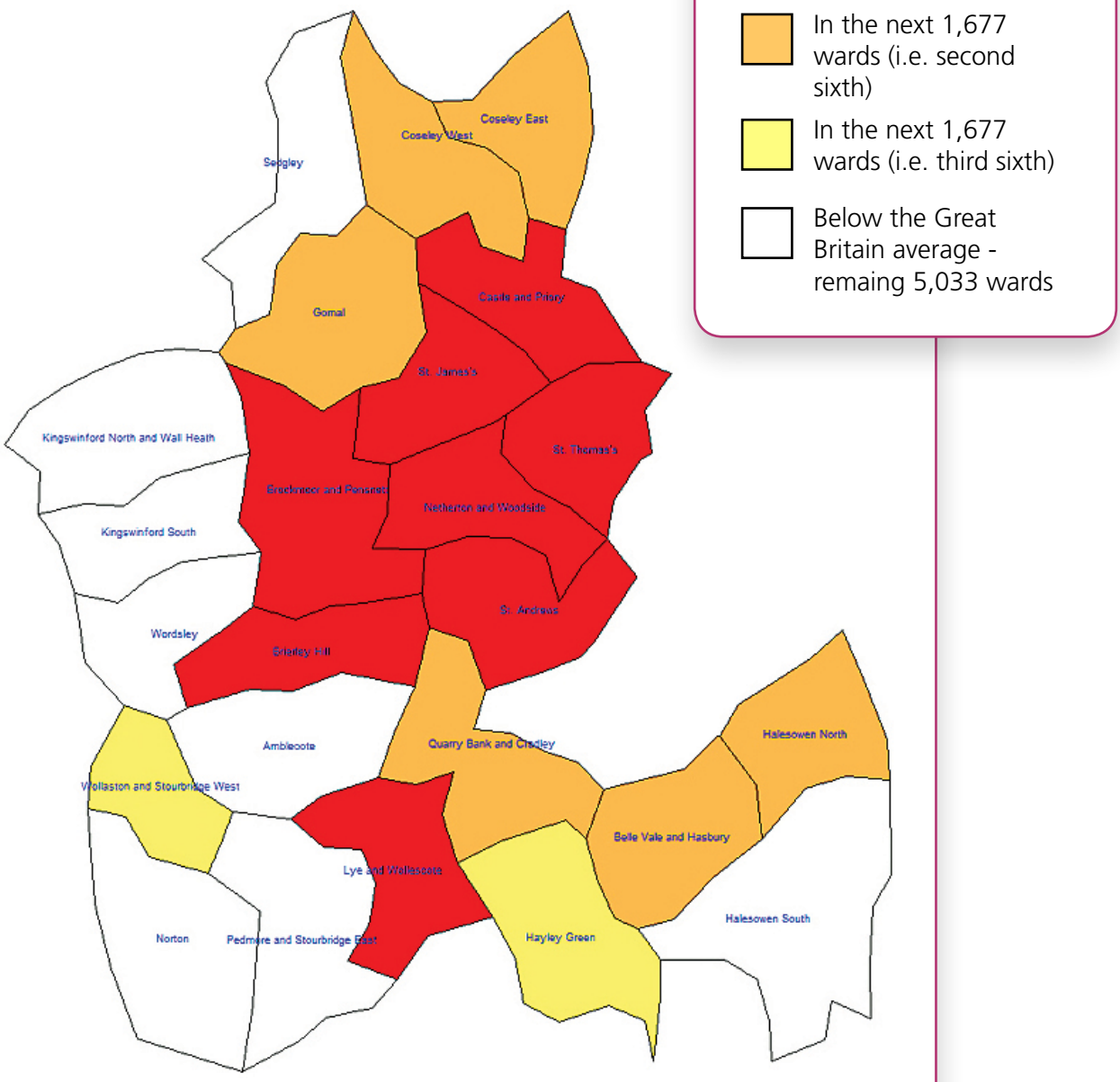
Figure 6.15



Source: ONS Claimant Count NOMIS

Proportion of the working-age population who are in receipt of key out-of work benefits for Dudley (Feb 2009)

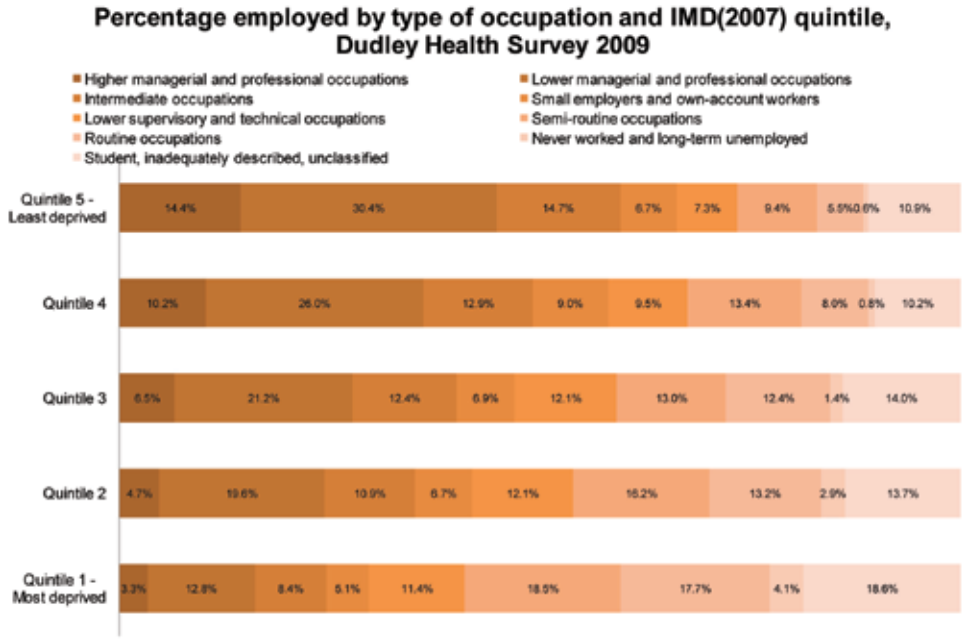
Figure 6.16



Source: Poverty.org.uk (accessed 02/08/2010).

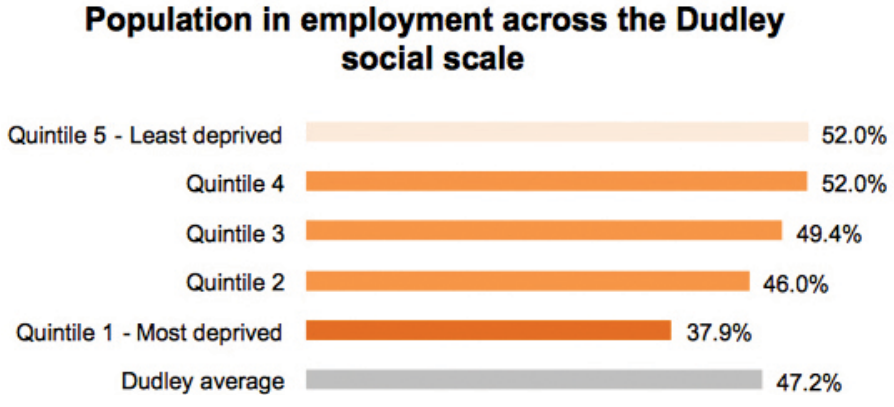
In terms of statistics on employment, the sources of data available have limitations. For example the Annual Business Enquiry collects data based on the pay point of persons rather than where they reside which would mask the social gradient due to the positioning of industrial and business estates within less affluent areas and the high employment rates in town centres which tend to be areas of deprivation. The Census provides a comprehensive source of employment data but the last Census was completed in 2001 and is unlikely to reflect the true current picture. The Annual Population Survey provides data on self-employment but the sample sizes for local authorities are too low for robust analysis at a lower geography. Dudley completed a local Health Survey in 2009 where employment was self-reported. Figure 6.17a shows employment by type (NS-Sec) across the social gradient and figure 6.17b the proportion reported to be in employment from the Dudley Health Survey 2009. There is a strong social gradient for employment, with a lower proportion of people employed in the most deprived quintile compared with the least deprived quintile.

Figure 6.17a



Source: Dudley Health Survey 2009

Figure 6.17b



Source: Dudley Health Survey 2009

Inequality in those in employment across Dudley

Table 6.1

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Population in employment (Dudley Health Survey 2009)	47.2%	NA	52.0%	37.9%	NA	NA	1.37	-14.1%
Population in employment (Census 2001)	54.8%	52.6%	66.6%	51.0%	0.96*	2.2%	1.31	-15.6%

A Healthy Standard of Living for All

Table 6.2 below shows the average weekly household income for Dudley and England, by national quintile. (Using national quintiles, it should be noted that there are no households in Dudley which fall into the top quintile for England).

The income gradient for Dudley is further illustrated by looking at gross weekly pay (Figure 6.18) where both male and female pay show a gradient, with a slightly steeper gradient for men. The gender gap in pay is immediately apparent.

A comparison of the household income gradient in Dudley with that in England is shown in Figure 6.19. Households are ranked by net equivalised income before housing costs and grouped into quintiles. In this chart, the data for Dudley has been grouped into quintiles for Dudley only, whereas the England level data is grouped into quintiles for the whole of England.

Summary of the effects of taxes and benefits by quintile groups on ALL households, 2007-08

Table 6.2

Income per household (£ per week) [2]		Quintile groups of ALL households [1]						Ratio Top/Bottom quintile
		Bottom	2nd	3rd	4th	Top	All households	
Average Total household weekly income (unequivalised)[3]	England	480	569	639	737	946	674	2.0
	Dudley	504	595	676	790	NA	575	1.6
Average Net household weekly income (unequivalised) [4]	England	407	470	523	588	709	539	1.7
	Dudley	423	484	554	615	NA	473	1.5

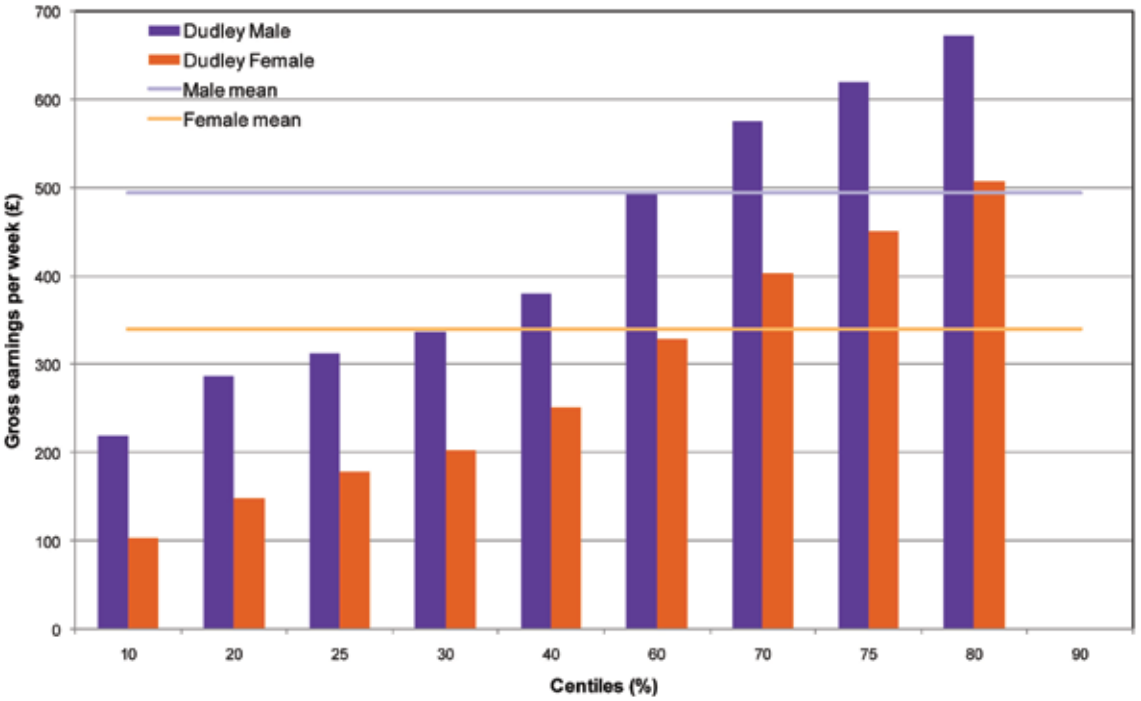
1 Households are ranked by Ave Weekly Household Net Income equivalised before housing costs
2 This table shows unequivalised income. Equivalised income has only been used in the ranking process to produce the quintile groups
3 Total household weekly income (unequivalised) - is the sum of the gross income of every member of the household plus any income from benefits such as Working Families Tax Credit.
4 Net household weekly income (unequivalised) - is the sum of the net income of every member of the household. It is calculated using the same components as gross income but income is net of direct taxes such as income tax, national insurance and council tax

Data source: Income: Model-Based Estimates at MSOA Level, 2007/08, ONS

The income received by households is affected by direct taxation such as income tax, national insurance and council tax. The ratio of the top/bottom quintile for gross income is 1.6 for Dudley and 2.0 for England, whereas this ratio is slightly reduced for net income, when taking account of direct taxes, to 1.5 and 1.7 respectively. A steeper gradient is seen between the bottom and top quintiles for England than for Dudley.

Figure 6.18

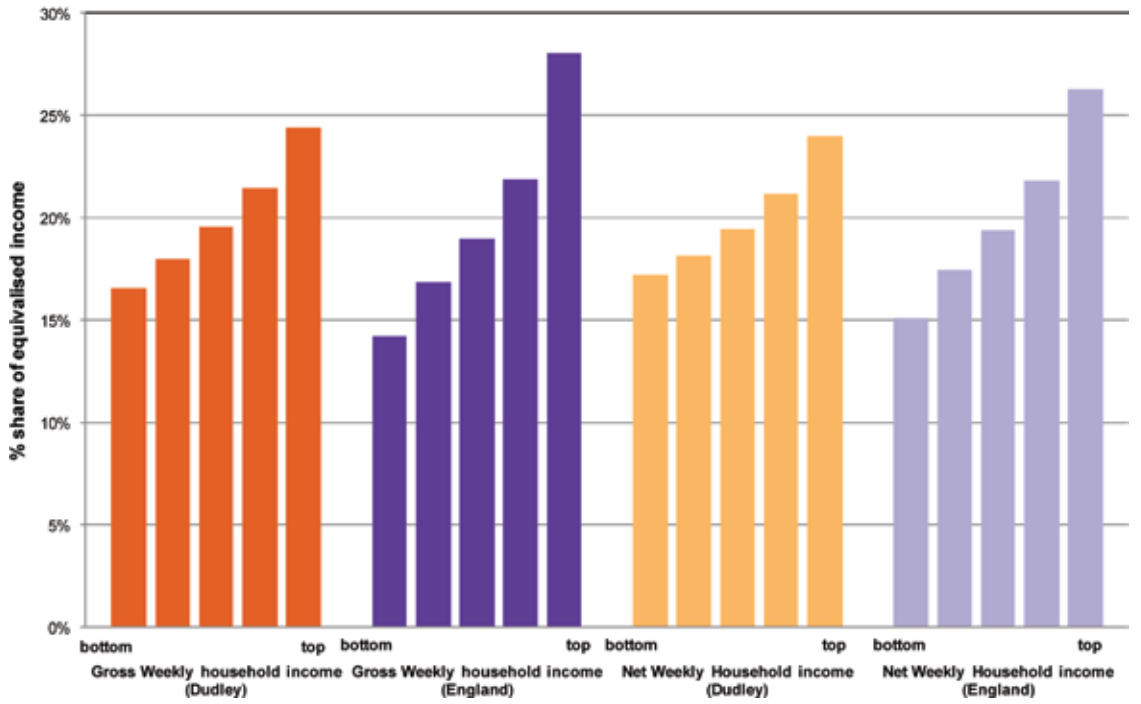
Centiles for Gross Weekly Pay by gender, Dudley, 2009



Data source: www.nomisweb.co.uk, Annual Survey of Hours and Earnings, 2009

Figure 6.19

Percentage Shares of Equivalised Income by Quintile Groups for Households, Dudley, 2007/8

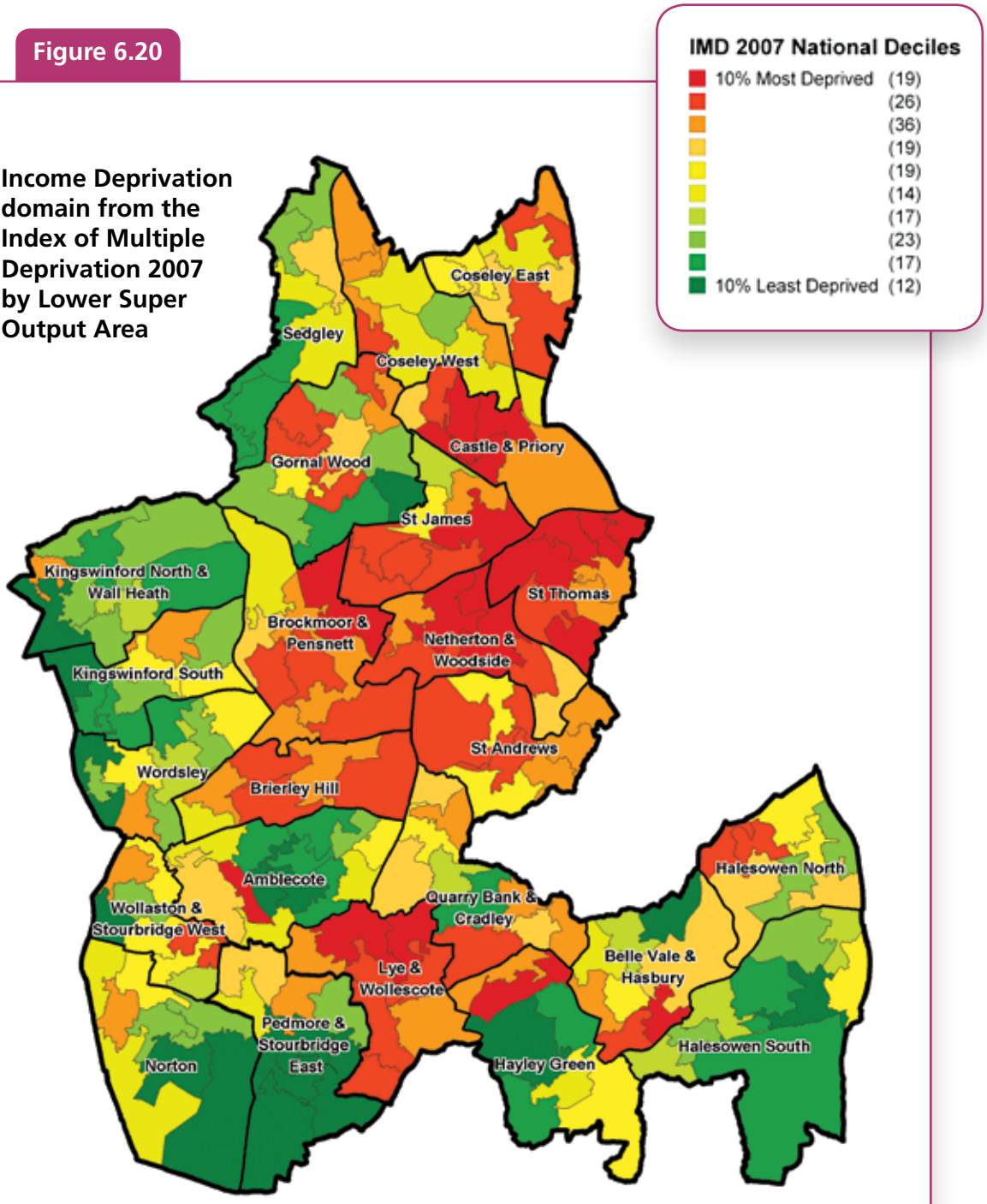


Data source: Income: Model-Based Estimates at MSOA Level, 2007/08, ONS

The spatial distribution of income deprivation in Dudley is shown in Figure 6.20. This map shows income deprivation in Dudley, based on information from the Index of Multiple Deprivation (IMD) 2007.

Figure 6.20

Income Deprivation domain from the Index of Multiple Deprivation 2007 by Lower Super Output Area

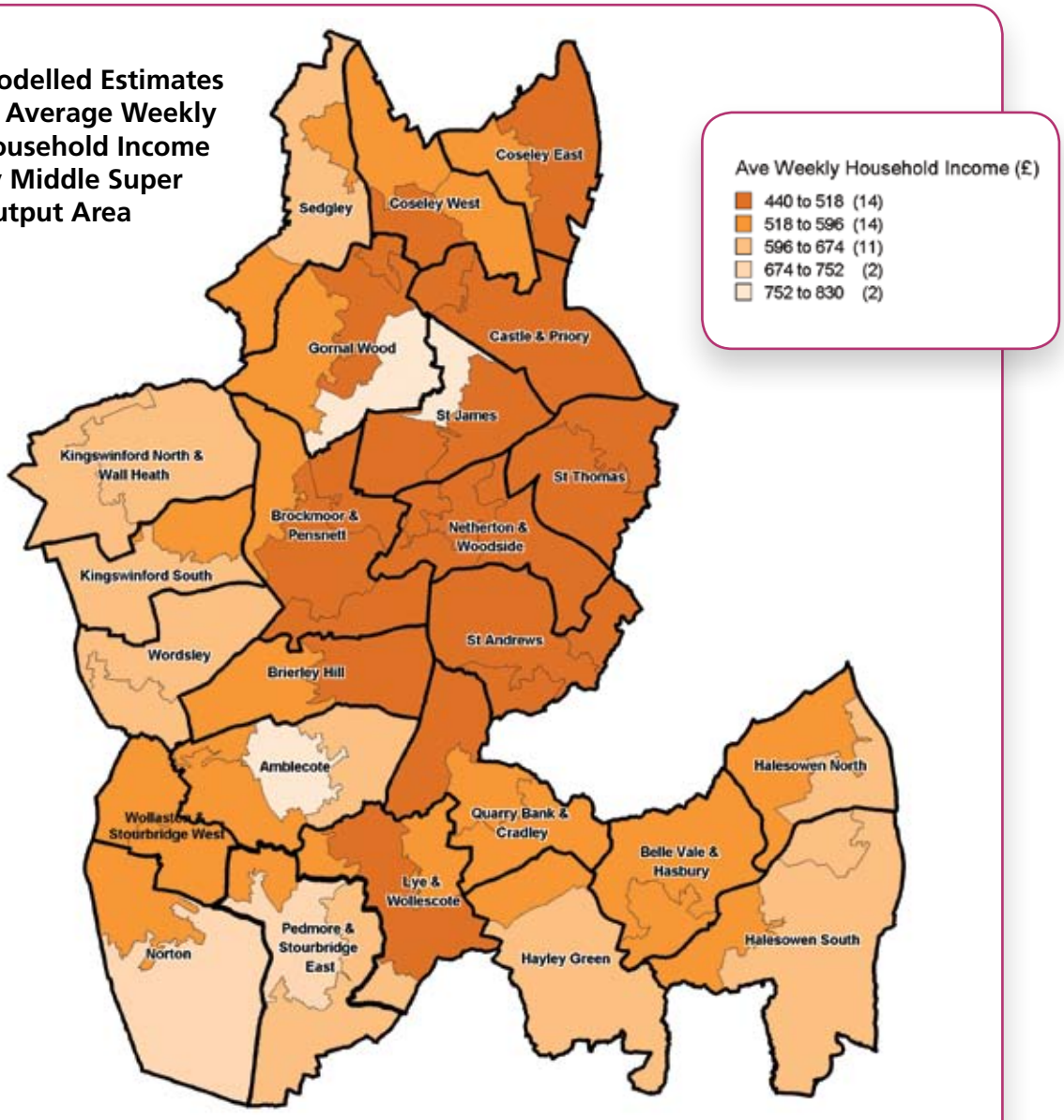


Source: Department of Communities & Local Government Indices of Deprivation, 2007

Figure 6.21 shows the income distribution across Dudley at MSOA level, based on modelled estimates for 2007-8.

Figure 6.21

Modelled Estimates of Average Weekly Household Income by Middle Super Output Area

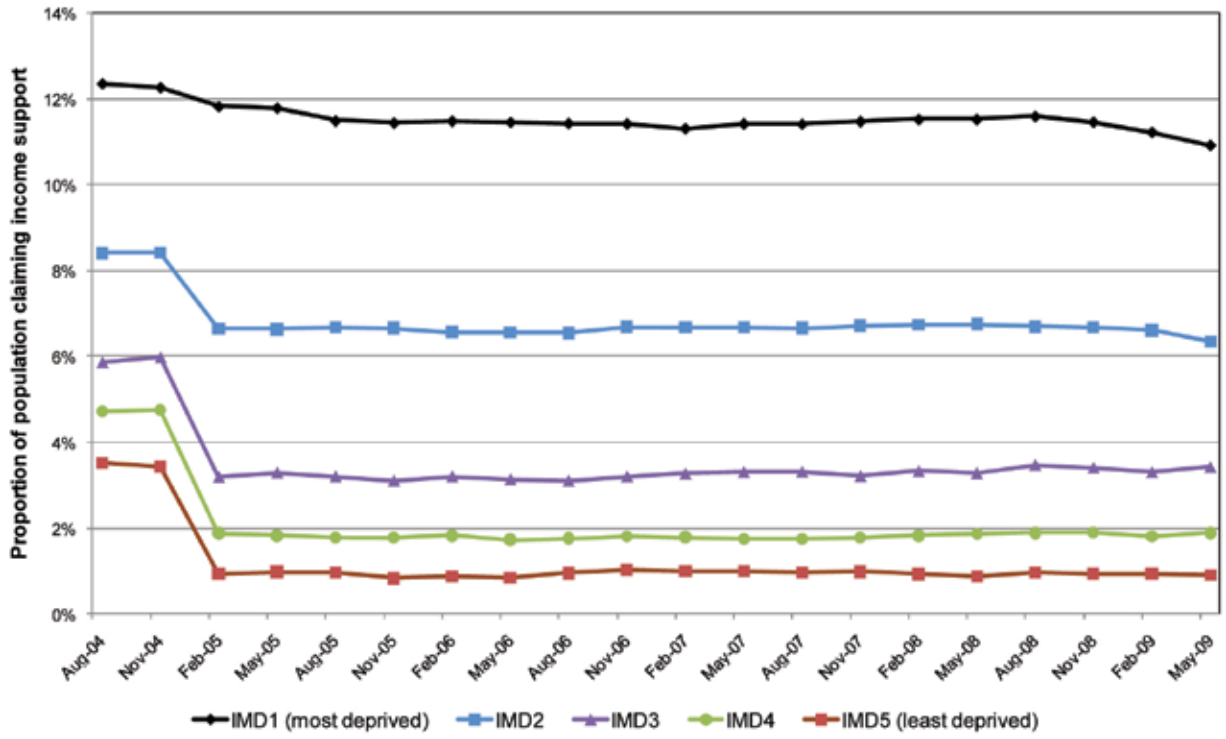


Source: Income: Model-Based Estimates at MSOA Level, 2007/08, ONS

The proportion of income support claimants in the working age population varies by IMD quintile, showing a gradient from most deprived (highest proportion of claimants) to the least deprived (Figure 6.22). IMD is a general measure of deprivation in the round and may be seen as a proxy for social position, although it should be borne in mind that there is a small degree of autocorrelation in that levels of income support form part of one component of the index. Nevertheless the trend lines suggest that the inequality gap appears to be narrowing slightly, with the proportion of claimants of income support in the 2 most deprived quintiles showing a decreasing trend from August 2008. In the 3 least deprived quintiles, the proportion of claimants has stayed fairly constant from February 2005 to May 2009.

Figure 6.22

Proportion of Working Age Population of Dudley Claiming Income Support by Index of Multiple Deprivation (IMD) 2007 National Quintile of Residence



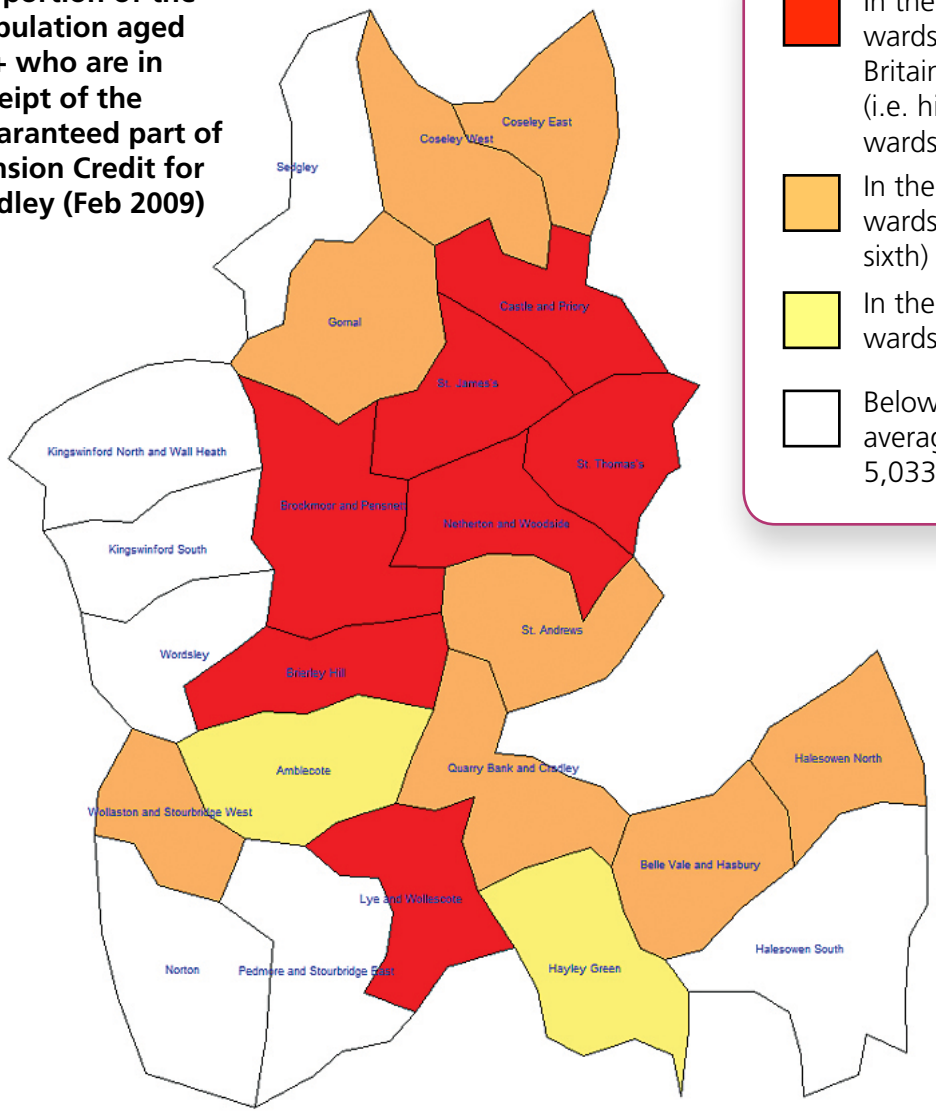
Source: ONS Claimant Count NOMIS.

Note: the steep decline in the number of claimants between November 2004 and February 2005 is due to changes in the benefits system which resulted in some claimants having income support replaced by tax credits.

An indication of pensioner poverty may be gained from examination of the guaranteed part of pension credit. Figure 6.23 shows the spatial distribution for Dudley.

Figure 6.23

Proportion of the population aged 60+ who are in receipt of the Guaranteed part of Pension Credit for Dudley (Feb 2009)



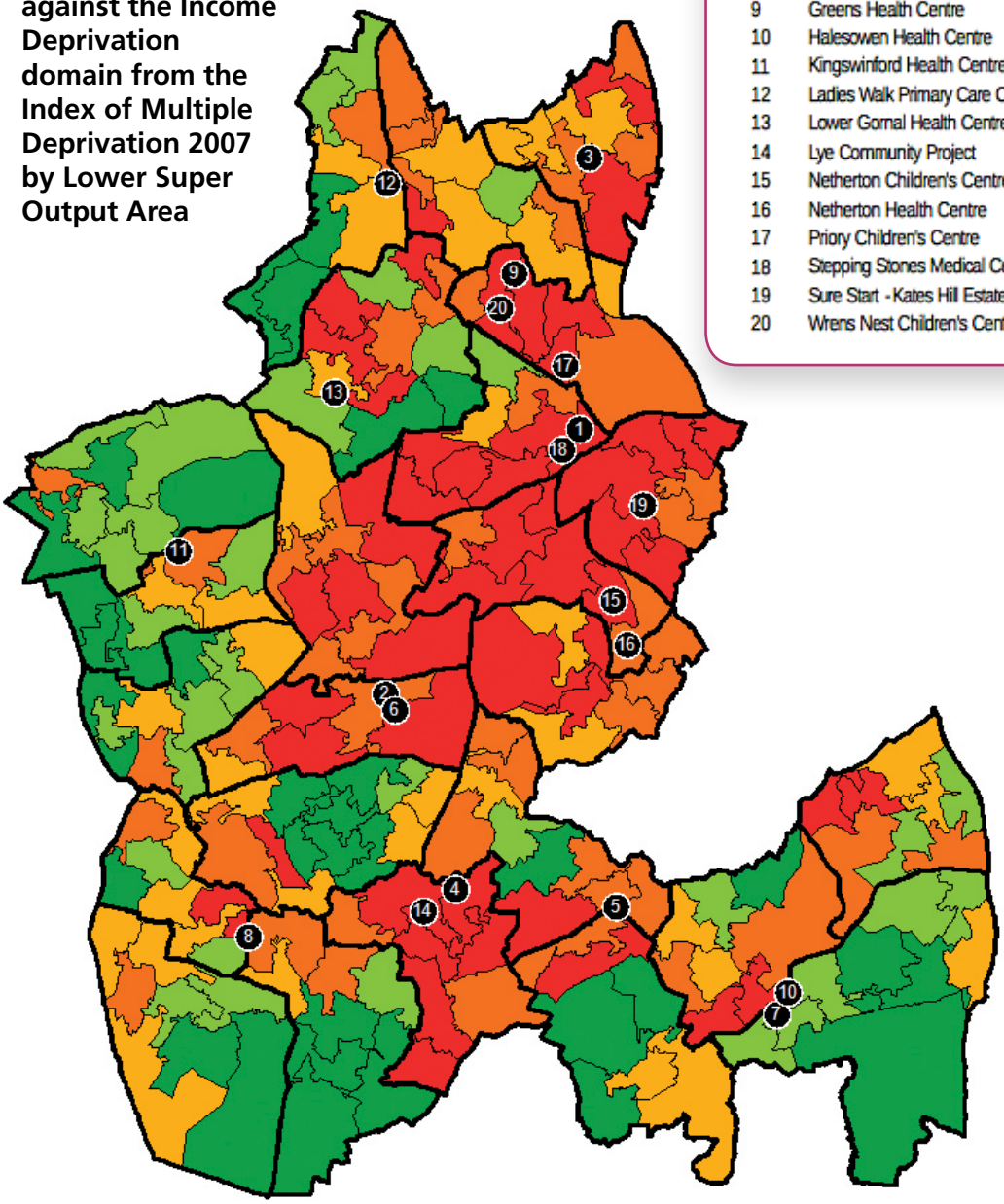
Source: Poverty.org.uk (accessed 02/08/2010).

The GP commissioners in Dudley have mainstreamed the funding of Citizen Advice Bureaus in GP surgeries into a 3 year agreement. With a service provided from 12 of the Borough's 53 practices. The siting of the CAB centres is in centres serving deprived communities.

The service sees between 500 and 600 clients per year (although clients will have multiple appointments), gaining in the region of £0.5m per year additional income for poor people in the Borough. Figure 6.24 shows the location of the CAB centres located in GP practices.

Figure 6.24

Location of Citizen Advice Bureau Centres commissioned by Dudley PCT against the Income Deprivation domain from the Index of Multiple Deprivation 2007 by Lower Super Output Area

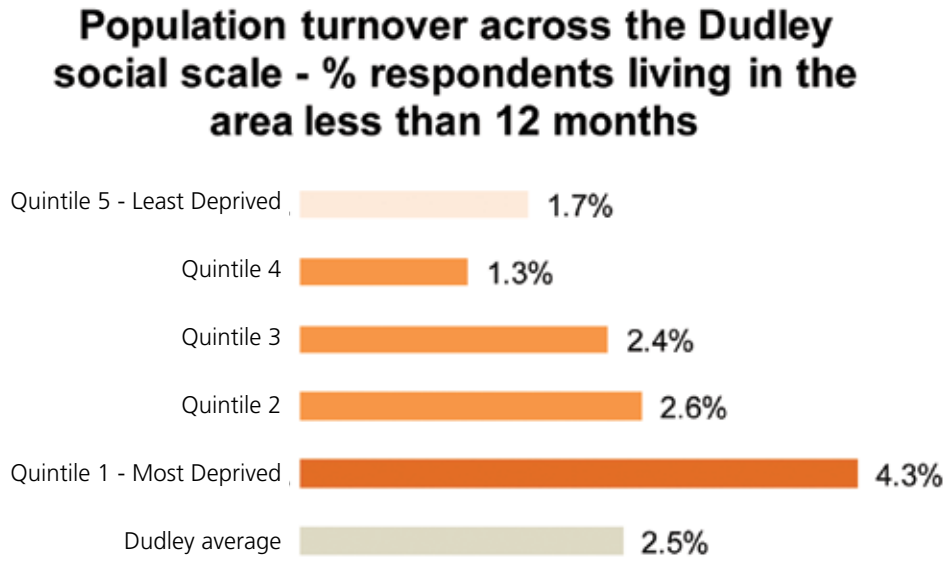


Source: Department of Communities and Local Government, Indices of Deprivation, 2007

Social Capital

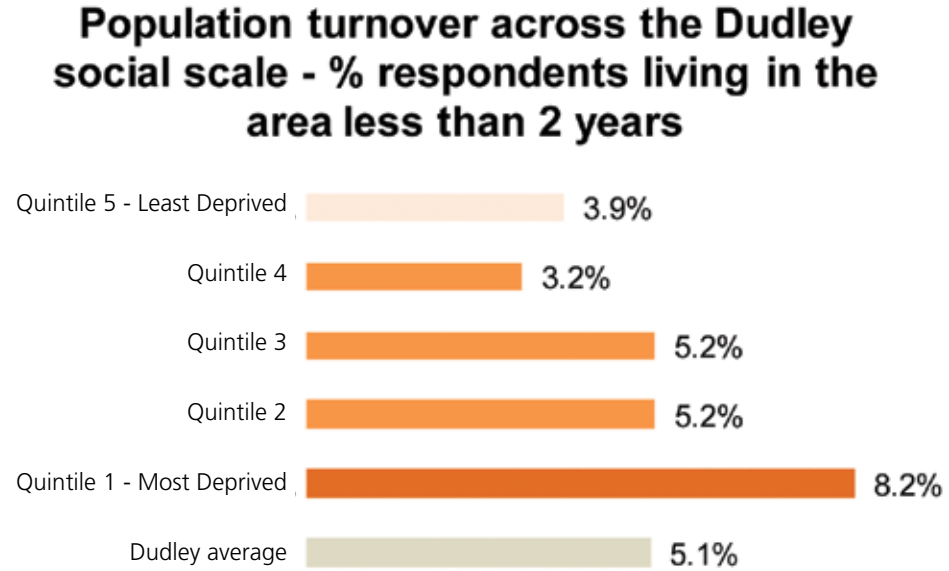
Social capital can be considered a measure of community. It is defined as people feeling connected to their community and being able to contribute to the everyday life of society. Social capital was addressed in the Dudley Health Survey 2004 and included population turnover. Figures 6.25 and 6.26 show the % of respondents living in areas less than one year or two years respectively by national quintile of deprivation. There is a higher turnover in the more deprived areas of the borough, which may indicate that people living in these areas may not be doing so out of their own choice and once their circumstances change they move to other less deprived areas. Overall approximately 2.5% of respondents had lived in their area less than a year and 5% had lived there less than 2 years.

Figure 6.25



Source: Dudley Health Survey 2004

Figure 6.26



Source: Dudley Health Survey 2004

Table 6.3 shows the inequality in population turnover across Dudley.

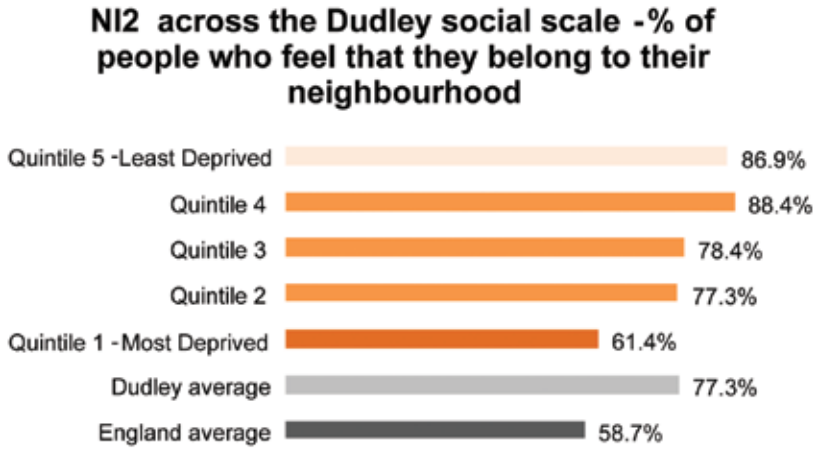
Inequality in population turnover across Dudley

Table 6.3

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Lived in area less than 12 months (Dudley Health Survey 2004)	2.5%	NA	1.7%	4.3%	NA	NA	2.5	2.6%
Lived in area less than 2 years (Dudley Health Survey 2004)	5.1%	NA	3.9%	8.2%	NA	NA	2.1	4.3%

Another example of social capital is how strongly people feel that they belong to their immediate neighbourhood. In Dudley there is a strong social gradient with approximately 60% of people in the most deprived 20% areas in Dudley reporting that they belong to their neighbourhood compared to nearly 87% in the least deprived 20% (Figure 6.27). This corresponds to the results for highest transient population from the Dudley Health Survey 2004. Although there is a feeling of least belonging in the 20% most deprived population of Dudley this is still higher than the England average.

Figure 6.27



Source: Place Survey 2008

Table 6.4 shows the inequality in those who feel they belong to their neighbourhood across Dudley.

Inequality in those who feel they belong to their neighbourhood across Dudley.

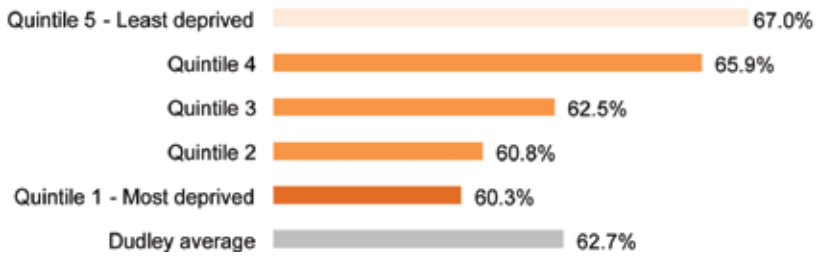
Table 6.4

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
People who feel they belong (Place Survey, 2008)	77.3%	58.7%	86.9%	61.4%	0.76*	18.6%	2.5	-15.5%

The pupil health behaviour survey carried out by Dudley Health Promoting Schools in 2010, asked pupils if they had to often make new friends because their old friends were with someone else. Across Dudley 62.7% of pupils say they often have to make new friends and there appears to be a positive social gradient with less pupils in the most deprived quintile having to often make new friends (Figure 6.28). There was a similar picture for secondary (years 8 and 10) pupils with 11.5% agreeing that they often have to find new friends overall in Dudley and for the 20% most deprived and this increased to 12.6% in the 20% least deprived quintile.

Figure 6.28

Across the Dudley social scale -% of Primary School pupils Years 5 and 6 who often have to find new friends because your old friends are with someone else



Source: Dudley Schools Health Behaviour Survey 2010

Inequality in those who often have to find new friends across Dudley.

Table 6.5

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Primary Pupils who often have to find new friends (Dudley Health Behaviour Survey, 2010)	62.7%	NA	67.0%	60.3%	NA	NA	0.90	-6.7%
Secondary Pupils who often have to find new friends (Dudley Health Behaviour Survey, 2010)	11.5%	NA	12.6%	11.5%	NA	NA	0.91	-1.1%

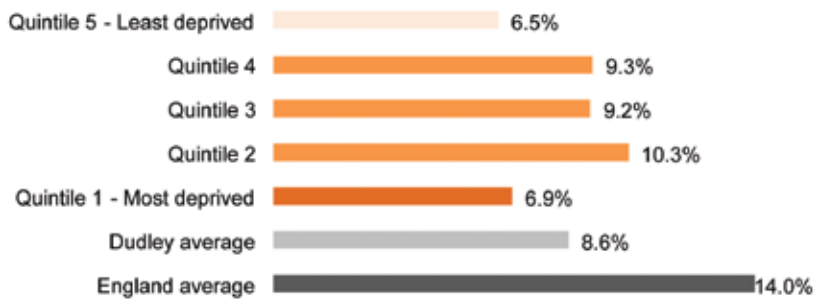
> Across Dudley 62.7% of pupils say they often have to make new friends and there appears to be a positive social gradient with less pupils in the most deprived quintile having to often make new friends

Contribution to everyday life

The Place Survey asks whether people have been involved in decisions that affect the local area in the past 12 months (have been involved in one or more decision making groups over the last 12 months). Nationally 14% had been involved in decision making groups. This was only 8.6% in Dudley and there was weak negative social gradient; though it appears that there is least contribution to decision making from the 20% most and least deprived of the population (Figure 6.29).

Figure 6.29

NI3 across the Dudley social scale -% of people who feel that they contributed to decision making groups



Source: Place Survey 2008

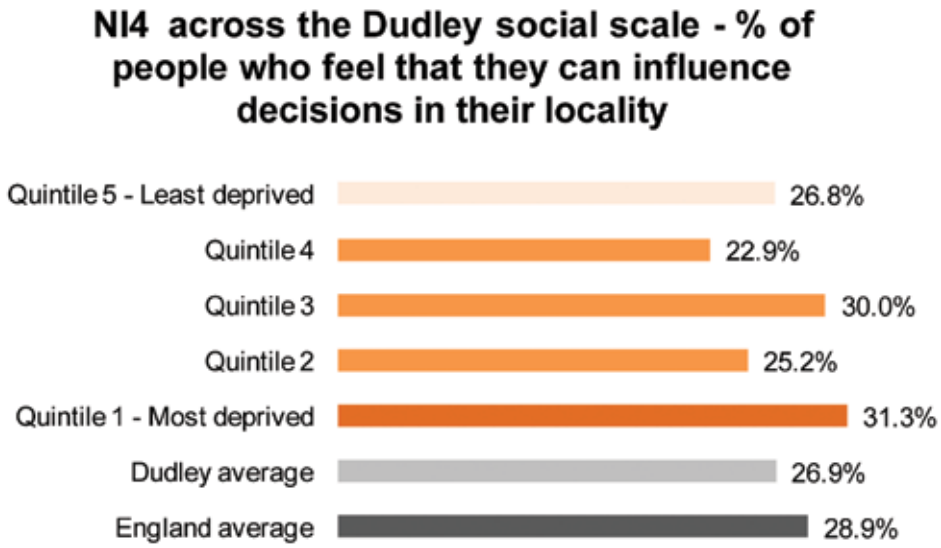
Inequality in those who feel they contributed to decision making groups across Dudley.

Table 6.6

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
People who feel they contributed to decision making groups (Place Survey, 2008)	8.6%	14.0%	6.5%	6.9%	1.63*	-5.4%	0.94	0.4%

Feeling that you can influence decisions in your own local area is an important indicator of social capital. According to the Place Survey results in Dudley, people living in the most deprived and middle quintiles of deprivation are most likely to feel that they can influence decisions in their local area. The level of people feeling that they could influence the decisions in their local area was slightly lower than England overall (Figure 6.30).

Figure 6.30



Source: Place Survey 2008

Inequality in those who feel they can influence decisions across Dudley.

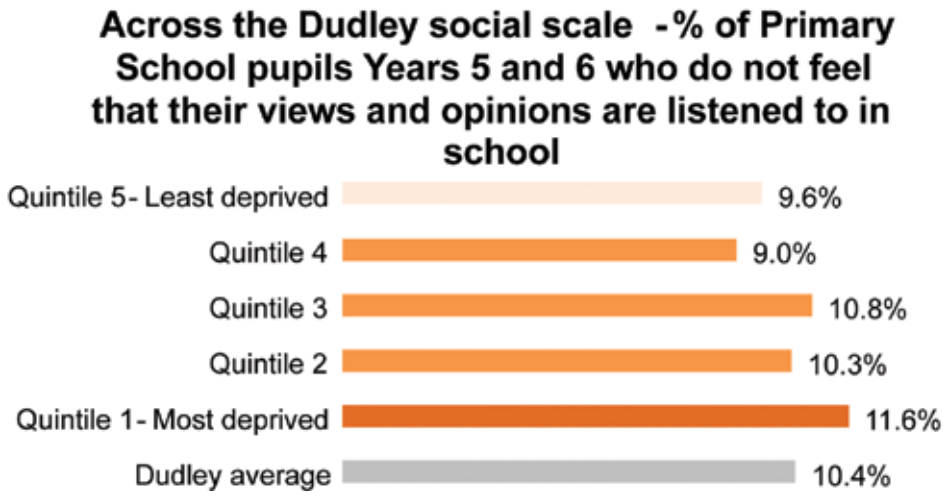
Table 6.7

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
People who feel they can influence decisions (Place Survey, 2008)	26.9%	28.9%	26.8%	31.3%	1.07	-2.0%	0.86	4.5%

Being able to influence decisions affecting your own life is also linked with wellbeing for children. Dudley's Health Promoting Schools Health Behaviour survey asks pupils if they feel that their opinions are listened to in school. There was a negative social gradient with a higher proportion of primary pupils in the most deprived areas who don't believe that they are listened to than those in the least deprived quintile (Figure 6.31). This was less noticeable for the Secondary School pupils where a greater proportion of pupils in both the most and least deprived quintiles believed that they were not listened to and both felt they were listened to less than the 3rd quintile of deprivation (Figure 6.32).

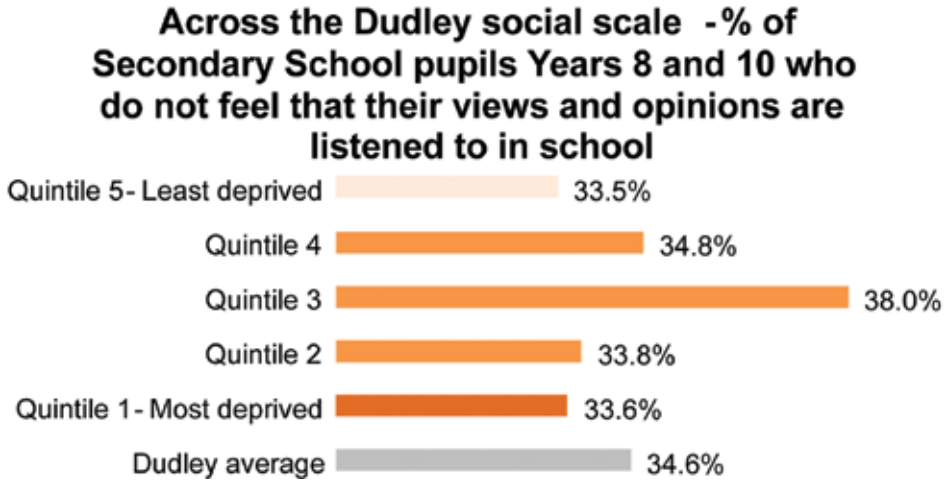
Table 6.8 shows the inequality in ability to influence changes in schools across Dudley.

Figure 6.31



Source: Dudley Schools Health Behaviour Survey 2010

Figure 6.32



Source: Dudley Schools Health Behaviour Survey 2010

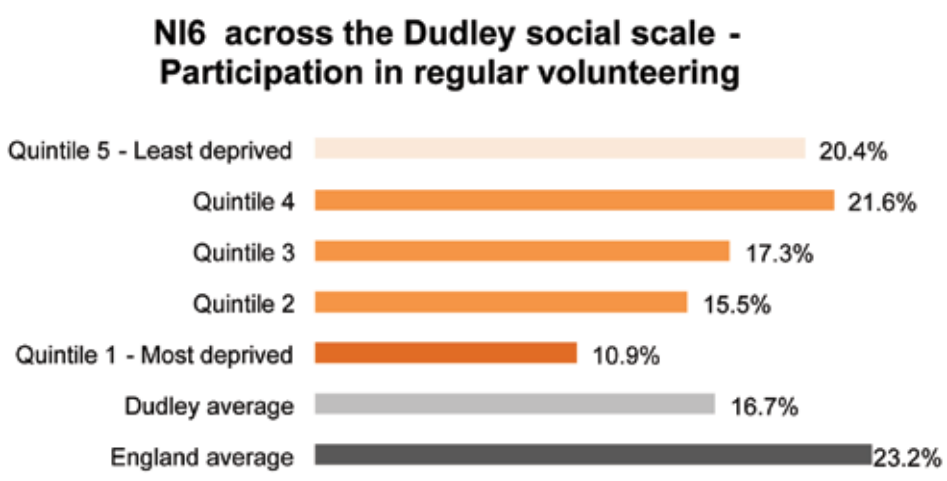
Inequality in ability to influence changes in schools across Dudley.

Table 6.8

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Primary Pupils who often don't believe they are listened to (Dudley Health Behaviour Survey, 2010)	10.4%	NA	9.6%	11.6%	NA	NA	1.21	2.0%
Secondary Pupils who don't believe they are listened to (Dudley Health Behaviour Survey, 2010)	34.6%	NA	33.5%	33.6%	NA	NA	1.00	0.1%

Participation in volunteering is another indicator of social capital within communities. In Dudley, people in deprived areas are less likely to report that they are involved in volunteering and participation in volunteering is lower in Dudley than England (Figure 6.33).

Figure 6.33



Source: Place Survey 2008

Inequality in participation in volunteering across Dudley.

Table 6.9

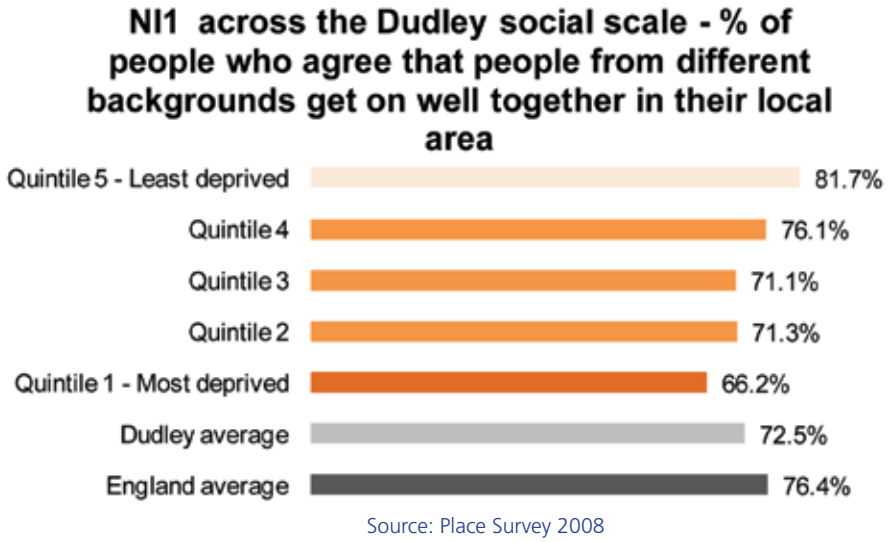
Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Participation in volunteering (Place Survey, 2008)	16.7%	23.2%	20.4%	10.9%	1.39*	-6.5%	1.87	-9.5%

Community Cohesion

This is an important determinant of health and a community that has good cohesion is one where the people of different groups feel that they get on both within and across the different communities. The Place Survey along with the Dudley Schools Health Behaviour Survey includes several measures of community cohesion.

The Place Survey asked whether people think their area is a place where people from different backgrounds get on together. There is a strong social gradient for this indicator with more deprived areas less likely to agree that people from different backgrounds get on well together (Figure 6.34). Only two thirds of people in the 20% most deprived quintile group felt that people from different backgrounds get on well together in their local area compared with 82% in the most affluent 20%.

Figure 6.34



Source: Place Survey 2008

Inequality in people from different backgrounds getting on across Dudley.

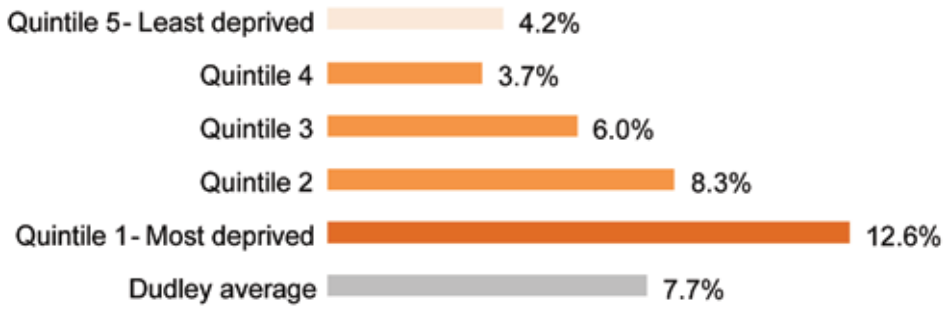
Table 6.10

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people that agree that people from different backgrounds get on (Place Survey, 2008)	72.5%	76.4%	81.7%	66.2%	1.05*	-3.9%	1.26*	-15.5%

The Dudley Pupil Health Behaviour Survey asked if they felt they were being picked on or bullied due to their colour, race or religion. There is a strong social gradient for pupils feeling that they are picked on or bullied due to their colour, race or religion in Primary pupils with three times as many in the 20% most deprived compared with the 20% most affluent (Figure 6.35). This was less evident in Secondary school pupils (Figure 6.36).

Figure 6.35

Across the Dudley social scale -% of Primary School pupils Years 5 and 6 who feel they are picked on or bullied because of their colour, race or religion



Source: Dudley Schools Health Behaviour Survey

Figure 6.36

Across the Dudley social scale -% of Secondary School pupils Years 8 and 10 who feel they are picked on or bullied because of their colour, race or religion

Source: Dudley Schools Health Behaviour Survey

Inequality in bullying due to colour, race or religion in schools across Dudley.

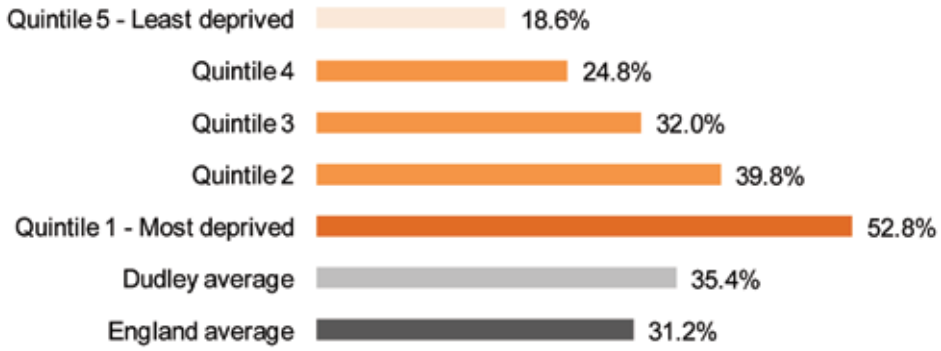
Table 6.11

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Primary Pupils who feel they are bullied due to colour, race or religion (Dudley Health Behaviour Survey, 2010)	7.7%	NA	4.2%	12.6%	NA	NA	3.00*	8.4%
Secondary Pupils who feel they are bullied due to colour, race or religion (Dudley Health Behaviour Survey, 2010)	5.9%	NA	4.6%	7.0%	NA	NA	1.52	3.4%

The Place Survey asked people to say whether they think there is a problem with people not treating each other with respect and consideration in the area. This indicator is strongly associated with deprivation with just over half of people in the most deprived areas reporting that people don't treat each other with respect and consideration in their area compared to less than a fifth of people in the 20% most affluent areas (Figure 6.37).

Figure 6.37

NI23 across the Dudley social scale - perceptions that people in the area do not treat one another with respect and consideration



Source: Place Survey 2008

Table 6.12

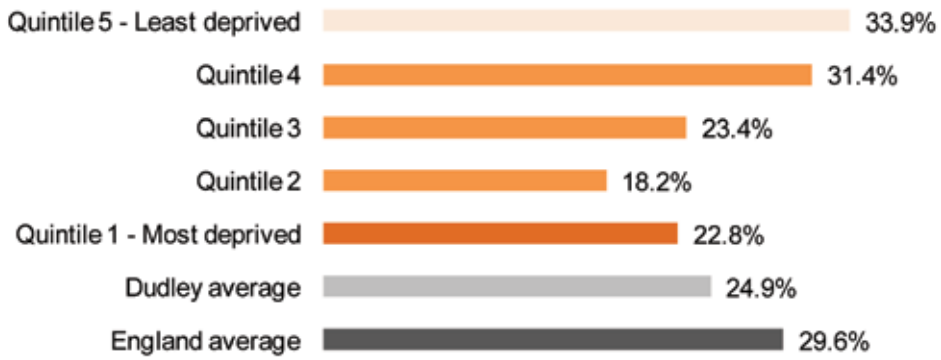
Inequality in people treating each other with respect across Dudley.

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people that agree that people do not treat each other with respect (Place Survey, 2008)	35.4%	31.2%	18.6%	52.8%	1.13*	4.2%	2.84*	34.2%

The Place Survey asked whether people felt parents take enough responsibility for their children. Perceptions of parents taking responsibility for their children are lowest in the second most deprived quintile group (Figure 6.38).

Figure 6.38

NI22 across the Dudley social scale - perceptions of parents taking responsibility for their children in the area



Source: Place Survey 2008

Inequality in perceptions of parents taking responsibility for children across Dudley.

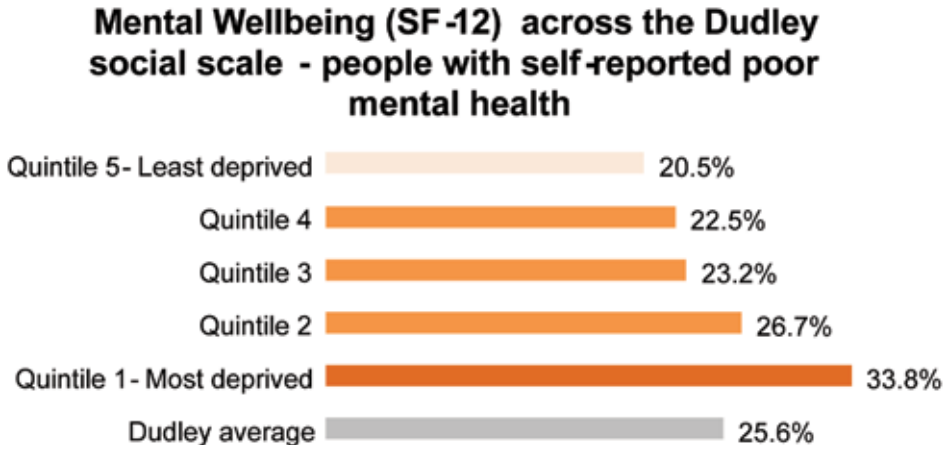
Table 6.13

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people that agree that parents take responsibility for their children (Place Survey, 2008)	24.9%	29.6%	33.9%	22.8%	1.19*	-4.7%	1.49*	-11.1%

Personal Wellbeing

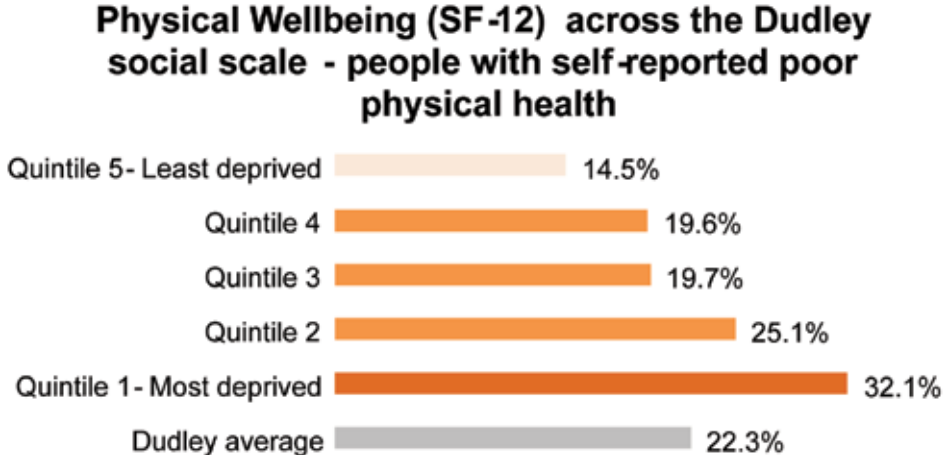
Personal wellbeing is where people feel happy, fulfilled, valued, positive and in control. The Dudley Health Survey included SF-12 mental and physical wellbeing scores. This highlights that levels of mental well-being are poorest in the most deprived areas and improve with increasing levels of affluence (Figure 6.39). The same was true for self-reported physical health (Figure 6.40).

Figure 6.39



Source: Dudley Health Survey 2009

Figure 6.40



Source: Dudley Health Survey 2009

Inequality in SF-12 score of mental and physical health across Dudley.

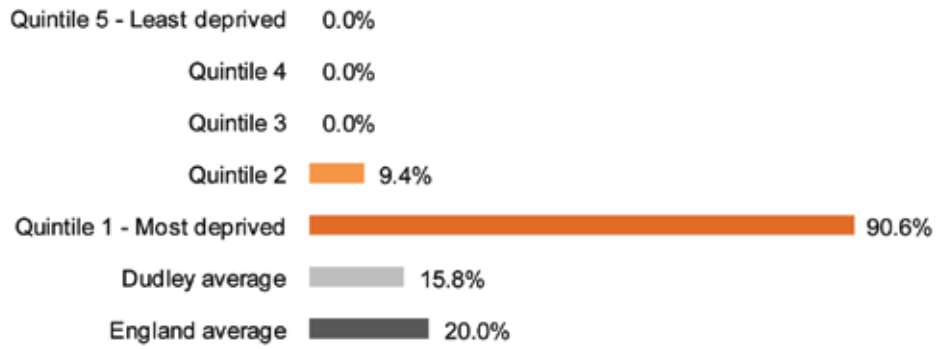
Table 6.14

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people that had low SF-12 mental wellbeing score (Dudley Health Survey, 2009)	25.6%	NA	20.5%	33.8%	NA	NA	1.65*	13.3%
% of people that had low SF-12 physical wellbeing score (Dudley Health Survey, 2009)	22.3%	NA	14.5%	32.1%	NA	NA	2.21*	17.6%

The Child Wellbeing Index has been developed using the same methodology as that used to create the Index of Multiple Deprivation 2007. It is not a measure of deprivation as it contains domains that are not strictly related to deprivation. It does however contain some of the same indicators used in the IMD 2007. The Child Wellbeing Index shows Dudley to have less LSOAs ranked in the 20% most deprived nationally than would be expected (15.8%) but these are concentrated in the areas of highest deprivation according to the Index of Multiple Deprivation 2007 (Figure 6.41).

Figure 6.41

Child Wellbeing Index, overall wellbeing across the Dudley social scale (% LSOAs ranked in the bottom 20% nationally for wellbeing)



Source: Child Wellbeing Index 2009 and ID2007, Department for Communities and Local Government

Table 6.15

Inequality in Child Wellbeing across Dudley

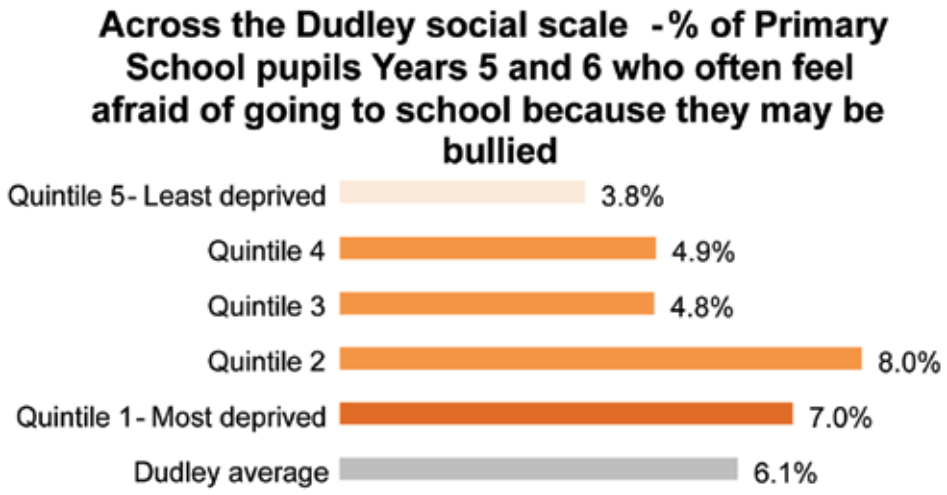
Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Child wellbeing - % of LSOAs ranked in the bottom 20% nationally (Child wellbeing index 2009)	15.8%	20.0%	0.0%	90.6%	0.79*	-4.2%	9.64+*	90.6%
+ 4th least deprived quintile used because least deprived is 0.0%								

> The Child Wellbeing index shows Dudley to have less LSOAs ranked in the 20% most deprived nationally than would be expected (15.8%)

Bullying

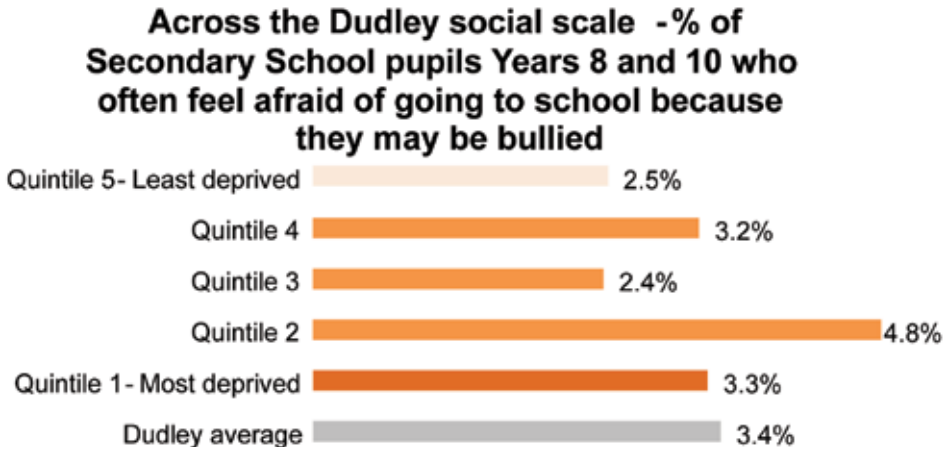
Cohesive communities should be free of bullying and harassment. The Dudley Schools Health Behaviour Survey (2010) asked pupils about levels of bullying in their schools. Across Dudley just over 6% of primary school pupils questioned and 3.5% of secondary school pupils answered that they are often afraid of going to school because of being bullied. There is a clear social gradient with bullying more likely in both primary and secondary (to a lesser extent) pupils from the two most deprived quintiles (Figures 6.42 and 6.43 respectively).

Figure 6.42



Source: Dudley Schools Health Behaviour Survey 2010

Figure 6.43



Source: Dudley Schools Health Behaviour Survey 2010

Inequality in bullying in schools across Dudley.

Table 6.16

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Primary Pupils who often feel afraid of going to school because they may be bullied (Dudley Health Behaviour Survey, 2010)	6.1%	NA	3.8%	7.0%	NA	NA	1.84*	3.2%
Secondary Pupils who often feel afraid of going to school because they may be bullied (Dudley Health Behaviour Survey, 2010)	3.4%	NA	2.5%	3.3%	NA	NA	1.32	0.8%

Environment

The local environment within which people live can have a significant impact on their health and wellbeing. The Place Survey asked respondents to say whether they are satisfied with the area where they live. There was a significant social gradient for satisfaction with the local area, with 87% of people in the 20% least deprived quintile satisfied compared with only 61% in the 20% most deprived quintile group (Figure 6.44).

Figure 6.44

NI5 across the Dudley social scale - overall/general satisfaction with the local area

Source: Place Survey 2008

Table 6.17

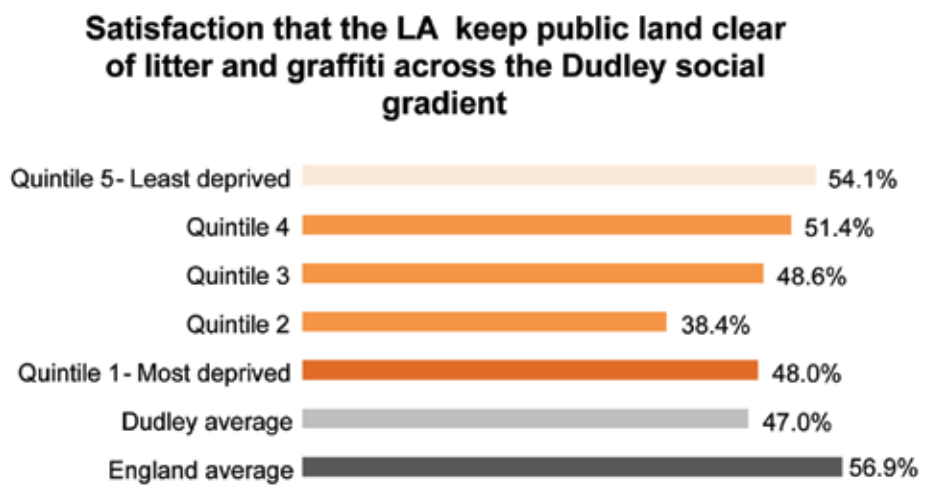
Inequality in satisfaction with the local area across Dudley.

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people generally satisfied with the local area (Place Survey, 2008)	77.3%	79.7%	86.9%	61.4%	1.03	-2.4%	1.42*	-25.5%

Litter/detritus/graffiti

The Place Survey looked at whether people felt the area was kept clear of litter and graffiti by the local authority. There is a strong relationship with deprivation with 54% of people in the least deprived areas reporting they were satisfied compared to 48% in the most deprived areas. The second most deprived quintile actually showed the least satisfaction at just 38%.

Figure 6.45



Source: Place Survey 2008

Inequality in satisfaction with the LA keeping public land clear across Dudley.

Table 6.18

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people satisfied with the LA keeping public land clear (Place Survey, 2008)	47.0%	56.9%	54.1%	48.0%	1.21*	-9.9%	1.13	-6.1%

> There is a strong relationship with deprivation with 54% of people in the least deprived areas reporting they were satisfied compared to 48% in the most deprived areas.

Community Safety

Crime and community safety are important determinants of health and high levels of crime can be detrimental to community participation.

Actual Crime

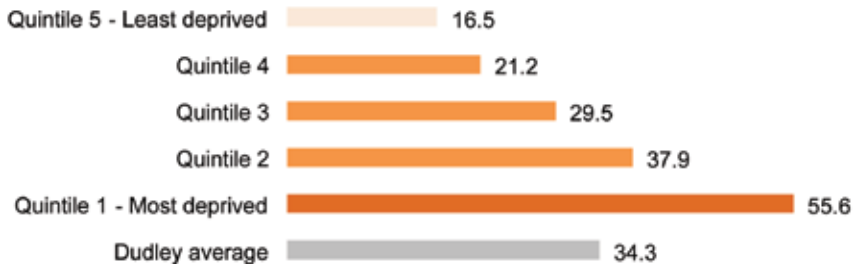
The rate of British Crime Survey (BCS) comparator crime for the period January-December 2010 in Dudley refers to crimes that are covered by the BCS (e.g. vehicle theft, domestic burglary, theft from a person, theft of a pedal cycle, criminal damage and violent crime).

There is a significant inequality in crime with those in the most deprived areas many more times more likely to be a victim of crime than those in the least deprived areas (Figure 6.46a).

Violence against the person is also strongly associated with deprivation in Dudley. Recorded violence against the person offences are six times as likely for those in the most deprived quintile than in the least deprived quintile (Figure 6.46b).

Figure 6.46a

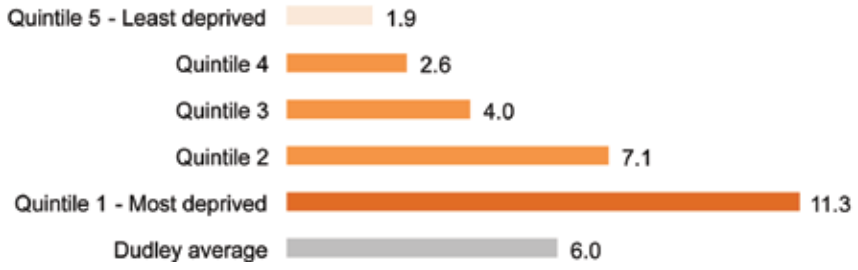
Recorded crime BCS comparator offences per 1,000 of the population, 2010, across the Dudley social gradient



Source: Dudley Community Safety Partnership, Safe & Sound

Figure 6.46b

Violence against the person offences per 1,000 of the population, 2010, across the Dudley social gradient

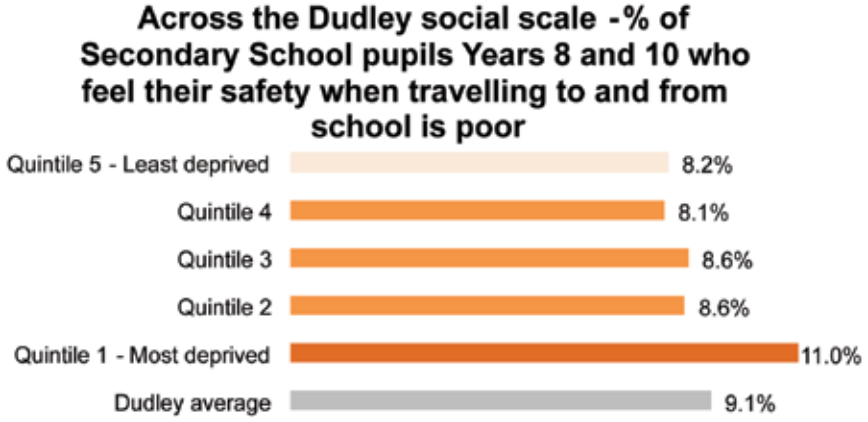


Source: Dudley Community Safety Partnership, Safe & Sound

Perceptions of Crime

Dudley School Health Behaviour Survey asks Secondary school pupils how they rate their safety in their local area when travelling to and from school. There is a social gradient with a higher proportion of pupils in the 20% most deprived quintile rating their safety as poor (Figure 6.47).

Figure 6.47



Source: Dudley Schools Health Behaviour Survey 2010

Inequality in BCS Comparator crimes, violence against the person and feeling safe in travelling to and from school across Dudley.

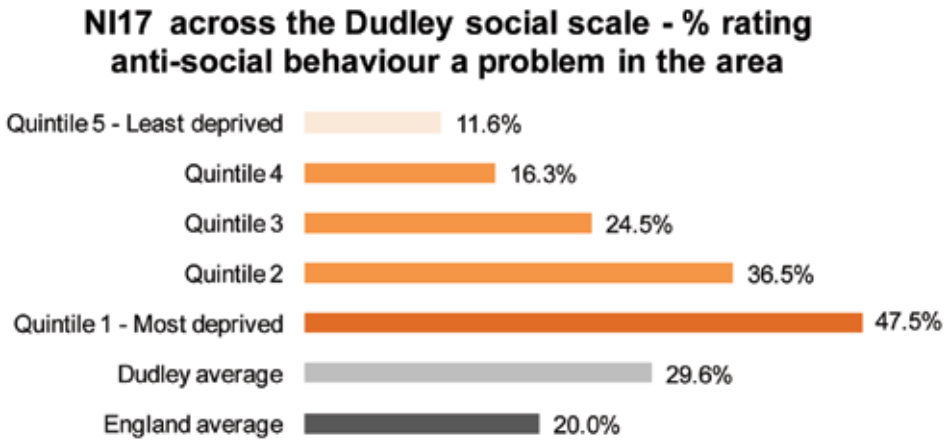
Table 6.19

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
BCS Comparator crimes per 1,000 population (Dudley Community Safety Partnership, 2010)	34.3	NA	16.5	55.6	NA	NA	3.4*	39.1
Violence against the person offences per 1,000 population (Dudley Community Safety Partnership, 2010)	6.0	NA	1.9	11.3	NA	NA	5.9*	9.4
% of Secondary Pupils rating their safety travelling to school as poor (Dudley Schools Health Behaviour Survey, 2010)	9.1%	NA	8.2%	11.0%	NA	NA	1.34	2.8%

> There is a social gradient with a higher proportion of pupils in the 20% most deprived quintile rating their safety as poor

The Place Survey asked people if they felt that anti-social behaviour was a problem in their local area. This may be used as a proxy indicator for fear for their safety. Dudley rates anti-social behaviour as a greater problem than the rest of England and there is a very strong social gradient with the most deprived area at 47.5% rating anti-social behaviour as a problem compared to only 11.6% in the least deprived quintile (Figure 6.48). The survey also asked whether people agree that the police/other public services are successfully dealing with anti-social behaviour and crime in the local area. Less people in Dudley feel that the LA/Police are doing enough to deal with anti-social behaviour than England, and people are less likely to agree that enough is being done in the 20% least deprived area (Figure 6.49). This finding is contrary to the previous indicator (NI17) where the least deprived area considered anti-social behaviour to be of little concern.

Figure 6.48



Source: Place Survey 2008

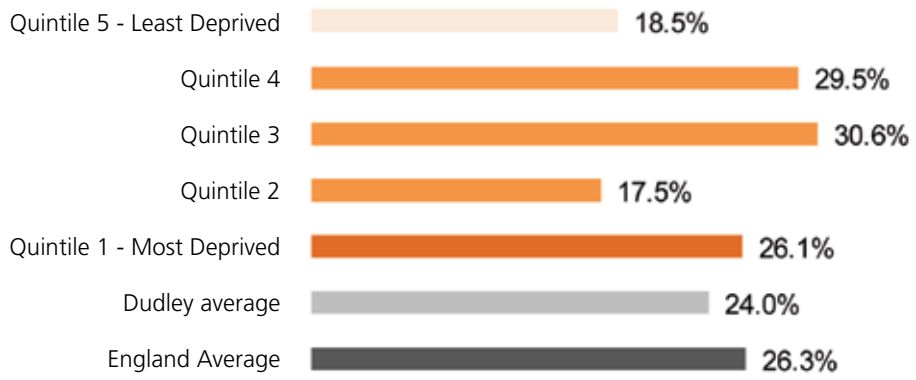
Inequality in rating anti-social behaviour a problem in the area across Dudley.

Table 6.20

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people considering anti-social behaviour in the area a problem (Place Survey, 2008)	29.6%	20.0%	11.6%	47.5%	1.48*	9.6%	4.09*	35.9%

Figure 6.49

NI21 across the Dudley social scale - % who agree that the police and other public services are successfully dealing with the anti-social behaviour and crime in their local area



Source: Place Survey 2008

Inequality in perceptions of LA dealing with local concerns across Dudley.

Table 6.21

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people agreeing LA and police deal with local concerns (Place Survey, 2008)	24.0%	26.3%	18.5%	26.1%	1.10	-2.3%	1.41	7.6%

The Place Survey asked respondents if they agree that the police and other local public services seek people's views about anti-social behaviour in their area. Dudley is similar to the National pattern and people in the 40% most deprived area are least likely to agree that public services seek people's views about anti-social behaviour and crime (Figure 6.50).

Figure 6.50

NI27 across the Dudley social scale - % who agree that the police and other public services are successfully dealing with the anti-social behaviour and crime in their local area

Source: Place Survey 2008

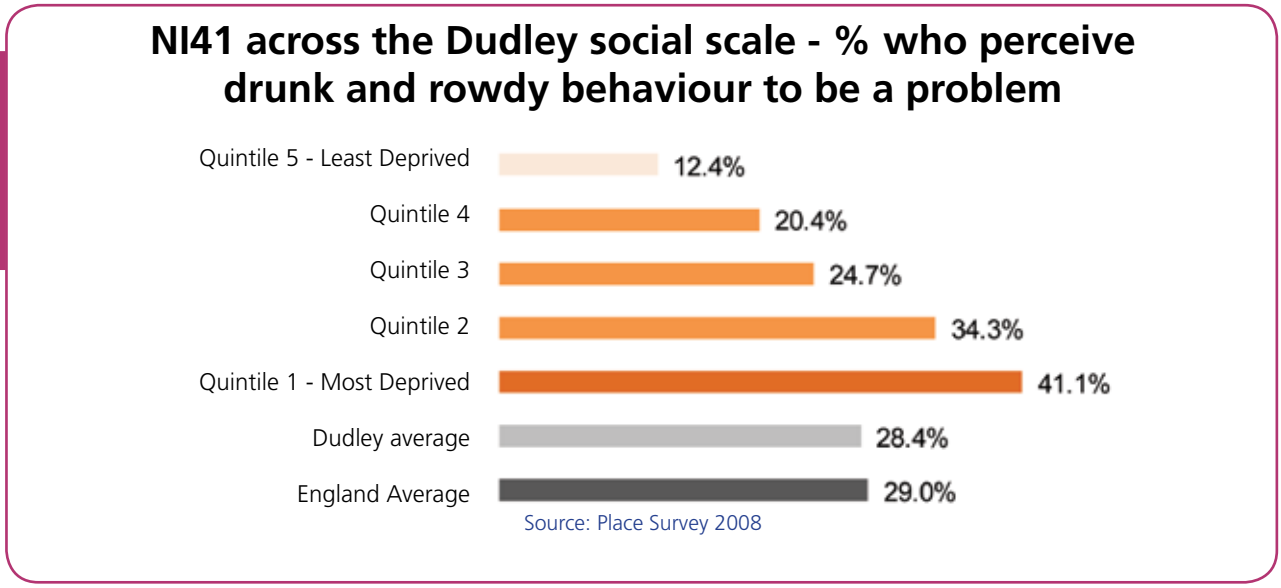
Inequality in LA and police understanding local concerns across Dudley.

Table 6.22

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people agreeing LA and police understand local concerns (Place Survey, 2008)	24.3%	24.8%	28.0%	23.5%	1.02	-0.5%	1.19	-4.5%

There is a strong association between perceptions that drunk and rowdy behaviour is a problem and deprivation (Figure 6.51). 40% of people in the most deprived quintile believe drunk and rowdy behaviour to be a problem compared to only 12% in the least deprived quintile.

Figure 6.51



Inequality in perceptions of drunk and rowdy behaviour as a problem across Dudley.

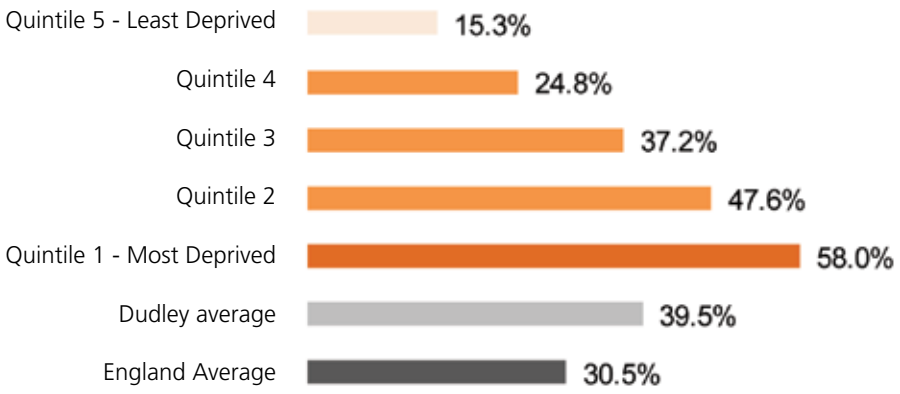
Table 6.23

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people agreeing that drunk/rowdy behaviour is a problem (Place Survey, 2008)	28.4%	29.0%	12.4%	41.1%	1.02	-0.6%	3.31*	28.7%

An even stronger association is seen between deprivation and proportion of people who think that drug use or drug dealing is a problem in their local area.

Figure 6.52

NI42 across the Dudley social scale - % who perceive drug use or drug dealing to be a problem



Source: Place Survey 2008

Dudley as a whole perceives it to be a bigger problem than people nationally and there is a large inequality gradient in perceptions of drug use or drug dealing as a problem with over half of people in the 20% most deprived area perceiving it as a problem compared to only 15.3% in the 20% least deprived area (Figure 6.52).

Inequality in perceptions of drug use or dealing as a problem across Dudley.

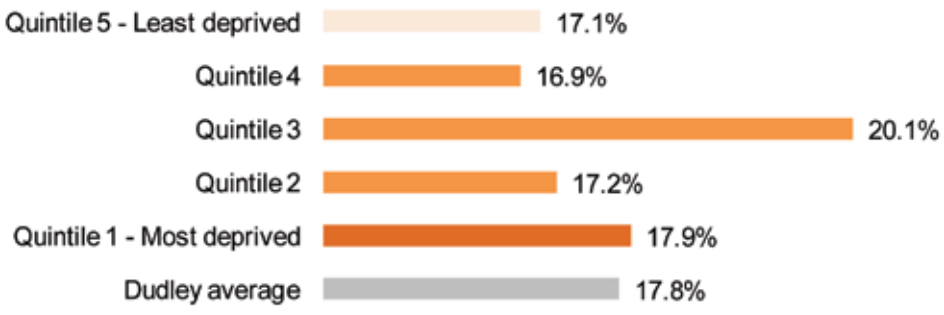
Table 6.24

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of people agreeing that drug use/dealing is a problem (Place Survey, 2008)	39.5%	30.5%	15.3%	58.0%	1.30*	9.0%	3.79*	42.7%

The Dudley Health Behaviour Survey asks secondary school pupils whether they have been offered drugs. Nearly 18% of year 8 and 10 pupils in Dudley have been offered drugs and this was highest in quintile group 3 (Figure 6.53).

Figure 6.53

Across the Dudley social scale - % of Secondary School pupils Years 8 and 10 who have been offered drugs



Source: Dudley Schools Health Behaviour Survey 2010

Inequality in pupils having been offered drugs across Dudley.

Table 6.25

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% of pupils stating that they have been offered drugs (Dudley Health Behaviour Survey, 2010)	17.8%	NA	17.1%	17.9%	NA	NA	1.05	0.8%

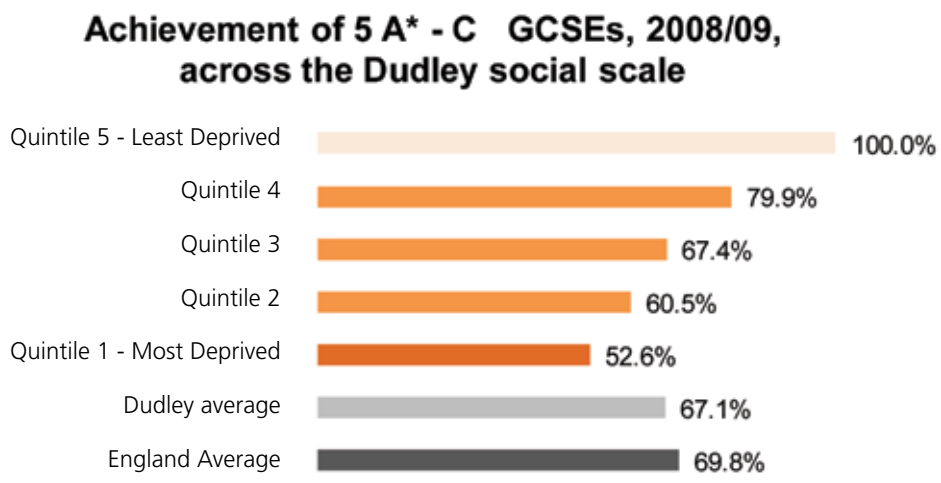
Skills

Skills are positively linked to health and wellbeing, with people who have more skills tending to feel they are more able to make a positive contribution to society.

Qualifications

Attainment of level 4 qualifications is strongly linked to deprivation in Dudley. The population with level 4 qualifications in Dudley is lower than the national figure. There is a clear social gradient to achievement at GCSE, with the achievement being lowest in the 20% most deprived area. Pupils in the 20% least deprived area are twice as likely to achieve 5 A* - C grades at GCSE than those from the 20% most deprived area (Figure 6.54).

Figure 6.54



Source: www.neighbourhood.statistics.gov.uk

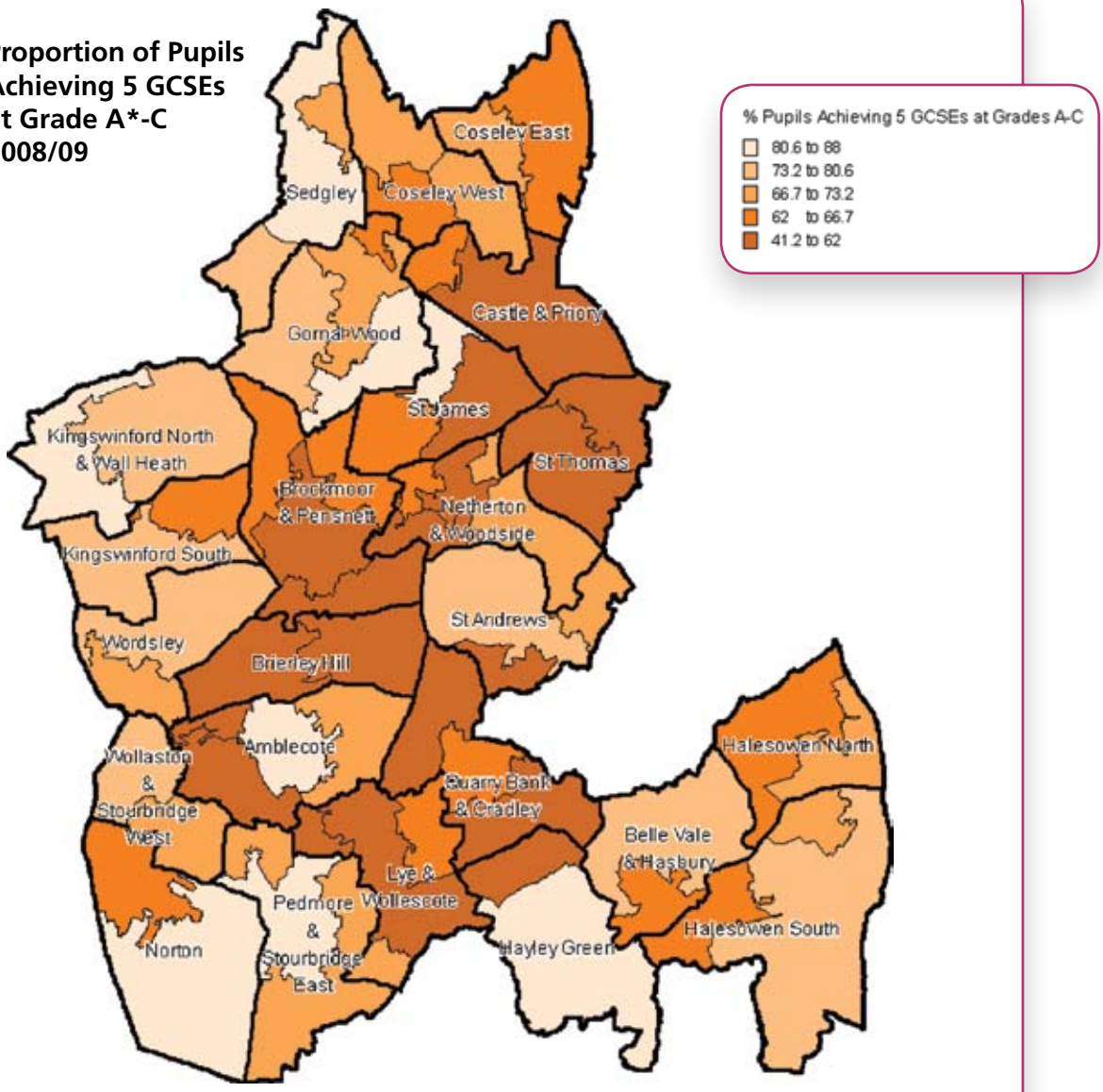
Inequality in achievement of 5 GCSEs graded A* to C across Dudley.

Table 6.26

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% achieving 5 GCSEs graded A* to C (www.neighbourhood.statistics.gov.uk)	67.1%	69.8%	100.0%	52.6%	1.04	-2.7%	1.90*	-47.4%

The map below shows GCSE achievement across Dudley by residence of pupils. There are areas in several middle super output areas (MSOA) where fewer than half the pupils achieve 5 GCSE's grade A* to C.

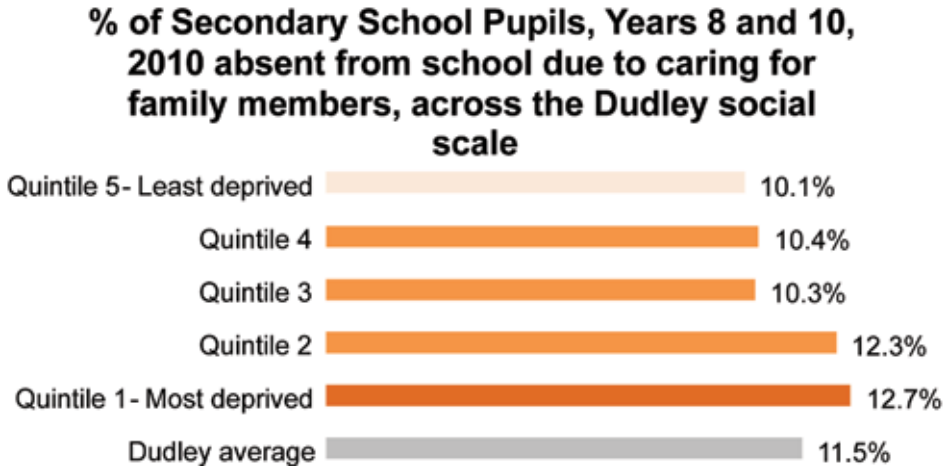
Proportion of Pupils Achieving 5 GCSEs at Grade A*-C 2008/09



Source: www.neighbourhood.statistics.gov.uk

Poor academic achievement is also associated with low levels of attendance at school. The Dudley Health Behaviour survey asked pupils the reasons they had been absent from school in the past year. Nearly 90% of pupils had been absent in the previous 12 months. Of those pupils who had been absent approximately a quarter to one third gave the reason that it was due to holiday or day-trips during the school term, three quarters gave illness as a reason and about 10% gave being worried about school as the reason. None of these reasons showed an inequality gradient with the exception of holidays which was more prevalent in the 20% least deprived quintile. The only reason given, to show a negative social gradient was being absent due to caring for family members, where 12.7% were absent from the 20% most deprived quintile compared to 10.1% in the 20% least deprived (Figure 6.55).

Figure 6.55



Source: Dudley Schools Health Behaviour Survey, 2010

Inequality in proportion of secondary pupils absent from school due to caring for family members across Dudley.

Table 6.27

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% secondary pupils absent from school due to caring for family members (Dudley Health Behaviour Survey, 2010)	11.5%	NA	10.1%	12.7%	NA	NA	1.26	2.6%

No qualifications

The 2001 census reported the proportion of the working age population with no qualifications to be 30.4% for the working age population of Dudley. There was a strong negative inequalities gradient for no qualification with the 20% most deprived quintile having 43.8% of their population with no qualification compared to 14.6% of the 20% least deprived quintile. The Annual Labour Force Survey reported the proportion of the Dudley working age population in 2009 to be 17%, so considerable progress has been made, but it is not possible to report whether there has been any improvement in the inequalities gradient.

Not in education, employment or training (NEET)

Young people who leave school but do not enter employment, further education or training are referred to as NEET. This group forms a particularly vulnerable group of young people and their health and life chances can be impaired if they remain in this situation. Dudley has reduced the proportion of NEET's in the 16-19 year old age group from 5.6% in 2008 to 5.3% in 2009 and 4.9% in 2010. This figure far exceeds the government's target of 7.6% by 2010.

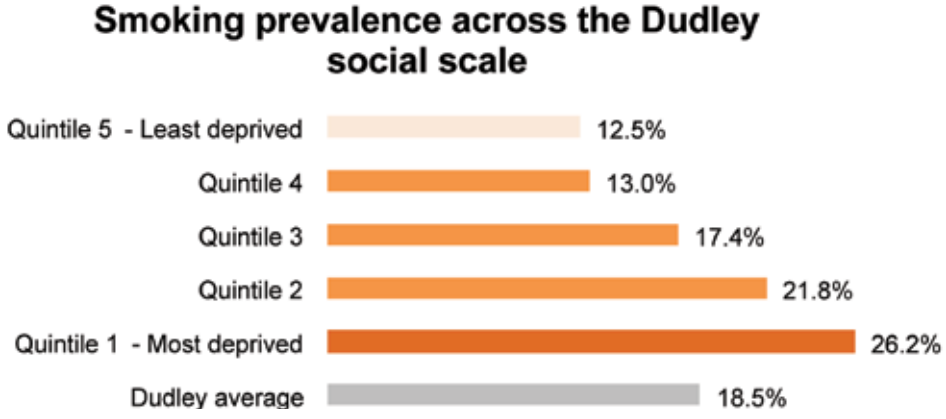
7. Health Behaviour

Health behaviour such as smoking, alcohol consumption, physical activity, healthy eating, obesity in combination with the influences of people's surroundings and environment has an important impact on the major health outcomes such as heart disease, cancer and respiratory conditions. This section will pull together data from a range of sources.

Smoking

Results from the Dudley Health Survey 2009, show that the estimated smoking prevalence in Dudley is 18.5%, a reduction from the 2004 estimate of 21.1%. There is a strong social gradient to smoking with 26.2% in the most deprived quintile and only 12.5% in the least deprived quintile (Figure 7.1).

Figure 7.1



Source: Dudley Health Survey, 2009

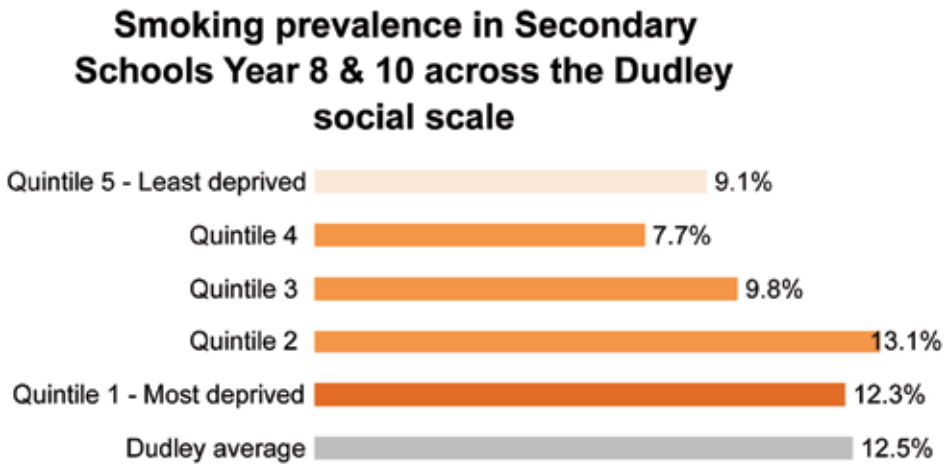
Inequality in smoking prevelance across Dudley.

Table 7.1

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Smoking prevalence – current smoker (Dudley Health Survey, 2009)	18.5%	NA	12.5%	26.2%	NA	NA	2.10*	13.7%

The Dudley Health Behaviour Survey asks pupils in Dudley Secondary schools if they have smoked in the last 7 days. Overall 12.5% of year 8 and 10 pupils are current smokers and there is a social gradient for smoking prevalence. Smoking prevalence is highest in the 40% most deprived areas. This is likely to be an underestimate as nearly 20% of pupils do not state their postcode and hence cannot be allocated to a deprivation quintile. The smoking prevalence in this group was 18.7%.

Figure 7.2



Source: Dudley Schools Health Behaviour Survey, 2010

Inequality in Secondary school smoking prevelance across Dudley.

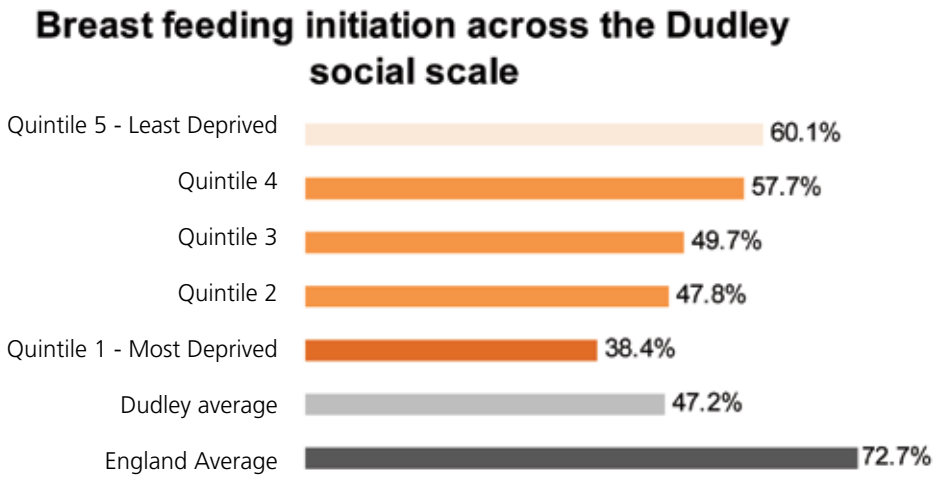
Table 7.2

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Secondary school Smoking prevalence – current smoker (Dudley Health Behaviour Survey, 2010)	12.5%	NA	9.1%	12.3%	NA	NA	1.35	3.3%

Diet and Nutition

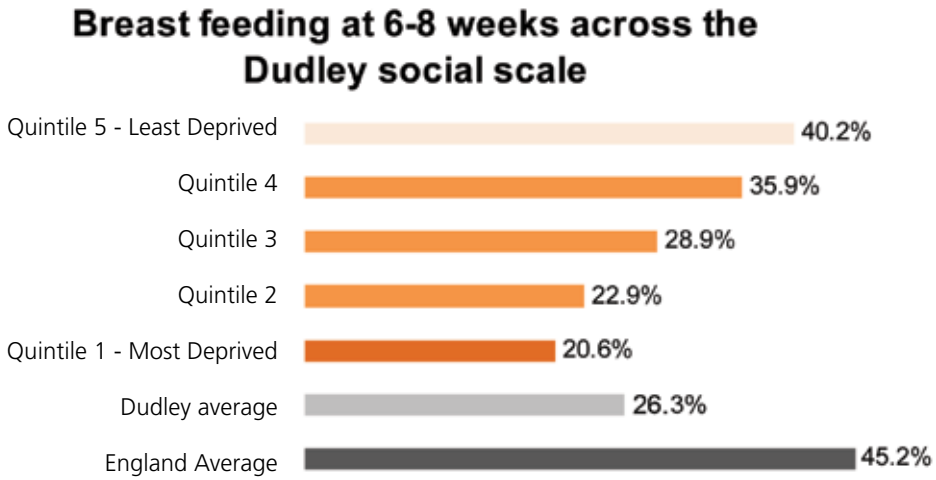
Good diet starts at birth with breastfeeding. Breastfeeding has well known health benefits for the child and mother in later life. Breast feeding rates in Dudley for both initiation (2009/10, 47.2%) and at 6-8 weeks (2009/10, 26.5%) are well below the England average of 72.7% and 45.2% respectively. There is a strong social gradient for both breastfeeding at initiation and at 6-8 weeks with rates being significantly lower in the most deprived quintile (Figure 7.3 and 7.4).

Figure 7.3



Source: Child Health System, 2009/10

Figure 7.4



Source: Child Health System, 2009/10

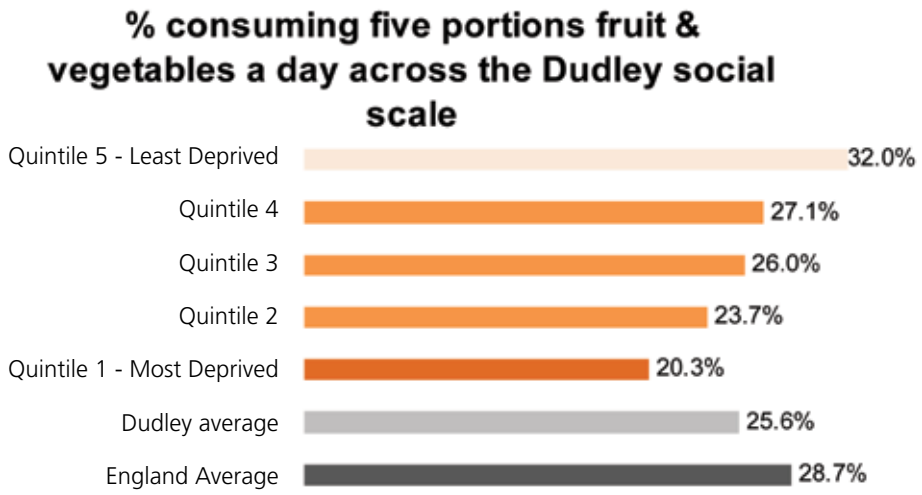
Inequality in breastfeeding rates at initiation and 6-8 weeks across Dudley.

Table 7.3

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Breastfeeding rates at initiation (Dudley Child Health System, 2009/10)	47.2%	72.7%	60.1%	38.4%	1.54*	-25.5%	1.57*	-21.7%
Breastfeeding rates at 6-8 weeks (Dudley Child Health System, 2009/10)	26.3%	45.2%	40.2%	20.6%	1.73*	-19.0%	1.95*	-19.6%

The government recommends that the population should be eating five portions of fruit and vegetables a day for good health. The Dudley Health Survey asked about the consumption of fruit and vegetables. There is a strong link between healthy eating and deprivation with those in the most deprived areas estimated to be less likely to consume the recommended five portions of fruit and vegetables a day (Figure 7.5).

Figure 7.5



Source: Dudley Health Survey, 2009

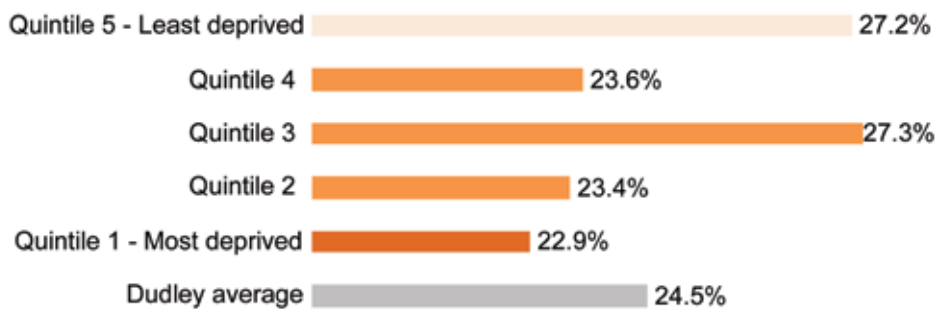
Inequality in eating five portions of fruit and vegetables per day across Dudley.

Table 7.4

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% eating five portions fruit and vegetables per day (Dudley Health Survey, 2009)	25.6%	28.7%	32.0%	20.3%	1.12*	-3.1%	1.58*	-11.7%

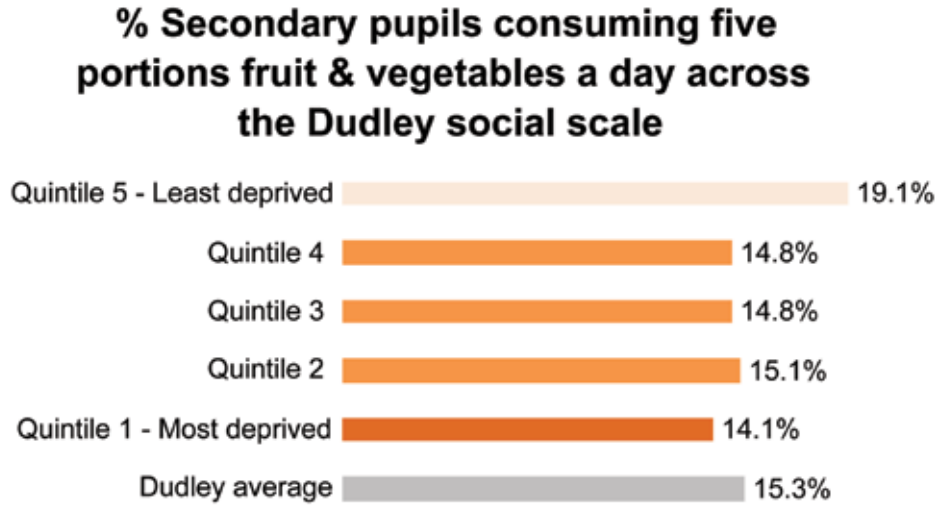
The Dudley Health Behaviour Survey asks both Primary and Secondary school pupils whether they eat five portions of fruit and vegetables a day. There is a slight social gradient for fruit and vegetables intake, though this is likely to be less marked in children than adults as there has been considerable emphasis on fruit and vegetable intake in schools since the introduction of the free fruit for primary key stage 1 and Dudley Public Health have been working with the schools particularly in the most deprived areas with regard to healthy eating.

Figure 7.6



Source: Dudley Schools Health Behaviour Survey, 2010

Figure 7.7



Source: Dudley Schools Health Behaviour Survey, 2010

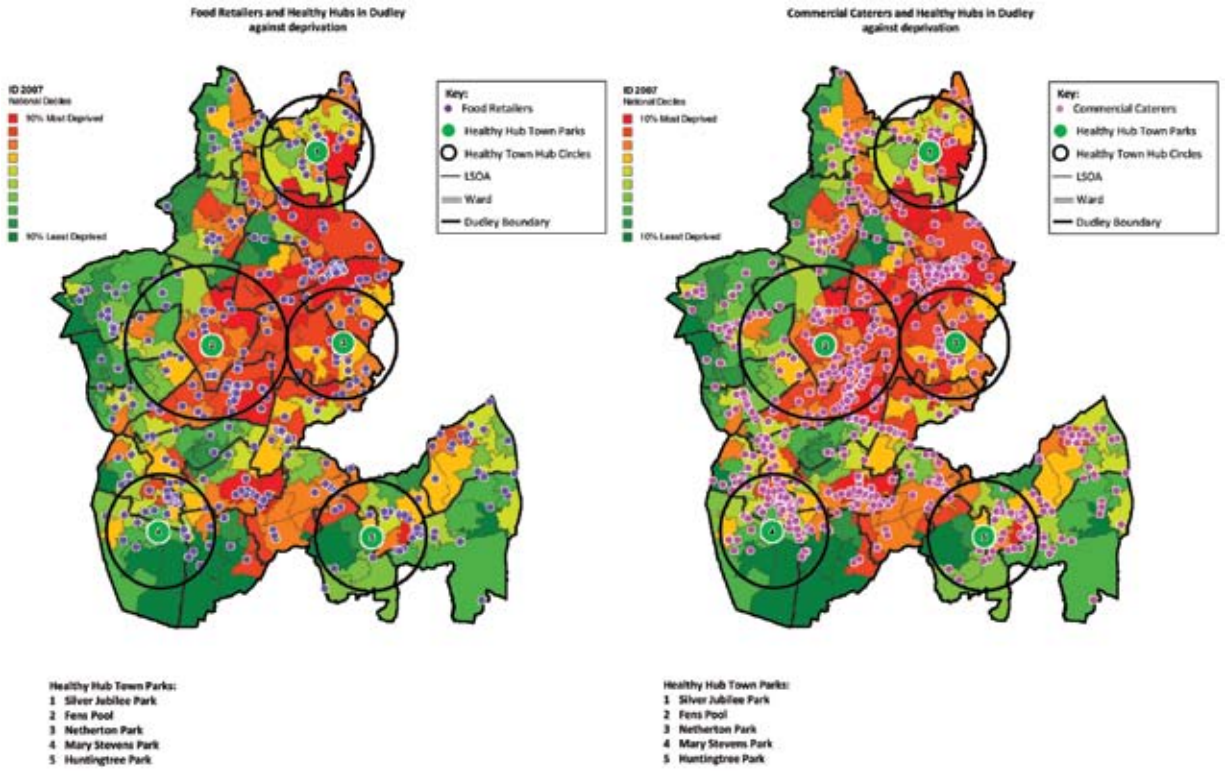
Inequality in % pupils eating five portion of fruit and vegetables per day across Dudley.

Table 7.5

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Primary pupils eating five portions fruit and vegetables per day (Dudley Health Behaviour Survey, 2010)	24.5%	NA	27.2%	22.9%	NA	NA	1.19	-4.3%
% secondary pupils eating five portions fruit and vegetables per day (Dudley Health Behaviour Survey, 2010)	15.3%	NA	19.1%	14.1%	NA	NA	1.35*	-5.0%

The maps below show the food retailers and commercial food outlets across Dudley against a backdrop of the LSOAs by national IMD 2007 quintile. It is evident that there are some deprived areas of Dudley where there is limited access to food retailers and similarly there is a concentration of commercial caterers in the more deprived areas, suggesting it may be easier to access processed foods and take-aways as opposed to fresh foods in the more deprived areas.

Commercial food retailers and commercial food outlets across Dudley



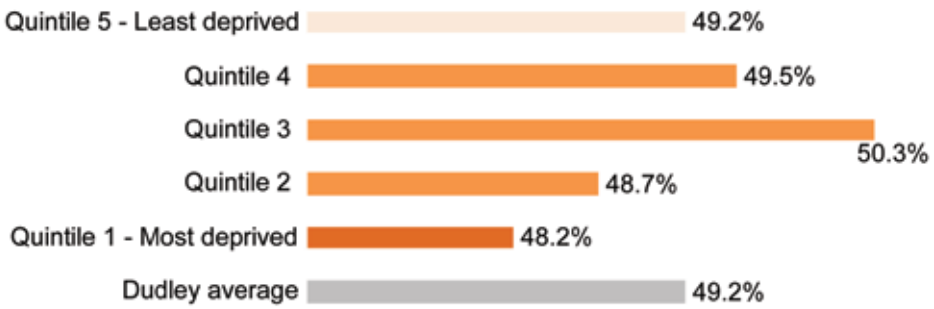
Source: Dudley MBC - Environmental Health

Exercise and Activity

The Sport England Active People Survey asked participants about their levels of activity. Dudley reported that 9.0% of the adult population were physically active (proportion undertaking the recommended five 30 minute sessions of exercise per week) compared to 11.2% for England. The Dudley Health Survey 2009 asked participants about their levels of activity and overall it reported that nearly half of the participants met the target for physical activity in the previous week (five times that reported by Sport England Survey). This difference maybe due to the fact that Sport England asked whether they had reached the recommended levels of activity over the last 4 weeks and not just the last week. There is a very slight deprivation gradient for physical activity (Figure 7.8).

Figure 7.8

% completing five 30 minute exercise sessions in the previous week across the Dudley social scale



Source: Dudley Health Survey, 2009

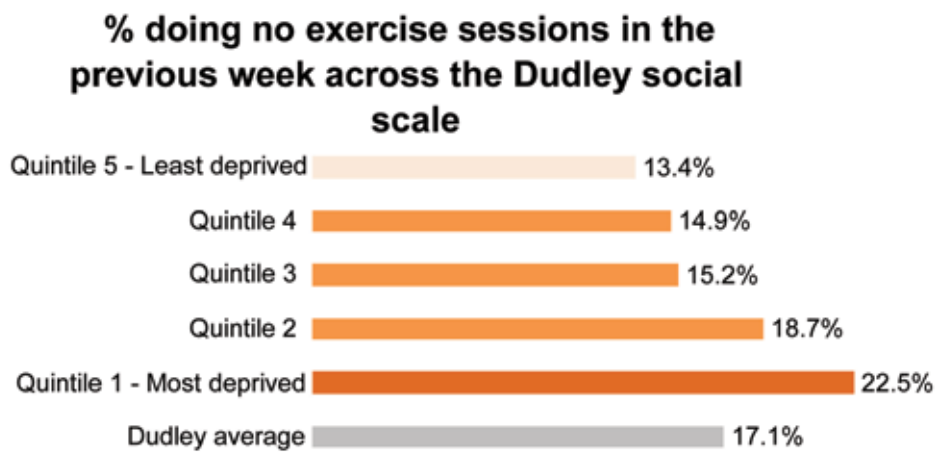
Inequality in participating in five times 30 minutes physical activity in the last week across Dudley.

Table 7.6

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% completing five times 30 minutes physical activity in the last week (Dudley Health Survey, 2009)	49.2%	NA	49.2%	48.2%	NA	NA	1.02	-1.0%

The Dudley Health Survey asked people if they had done no exercise in the last week which gives an indication of the proportion of people undertaking a sedentary lifestyle. A sedentary lifestyle can impact on health in a number of ways. People in the 20% most deprived areas were nearly twice as likely than the 20% least deprived group to not have taken any physical activity in the last week.

Figure 7.9



Source: Dudley Health Survey, 2009

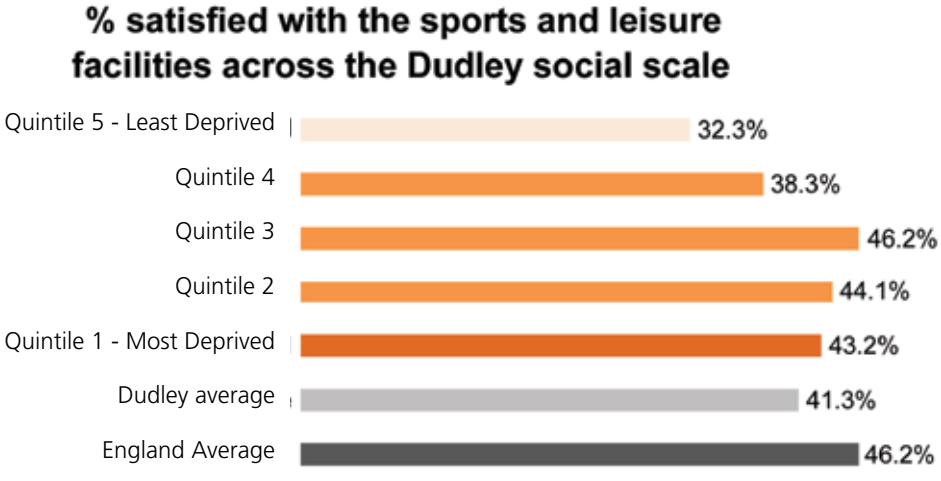
Inequality in sedentary lifestyle across Dudley.

Table 7.7

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% not participating in any physical activity in the last week (Dudley Health Survey, 2009)	17.1%	NA	13.4%	22.5%	NA	NA	1.68*	9.1%

The 2008 Place Survey found that satisfaction with sports and leisure facilities was higher in the more deprived areas and hence not a reason for poor physical activity in the more deprived areas.

Figure 7.10



Source: Place Survey, 2008

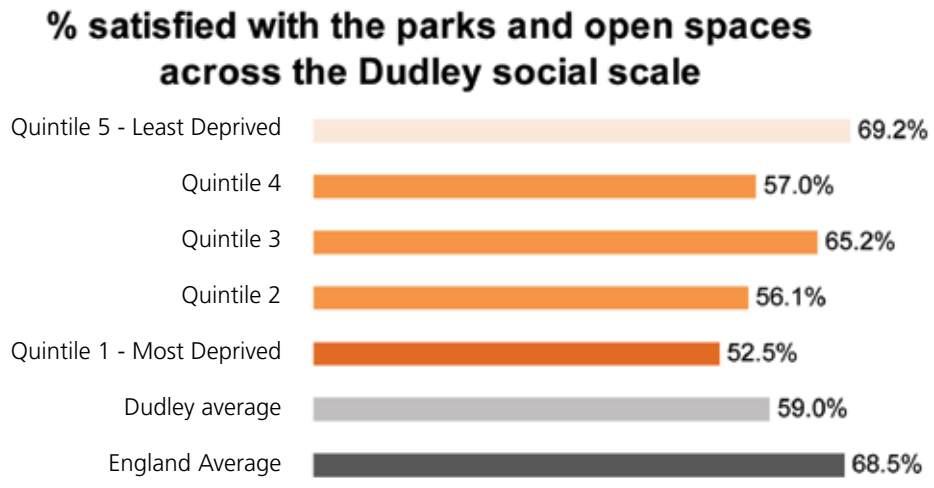
Inequality in satisfaction with sports and leisure services across Dudley.

Table 7.8

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% satisfied with sports and leisure services (Place Survey, 2008)	41.3%	46.2%	32.3%	43.2%	1.12*	-4.9%	0.75*	10.9%

The Place Survey also considered satisfaction with parks and open spaces and shows a clear social gradient with satisfaction being lower in the more deprived areas.

Figure 7.11



Source: Place Survey, 2008

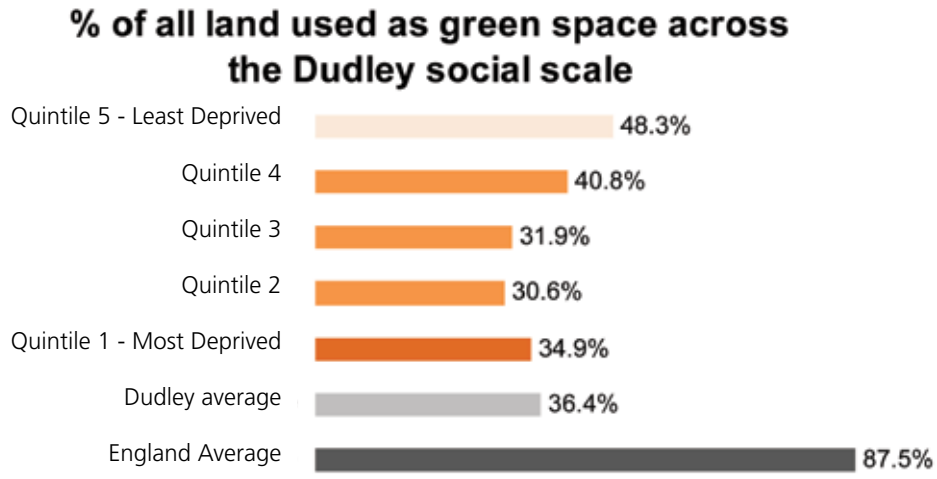
Inequality in satisfaction with parks and open spaces across Dudley.

Table 7.9

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% satisfied with parks and open spaces (Place Survey, 2008)	59.0%	68.5%	69.2%	52.5%	1.16*	-9.5%	1.32*	-16.7%

Shown in Figure 7.12 is the estimated proportion of land in Dudley that is accounted for by green space. Overall only 36.4% of Dudley borough is green space considerably lower than the national average. There is a strong social gradient to access to green space, which is strongest across the three most deprived quintiles. This reflects the urban nature of many deprived areas. Good urban planning is therefore required to optimize the accessibility of the available green space.

Figure 7.12



Source: Land Use Statistics (Generalised Land Use Database), 2005

Inequality in access to green space across Dudley.

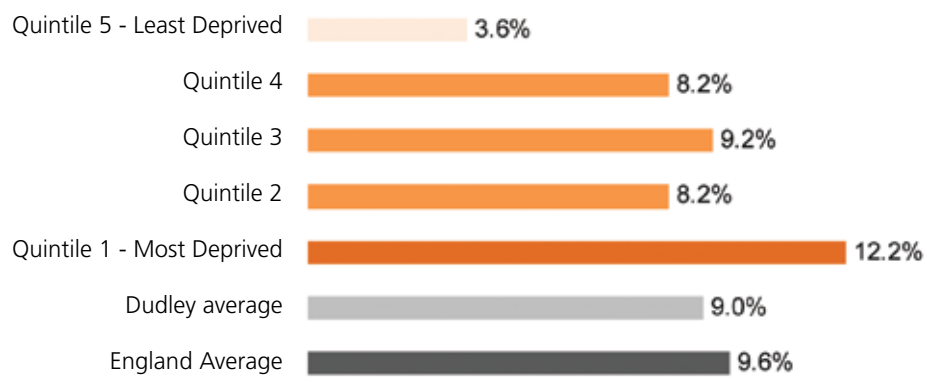
Table 7.10

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% access to green space (Land Use Statistics (Generalised Land Use Database), 2005))	36.4%	87.5%	48.3%	34.9%	2.40*	-51.1%	1.38	-13.4%

Obesity

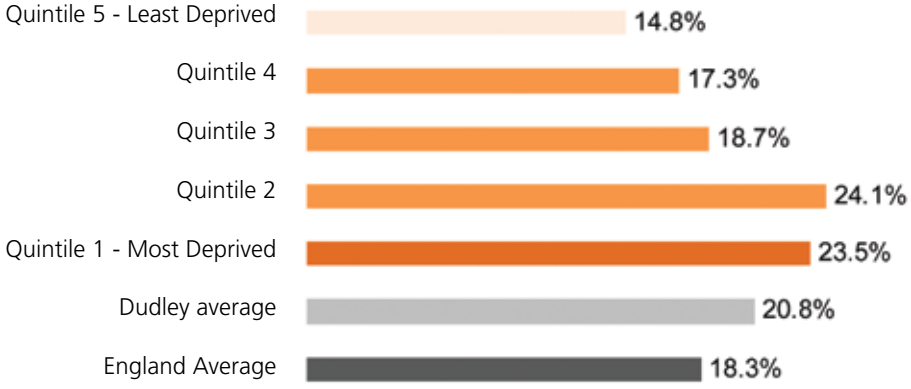
The National Child Measurement Programme provides data on the prevalence of overweight and obesity in pupils at Dudley Primary schools. There is a social gradient for obesity in both Reception and Year 6 pupils in Dudley schools (Figures 7.13 and 7.14).

Figure 7.13



Source: National Child Measurement Programme 2008/2009

Figure 7.14



Source: National Child Measurement Programme 2008/2009

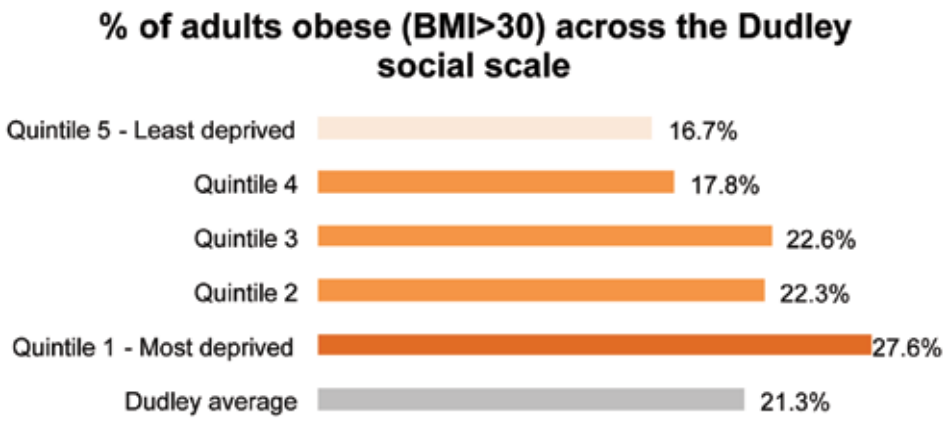
Inequality in proportion of children very overweight across Dudley.

Table 7.11

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Reception children very overweight (NCMP, 2008/09)	9.0%	9.6%	3.6%	12.2%	0.94	-0.6%	3.39*	8.6%
% Year 6 children very overweight (NCMP, 2008/09)	20.8%	18.3%	14.8%	23.5%	1.14*	2.5%	1.59*	8.7%

The Dudley Health Survey 2009 asked participants to self-report their height and weight. As with children there is a social gradient for obesity in adults across Dudley (Figure 7.15).

Figure 7.15



Source: Dudley Health Survey, 2009

Inequality in proportion of adults obese across Dudley.

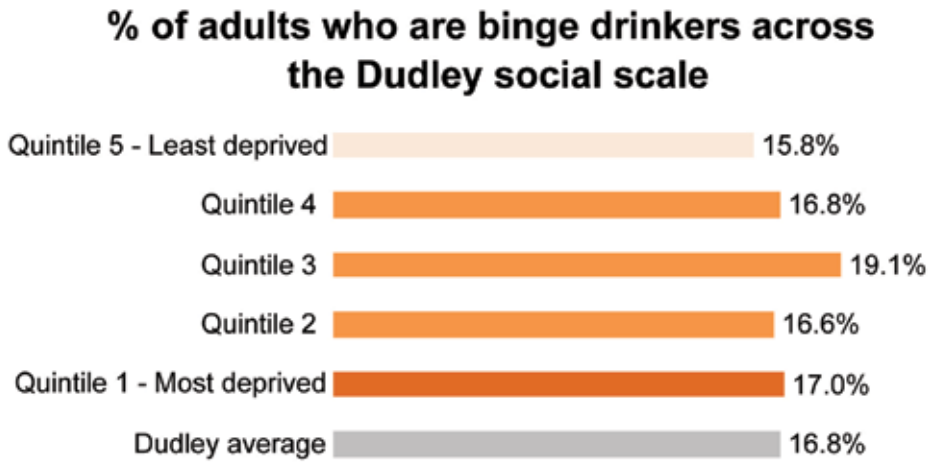
Table 7.12

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Adults obese (Dudley Health Survey 2009)	21.3%	NA	16.7%	27.6%	NA	NA	1.65*	10.9%

Alcohol

Binge drinking is defined as drinking 8 or more (men) or 6 or more (women) standard units on one day. Estimates of binge drinking from the Dudley Health Survey 2009, show Dudley to have a lower proportion of binge drinkers (16.8%) than that estimated for England from the Health Survey of England at 20.1%. There is a slight social gradient of binge drinking (Figure 7.16).

Figure 7.16



Source: Dudley Health Survey, 2009

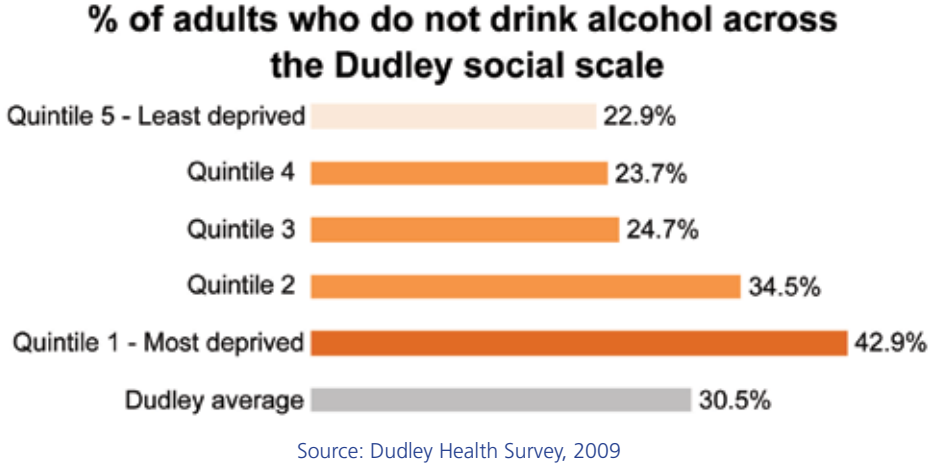
Inequality in proportion of adults who binge drink across Dudley.

Table 7.13

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Adults who binge drink (Dudley Health Survey 2009)	16.8%	NA	15.8%	17.0%	NA	NA	1.08*	1.2%

Further analysis of the Dudley Health Survey 2009 identifies a complicated picture with regards to alcohol consumption and deprivation. People in the most deprived areas are most likely to report that they do not drink alcohol (Figure 7.17). This may be related to differences in religion associated with the differing concentrations of ethnic groups across deprived and non-deprived wards.

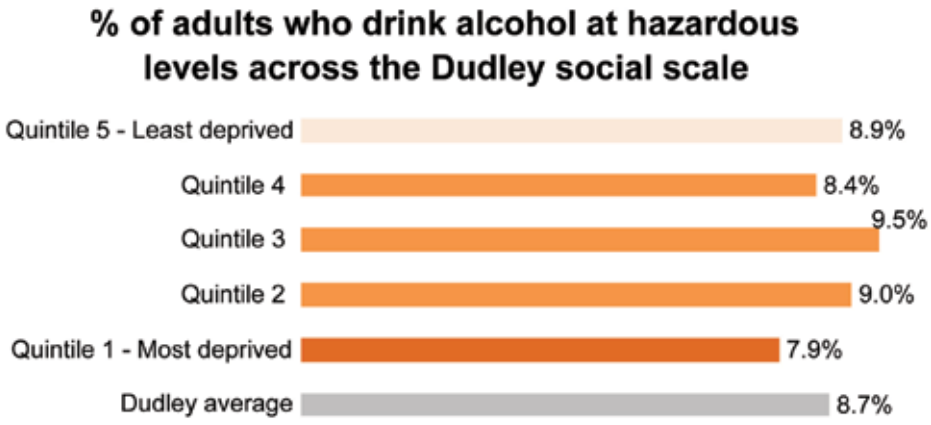
Figure 7.17



Source: Dudley Health Survey, 2009

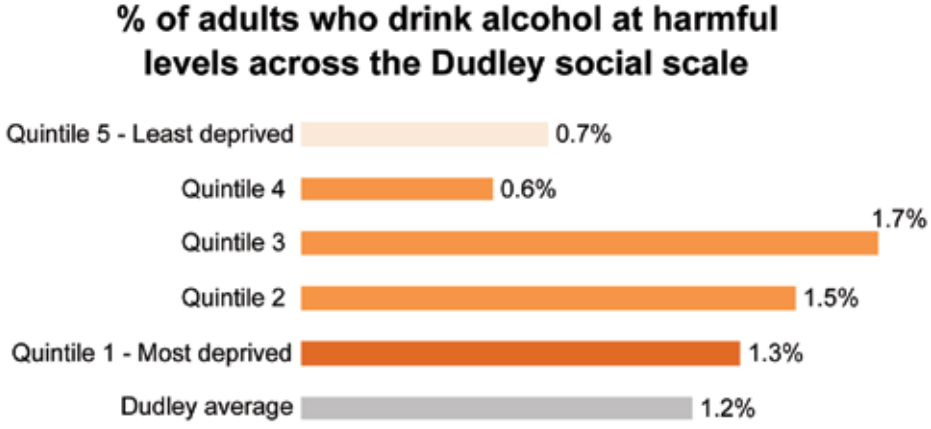
Hazardous drinking is defined as regularly drinking more than the recommended weekly alcohol limits (14 units for women and 21 units for men). People living in the most deprived areas were again less likely to drink at levels that are hazardous to health than in the more affluent areas (Figure 7.18), whereas people living in the most deprived areas were more likely to be drinking alcohol at levels that are harmful to their health (men who drink more than 50 units a week and women who drink more than 35 units per week are classed as drinking at harmful levels) (Figure 7.19).

Figure 7.18



Source: Dudley Health Survey, 2009

Figure 7.19



Source: Dudley Health Survey, 2009

Inequality in alcohol consumption across Dudley.

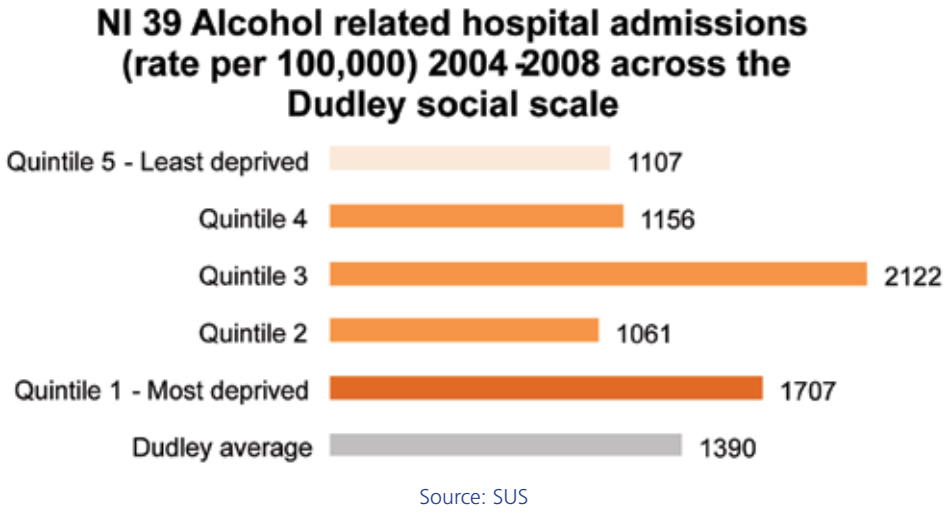
Table 7.14

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Adults who do not drink alcohol (Dudley Health Survey 2009)	30.5%	NA	22.9%	42.9%	NA	NA	1.87*	20.0%
% Adults who are hazardous drinkers (Dudley Health Survey 2009)	8.7%	NA	8.9%	7.9%	NA	NA	0.89*	-1.0%
% Adults who are harmful drinkers (Dudley Health Survey 2009)	1.2%	NA	0.7%	1.3%	NA	NA	1.86*	0.6%

Data on alcohol related hospital admissions shows that Dudley (1872 per 100,000 population in 2008) has a significantly higher rate than England (1582 per 100,000 population).

Hospital admissions that are related to alcohol are significantly higher in the most deprived quintile and the 3rd most deprived quintile (Figure 7.20).

Figure 7.20



Source: SUS

Inequality in alcohol related hospital admissions across Dudley.

Table 7.15

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Alcohol related hospital admissions (standardized rate per 100,000 population) 2004-2008 (SUS)	1390	NA	1107	1707	NA	NA	1.54*	600

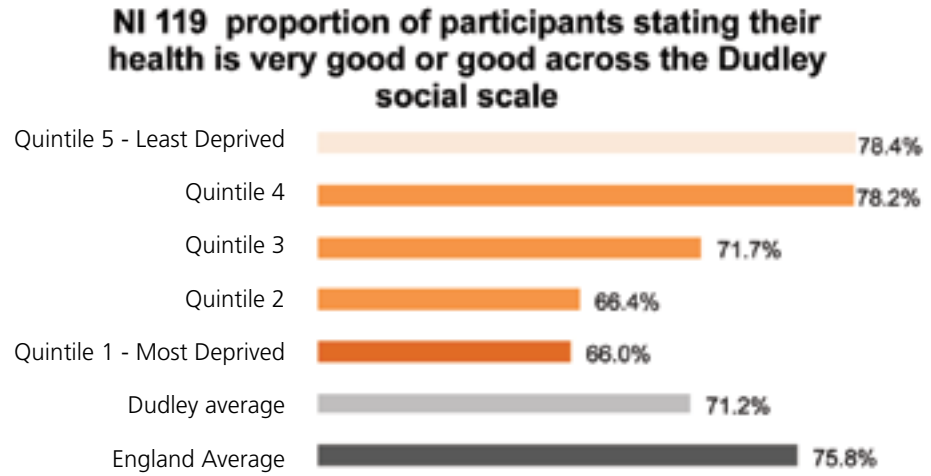
8. Health Outcomes

Here we examine a range of health indicators including mortality and incidence as well as general indicators of health such as life expectancy and self reported health.

Self reported health and wellbeing

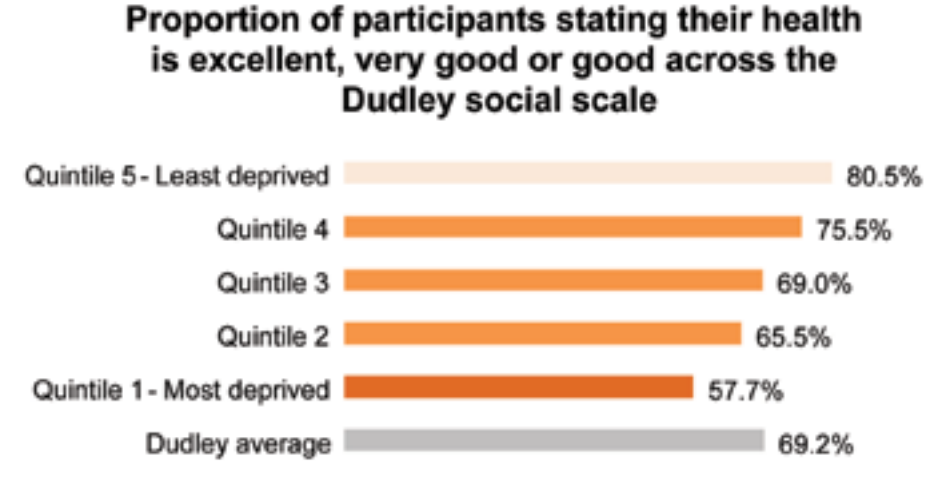
The Place Survey 2008, asked people to assess their overall health and well being. Self-perceived poor health is more prevalent in the most deprived quintile (Figure 8.1). The Dudley Health Survey, 2009 also asked about people's general health and a similar social gradient was noted (Figure 8.2).

Figure 8.1



Source: Place Survey, 2008

Figure 8.2



Source: Dudley Health Survey, 2009

Inequality in self reported health and well being across Dudley

Table 8.1

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Self reported good general health (Place Survey, 2008)	71.2%	75.8%	78.4%	66.0%	1.06*	-4.6%	1.19	-12.4%
Self reported good general health (Dudley Health Survey, 2009)	69.2%	NA	80.5%	57.7%	NA	NA	1.40*	-22.8%

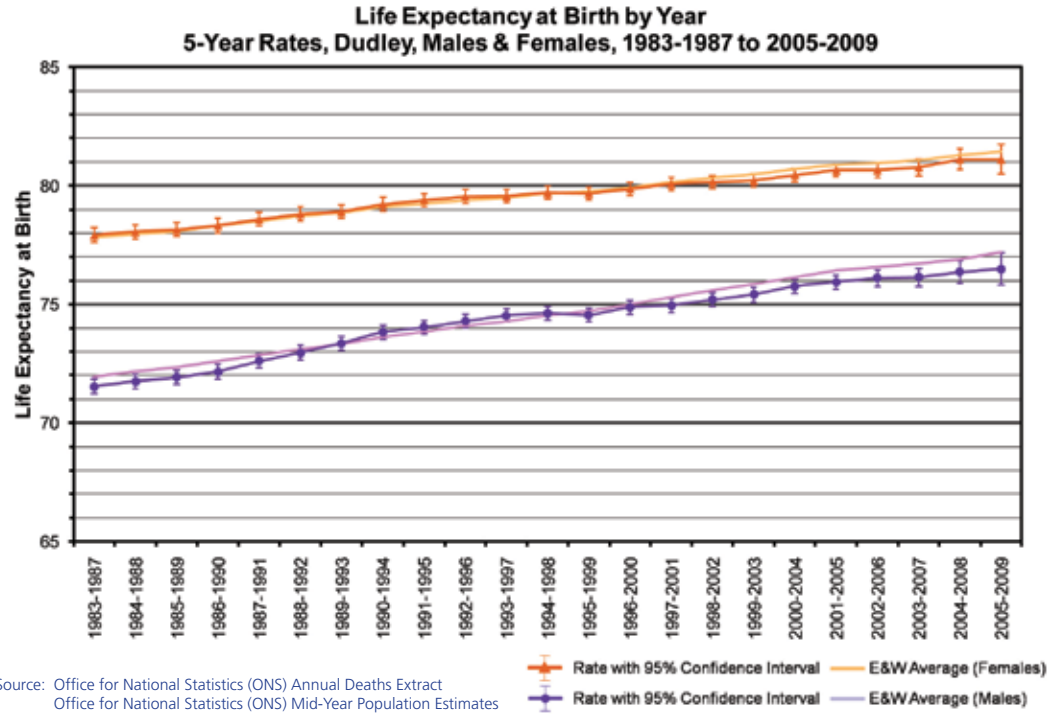
Life Expectancy and mortality

Life expectancy is used as an indicator of population health with the assumption that those in better health tend to live longer. It is also used to express the inequalities of health.

Life expectancy

Life expectancy has been increasing overall in Dudley for both men and women year on year (Figure 8.3), but there is a strong social gradient for life expectancy and this is wider for men than women. Looking across the social gradient of Dudley as a whole, the gap in life expectancy between the least and most deprived wards in 2005-2009 is 7.2 years overall, 9.5 years for men and 7.0 years for women. The Slope Index of Inequality for Dudley in 2005-2009 is 9.4 and 5.3 years for males and females respectively (Figure 8.4).

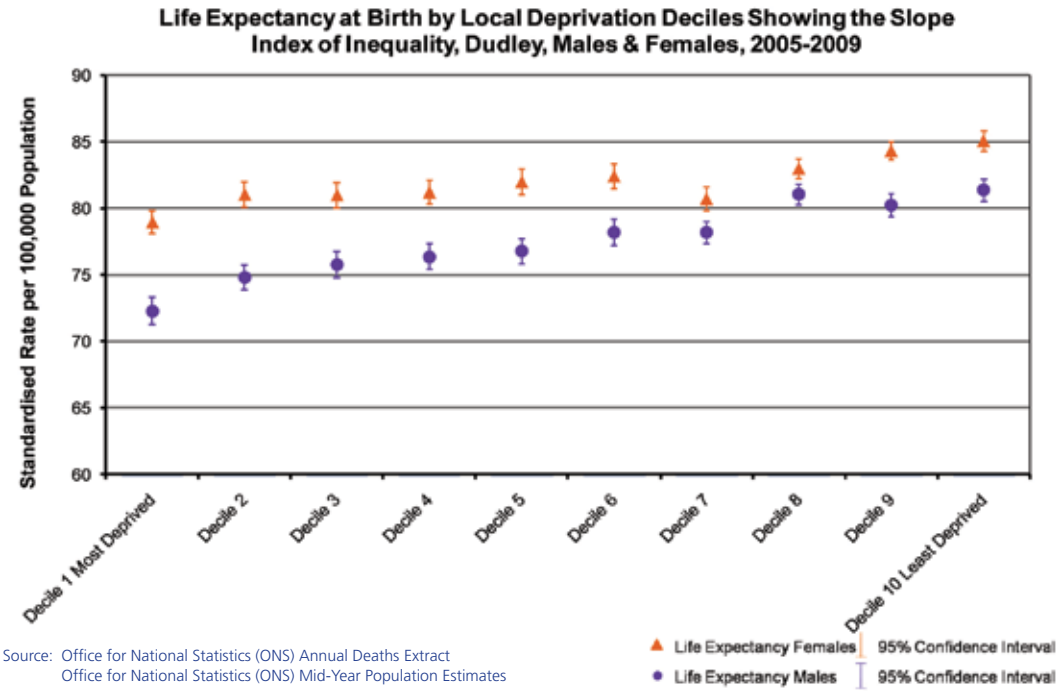
Figure 8.3



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

> Life expectancy has been increasing overall in Dudley for both men and women year on year, but there is a strong social gradient for life expectancy and this is wider for men than women.

Figure 8.4



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in Life Expectancy across Dudley

Table 8.2

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Male Life Expectancy 2005-2009 (Years)	77.4	77.7	81.4	72.3	1.00	-0.3	1.13*	-9.1
Female Life Expectancy 2005-2009 (Years)	81.9	81.8	85.0	79.0	1.00	0.1	1.08*	-6.0

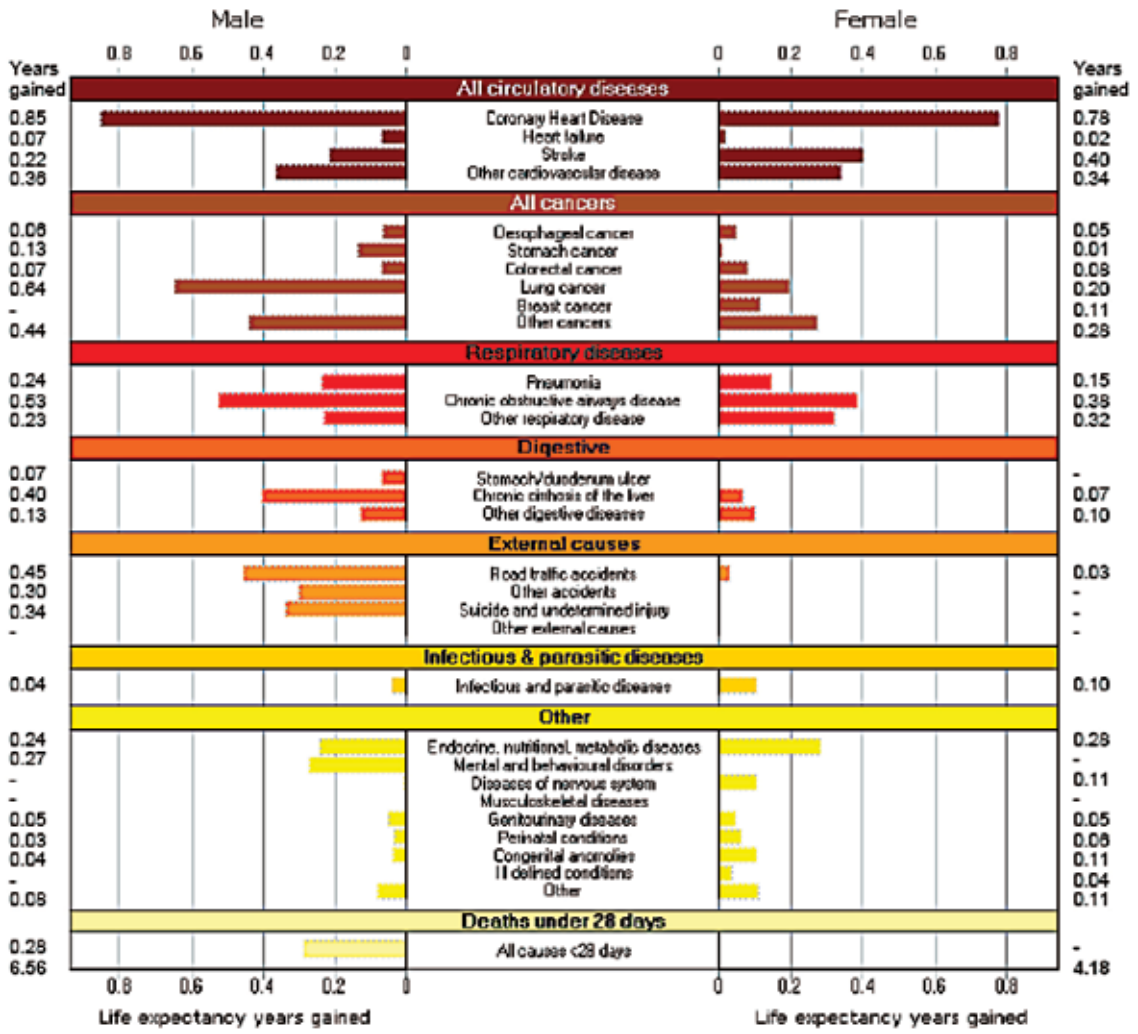
Causes of lost Life Expectancy

Understanding the causes of lost life expectancy is key to being able to start reducing their impact on the gap. The Association of Public Health Observatories have developed a tool that measures the contributory factors to the life expectancy gap and shows the causes of death that are the major contributors.

Figure 8.5 shows the years of life that would be gained if the Most Deprived Quintile (MDQ) of Dudley MCD had the same mortality rate as the least deprived quintile for each cause of death. This highlights the issues stated previously regarding the impact of deprivation on different diseases between men and women. If the mortality rates in the most deprived quintile were reduced for these major diseases to those recorded for the least deprived quintile (and also for the other quintiles), then the life expectancy for Dudley would be raised above that for England and Wales for both men and women. In Dudley for both men and women the biggest contributor to the gap in life expectancy are deaths from circulatory diseases, particularly coronary heart disease, this is followed by cancers for men and respiratory disease for women (Table 8.3).

Figure 8.5

Life expectancy years gained if the Most Deprived Quintile (MDQ) of Dudley MCD had the same mortality rate as the least deprived quintile in the local authority for each cause of death.



Source: London Health Observatory

Ranking shows that the top cause of the male and female life expectancy gap is circulatory diseases and that cancer and external causes make up the top three contributors to the gap for males whilst respiratory disease and other causes are more important for females. Figure 8.5 shows a further breakdown of the main causes of death contributing to the gap in life expectancy for males and females.

Ranked causes of the life expectancy gap between the most deprived quintile and least deprived quintile of Dudley

Table 8.3

Male		Female	
Rank	Cause of death	Rank	Cause of death
1	All Circulatory diseases	1	All Circulatory diseases
2	All Cancers	2	Respiratory diseases
3	External Causes	3	Other
4	Respiratory diseases	4	All Cancers
5	Other	5	Digestive
6	Digestive	6	Infectious and parasitic diseases
7	Deaths under 28 days	7	External Causes
8	Infectious and parasitic diseases	8	Deaths under 28 days

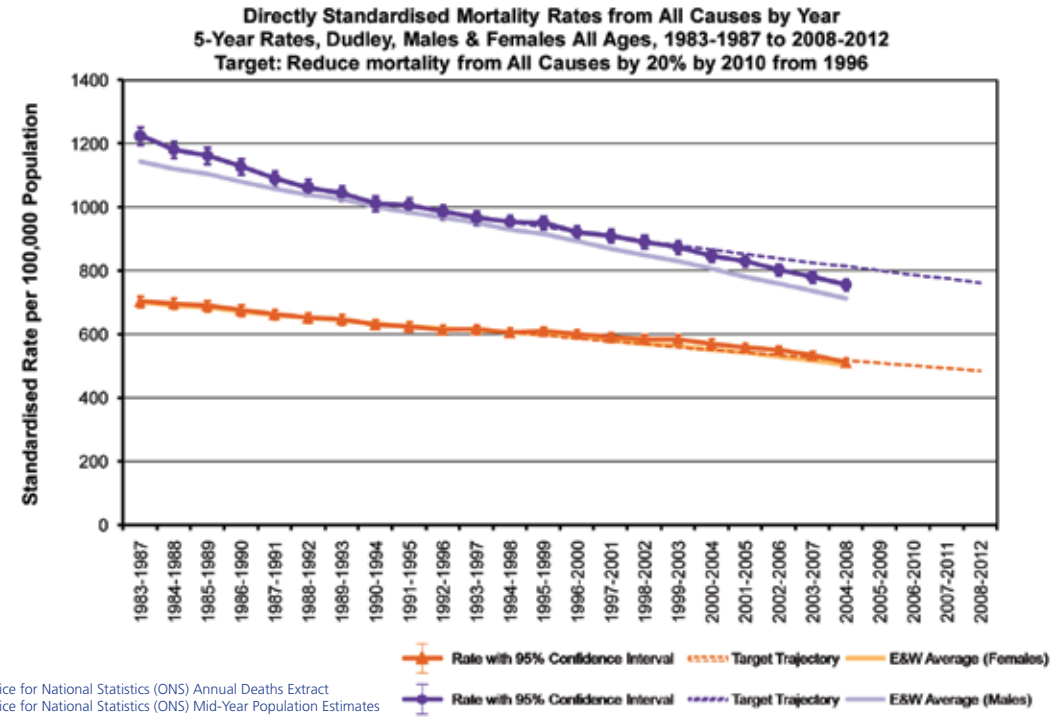
Source: London Health Observatory

Mortality and preventable deaths

Mortality from all causes

The trend in all age all cause mortality has been downward and is similar to England and Wales for females, but there are higher rates in Dudley than England and Wales for males.

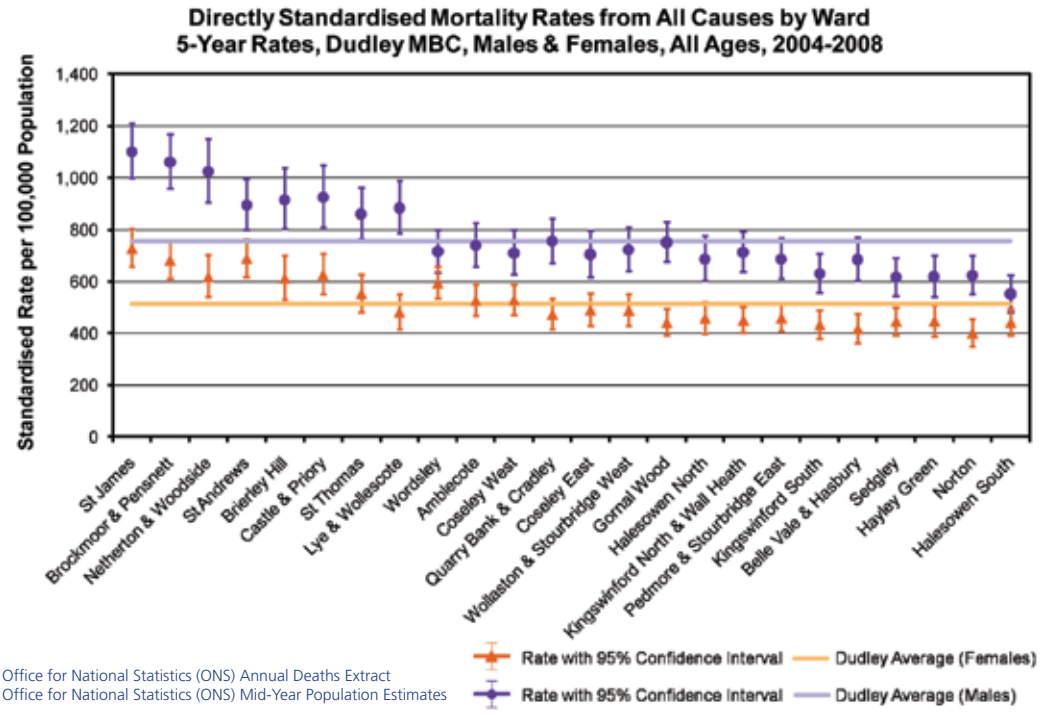
Figure 8.6a



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

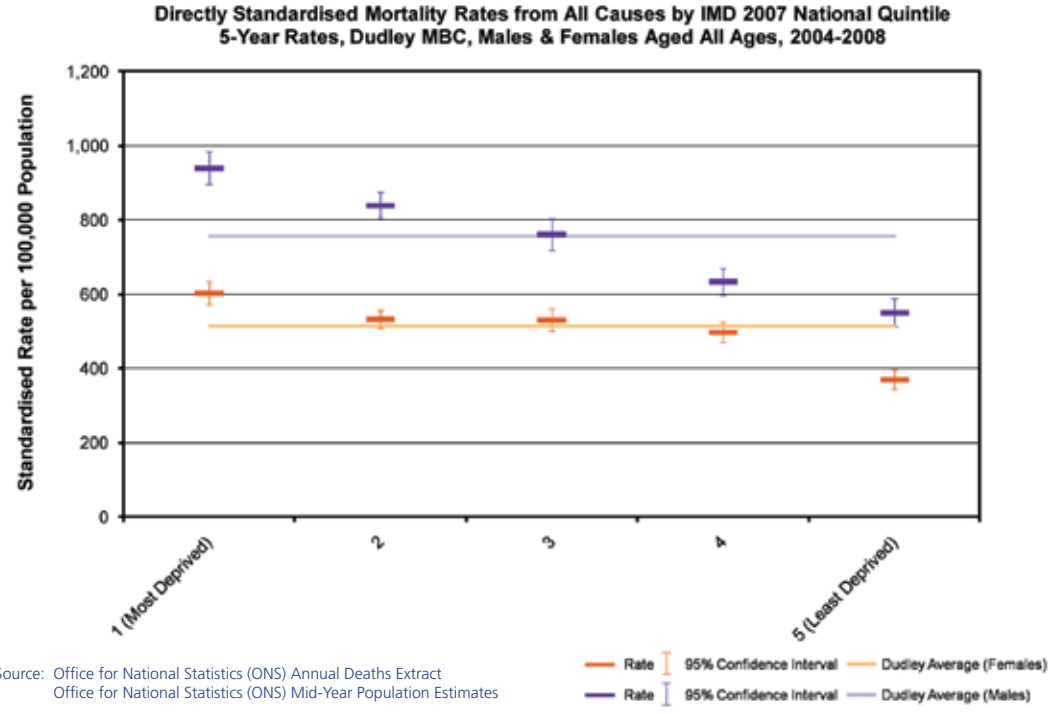
There is a clear social gradient to all cause all age mortality within Dudley with the more deprived wards having higher mortality rates than the least deprived wards (Figure 8.6b). This is re-affirmed when analysed by IMD quintile (Figure 8.6c).

Figure 8.6b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.6c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from all causes across Dudley

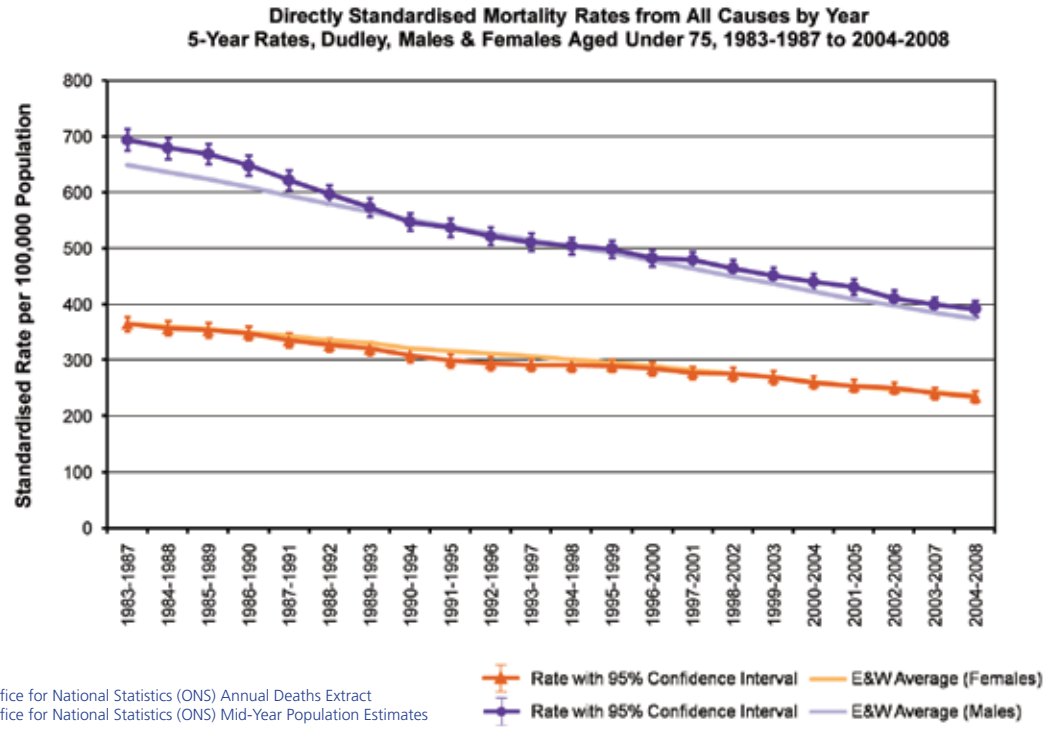
Table 8.4

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from all causes males (DSR per 100,000 population)	757	714	549	940	1.06	43	1.71*	391
Mortality from all causes females (DSR per 100,000 population)	513	504	369	603	1.02	9	1.63*	234
Mortality from all causes persons (DSR per 100,000 population)	622	598	450	755	1.04	24	1.68*	305

Aged under 75

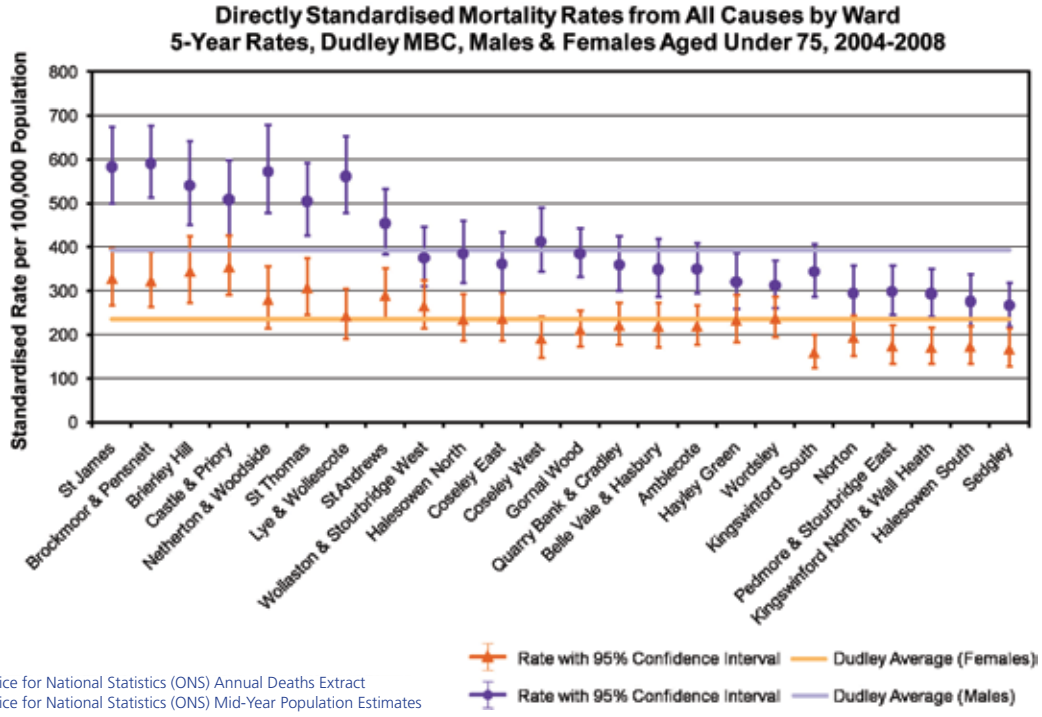
The trend data shows a similar picture to the all age all cause trend with a gap between Dudley and England and Wales for males (Figure 8.7a). There is a greater social inequality due to premature mortality across Dudley than mortality at all ages (Figure 8.7c). Those in the most deprived quintile regardless of gender are more than twice as likely to die prematurely than those who live in the most affluent areas.

Figure 8.7a



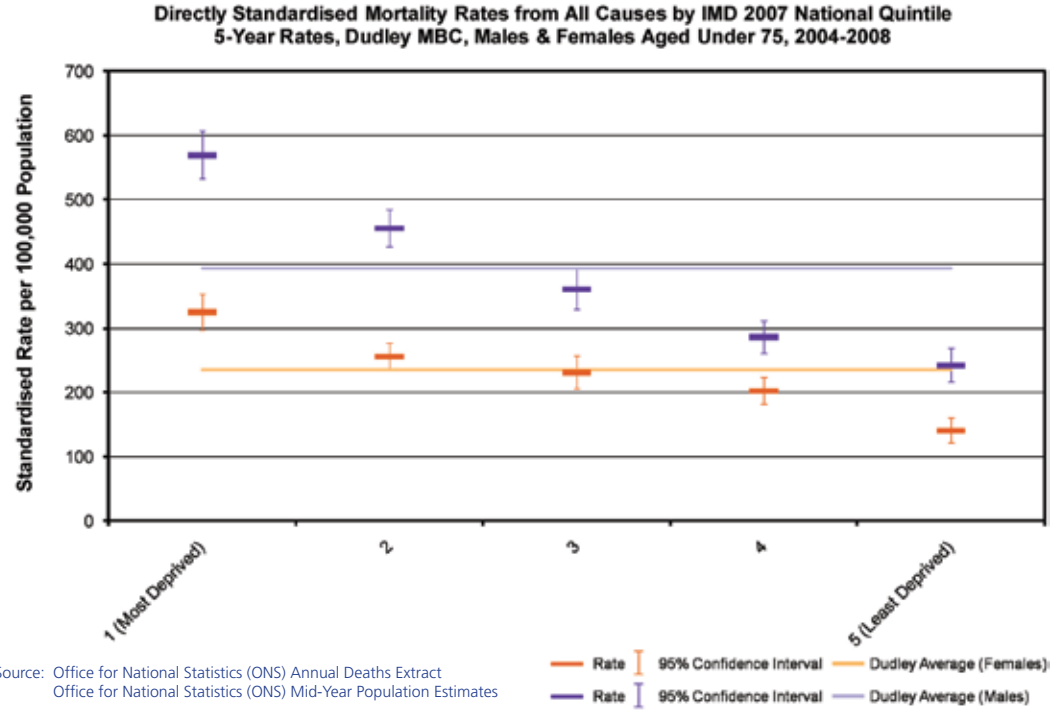
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.7b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.7c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

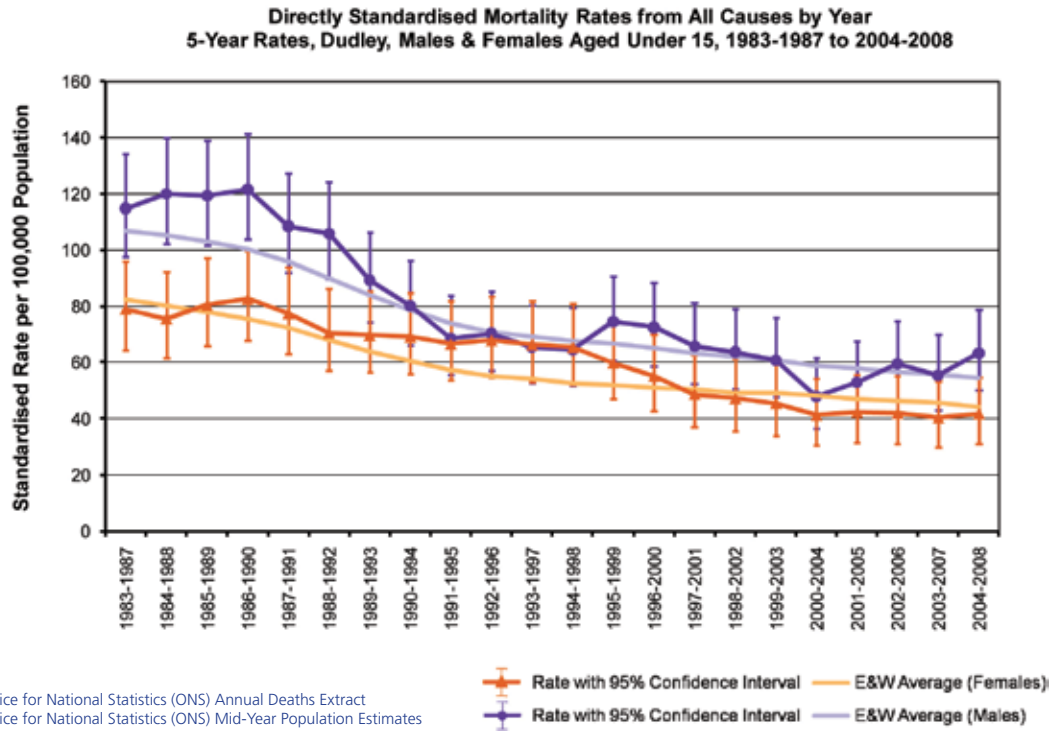
Inequality in premature mortality from all causes across Dudley

Table 8.5

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from all causes males (DSR per 100,000 population)	393	374	242	569	1.05	19	2.35*	327
Premature mortality from all causes females (DSR per 100,000 population)	235	236	141	325	0.99	-1	2.30*	184
Premature mortality from all causes persons (DSR per 100,000 population)	312	303	190	444	1.03	9	2.34*	254

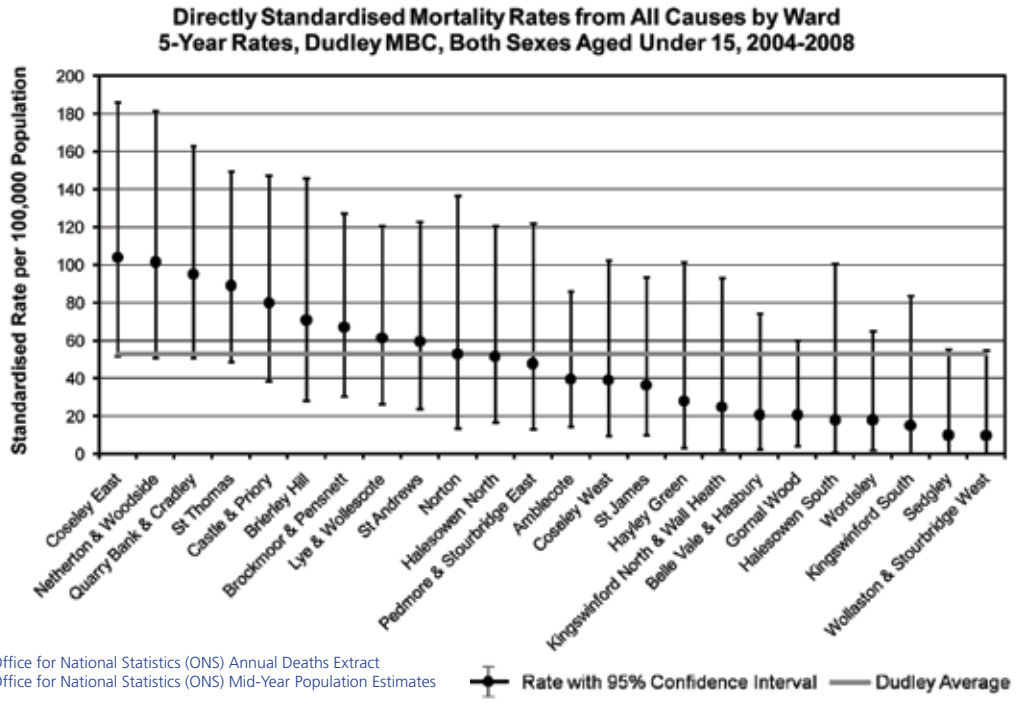
Child deaths are also affected by deprivation across Dudley, though, the gap with England has narrowed in recent years and is no longer statistically significantly higher (Figure 8.8a). Child deaths are higher in males than females and there is a social gradient for both males and females (Figure 8.8c). It should be noted that this analysis is based on small numbers and subject to large variation.

Figure 8.8a



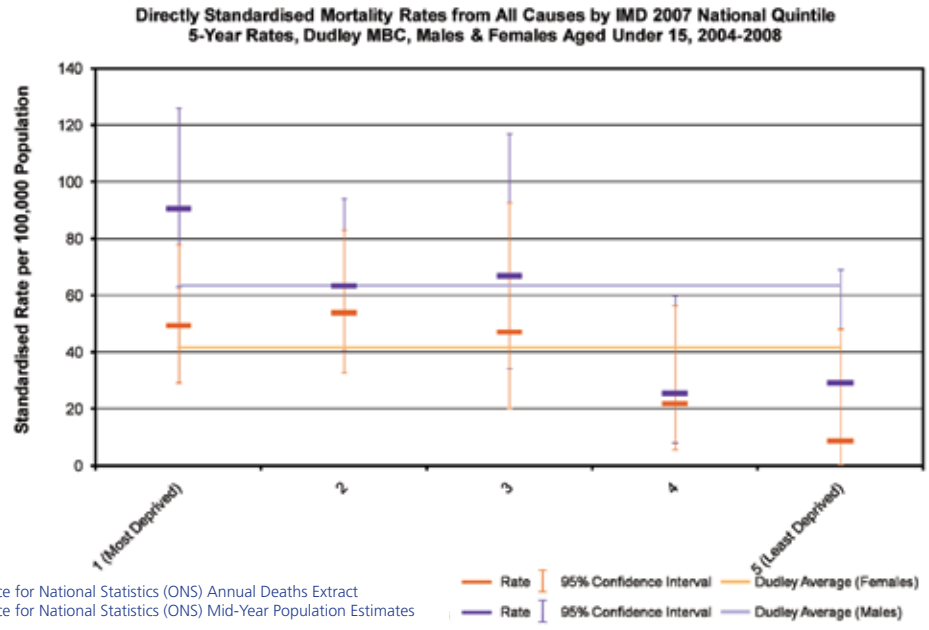
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.8b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.8c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Table 8.6

Inequality in child mortality from all causes across Dudley

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Child (<15 years) mortality from all causes males (DSR per 100,000 population)	63.3	54.4	29.1	90.5	1.16*	8.9	3.11*	61.4
Child (<15 years) mortality from all causes females (DSR per 100,000 population)	41.7	44.2	8.6	49.3	0.94	-2.5	5.73*	40.7
Child (<15 years) mortality from all causes persons (DSR per 100,000 population)	52.7	49.4	19.1	70.4	1.07	3.3	3.69*	51.3

Circulatory disease

Circulatory disease includes coronary heart disease, stroke, peripheral vascular disease and other diseases of the cardiovascular system. It is the main cause of reduced life expectancy of residents in the most deprived areas across Dudley. Prevalence is linked to a range of factors including diet and lifestyle as well as inherited and environmental factors. Analysis in this section includes all circulatory diseases, coronary heart disease, hypertensive disease and stroke.

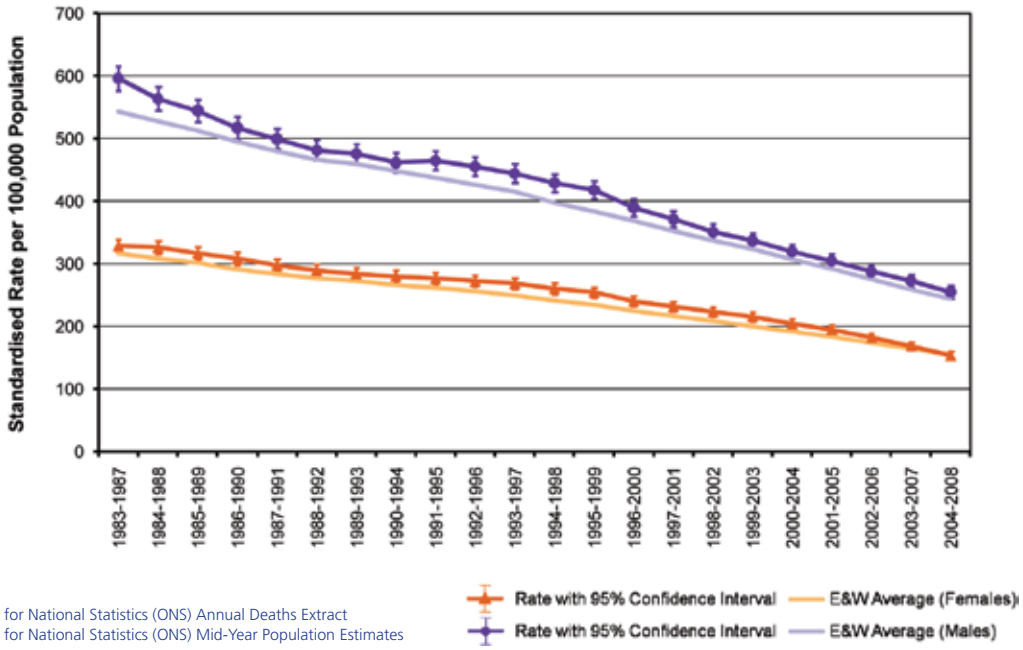
All circulatory diseases

All Ages

There has been a decline in mortality rate from all circulatory diseases over time and the gap with England and Wales has narrowed for females but remains for males being slightly higher. There is a clear social gradient for mortality from all circulatory diseases, which is steeper in men than women.

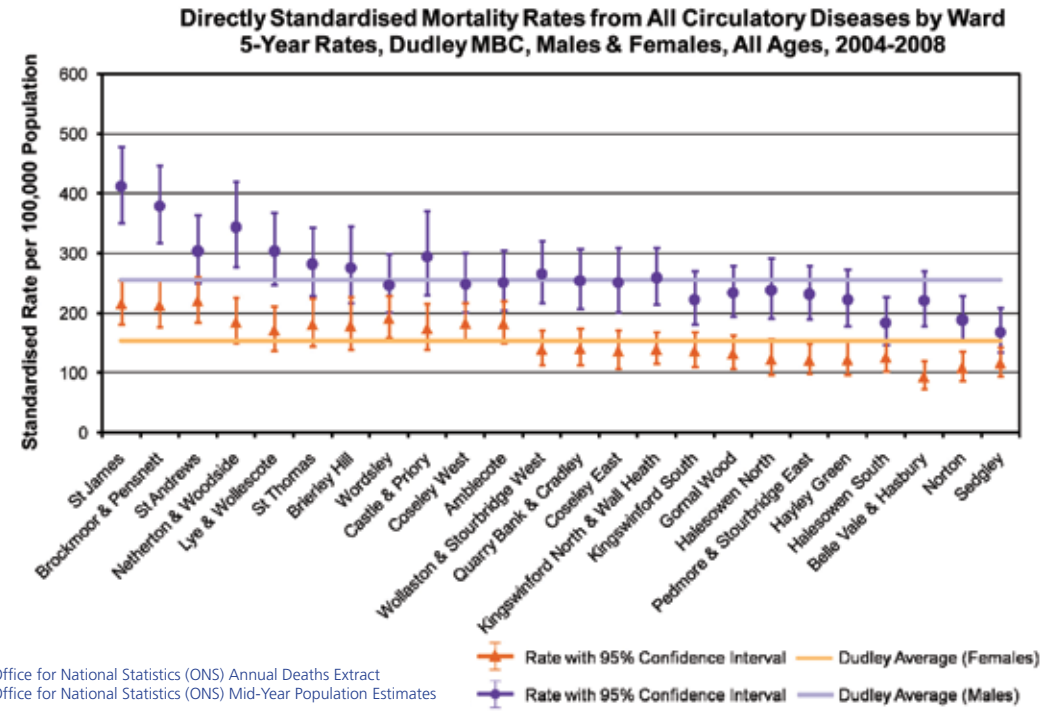
Figure 8.9a

Directly Standardised Mortality Rates from All Circulatory Diseases by Year 5-Year Rates, Dudley, Males & Females All Ages, 1983-1987 to 2004-2008



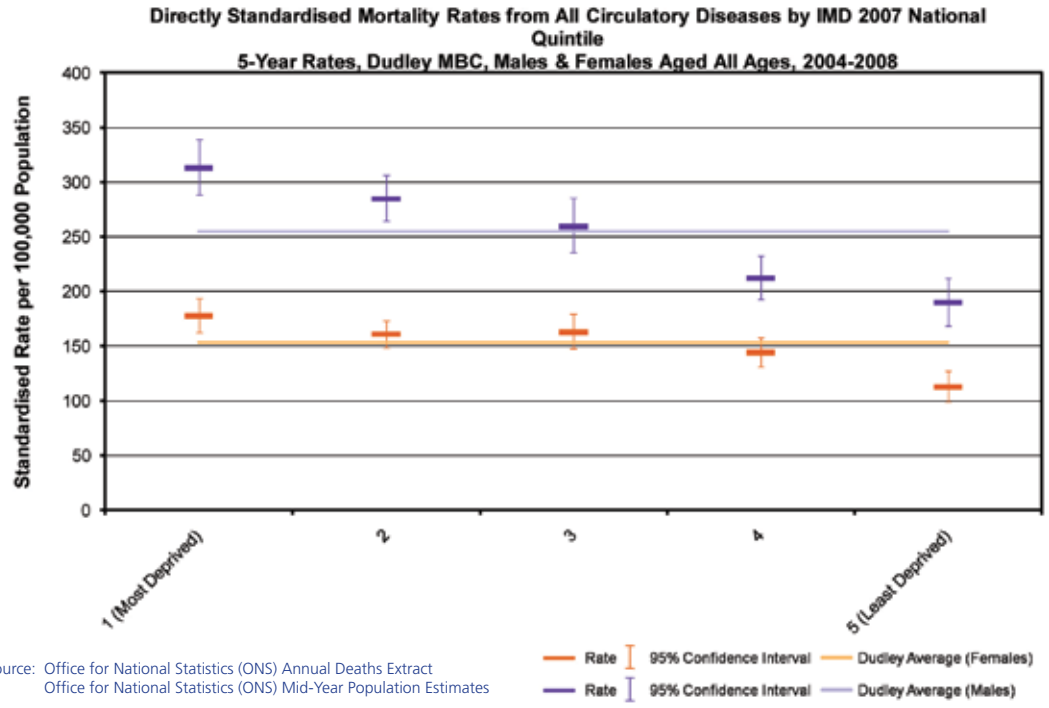
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.9b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.9c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from all circulatory diseases across Dudley

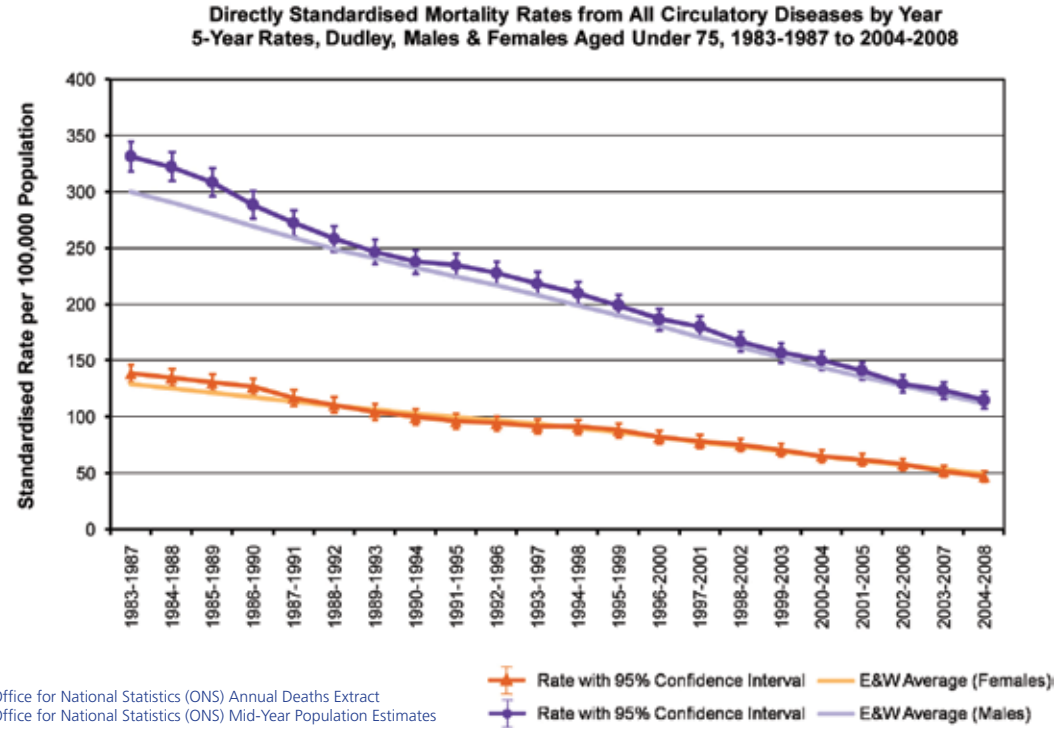
Table 8.7

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from all circulatory diseases males (DSR per 100,000 population)	255	244	190	313	1.05	11	1.65*	123
Mortality from all circulatory diseases females (DSR per 100,000 population)	153	155	112	177	0.99	-2	1.58*	65
Mortality from all circulatory diseases persons (DSR per 100,000 population)	199	196	147	238	1.02	3	1.62*	91

Aged under 75

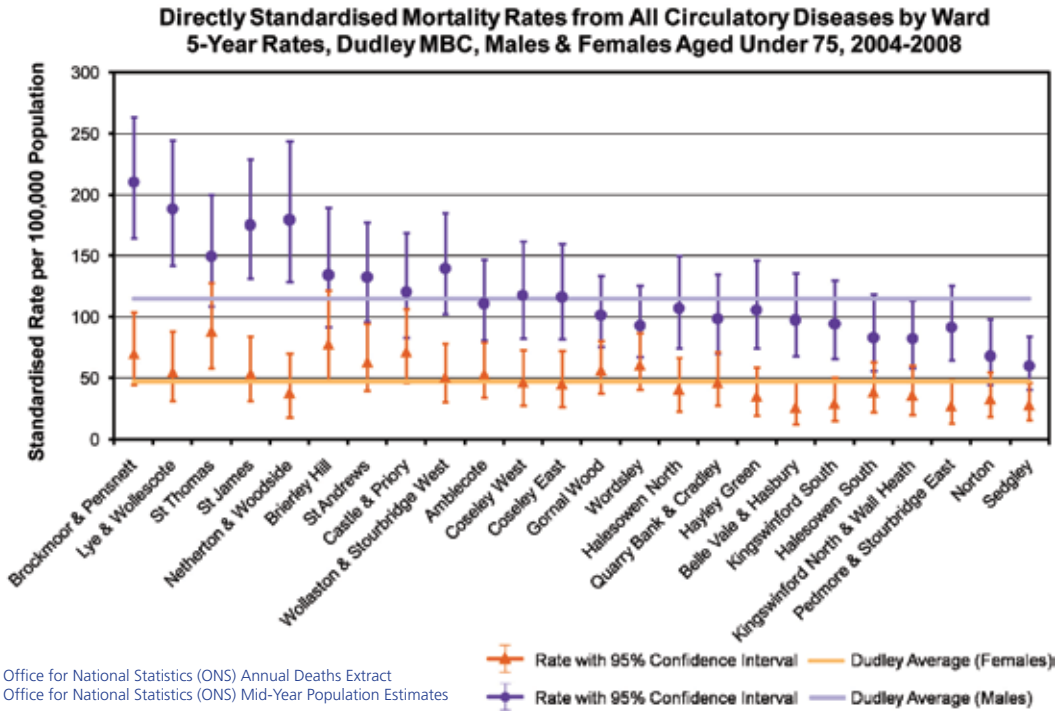
For premature mortality from all circulatory diseases there is little difference in the rate for Dudley and that for England and Wales, and the rate has continued to have a downward trend. Despite this success in reducing the external inequality there remains a significant internal inequality. Those in the most deprived quintile are two and a half times more likely to suffer premature death due to circulatory diseases than in the least deprived quintile and this goes up to three times more likely for females.

Figure 8.10a



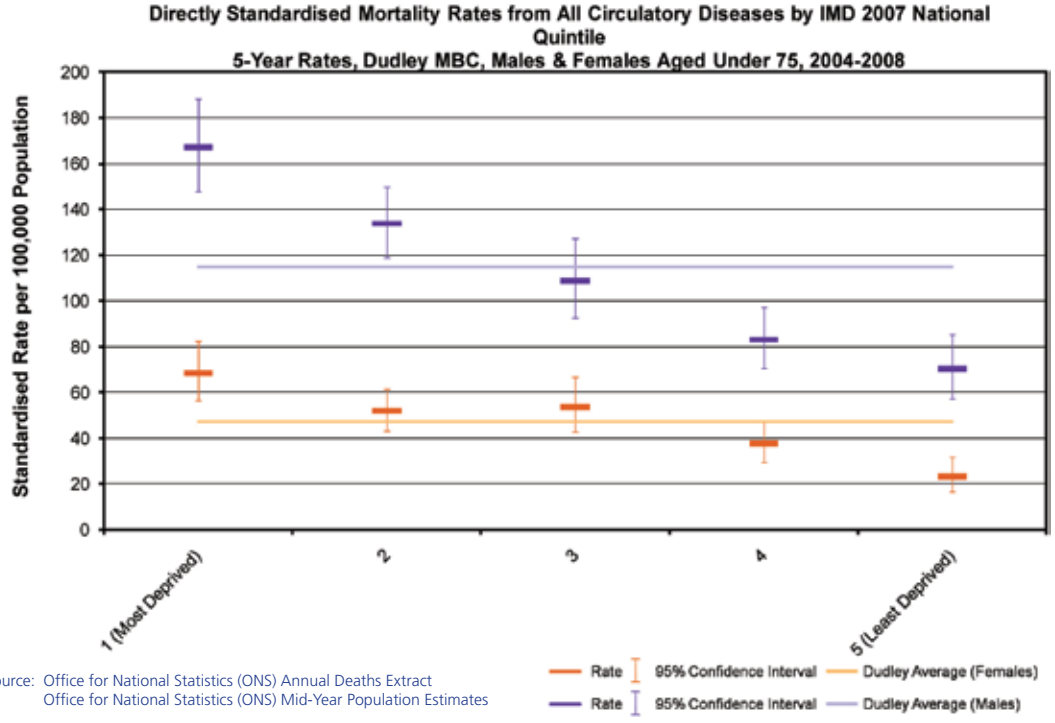
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.10b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.10c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Table 8.8

Inequality in premature mortality from all circulatory diseases across Dudley

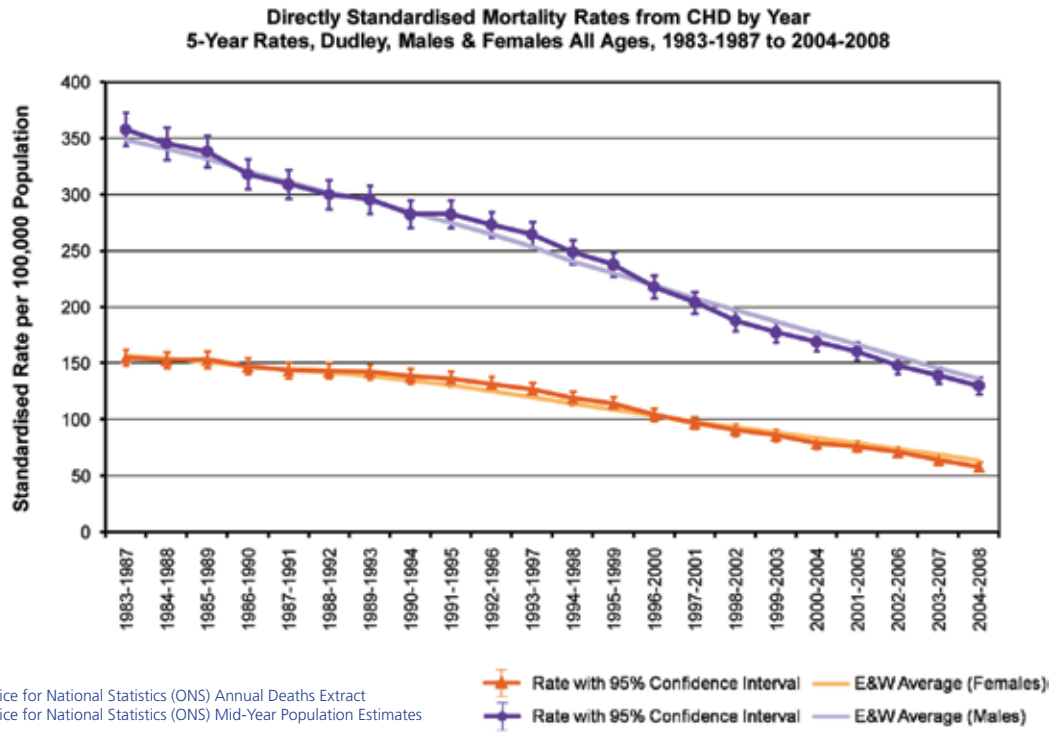
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from all circulatory diseases males (DSR per 100,000 population)	115	112	70	167	1.03	3	2.39*	97
Premature mortality from all circulatory diseases females (DSR per 100,000 population)	47	50	23	69	0.94	-3	3.00*	46
Premature mortality from all circulatory diseases persons (DSR per 100,000 population)	80	80	46	117	1.00	0	2.54*	71

Coronary heart disease

All Ages

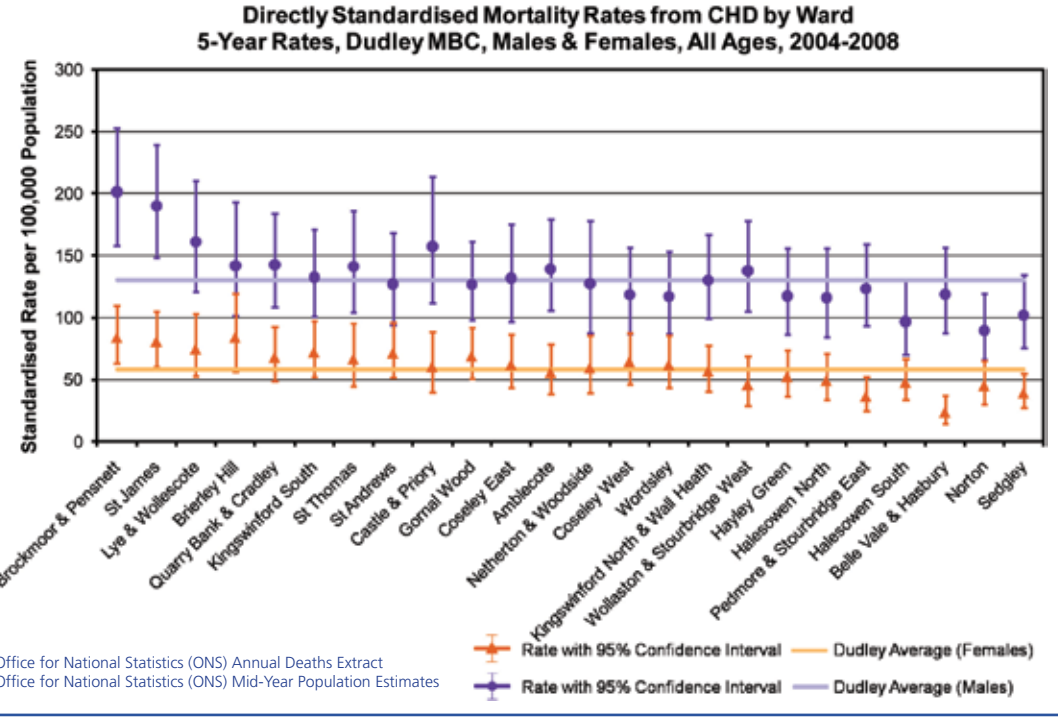
Death rates from coronary heart disease in Dudley are lower than the national rates for both men and women (Figure 8.11a) and this has been true for the last ten years. There is a strong social gradient for CHD with people in the most deprived areas over one and a half times more likely as those in the least deprived areas to die from CHD (Figure 8.11c).

Figure 8.11a



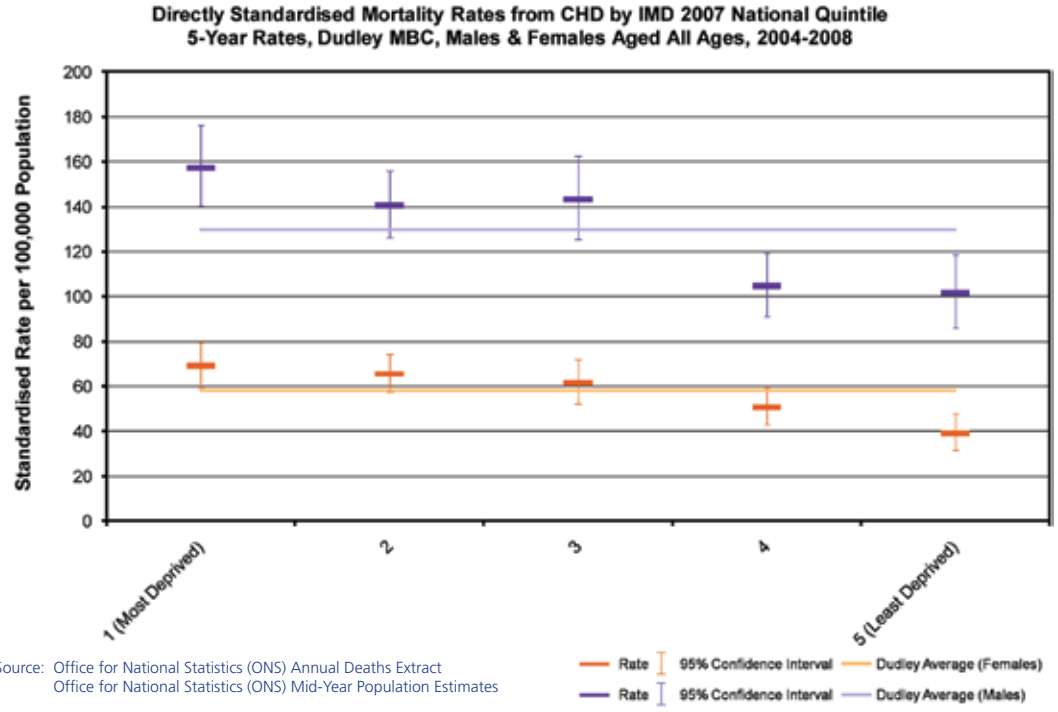
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.11b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.11c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from coronary heart disease across Dudley

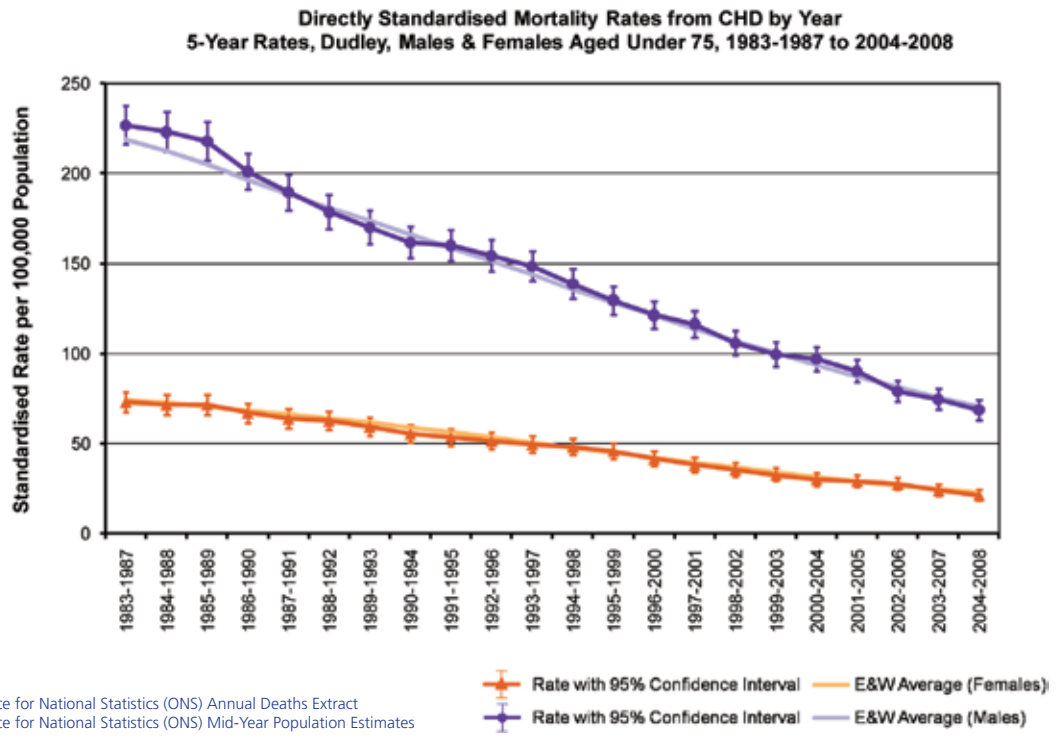
Table 8.9

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from coronary heart disease males (DSR per 100,000 population)	130	136	102	158	0.96	-6	1.55*	56
Mortality from coronary heart disease females (DSR per 100,000 population)	58	64	39	69	0.91	-6	1.77*	30
Mortality from coronary heart disease persons (DSR per 100,000 population)	90	96	67	109	0.94	-6	1.63*	42

Aged under 75

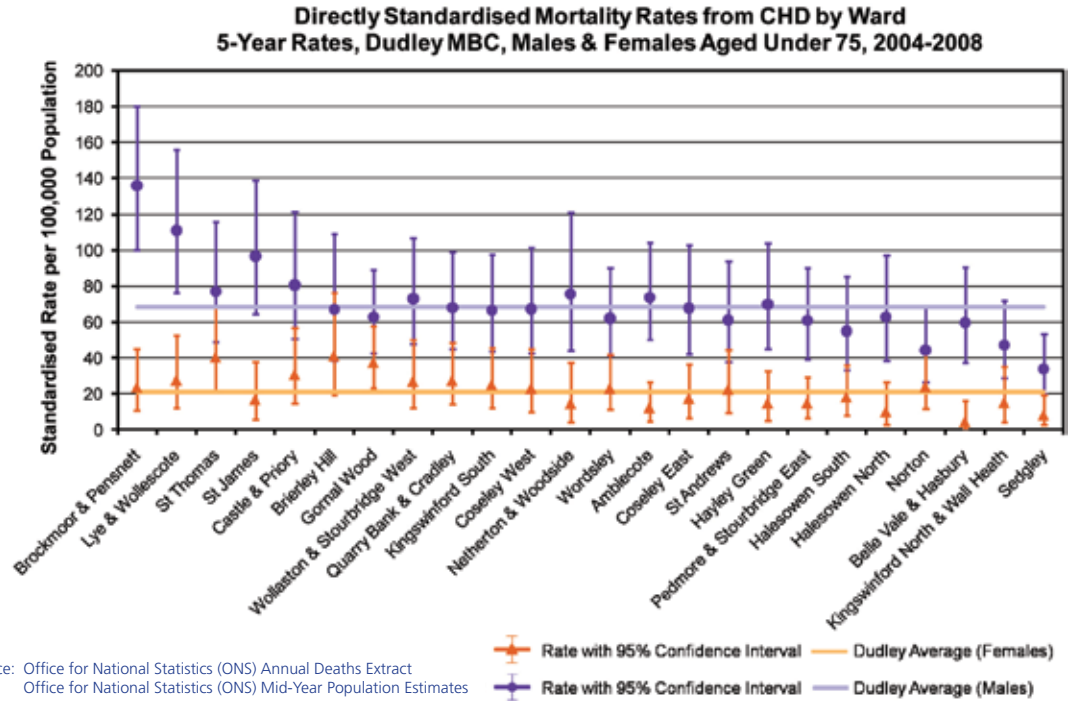
For premature mortality from coronary heart disease there is little difference in the rate for Dudley and that for England and Wales, and the rate has continued to have a downward trend. Despite this success in reducing the external inequality there remains a significant internal inequality. Those in the most deprived quintile are more than twice as likely to suffer premature death due to circulatory diseases than in the least deprived quintile and this goes up to two and a half times more likely for females.

Figure 8.12a



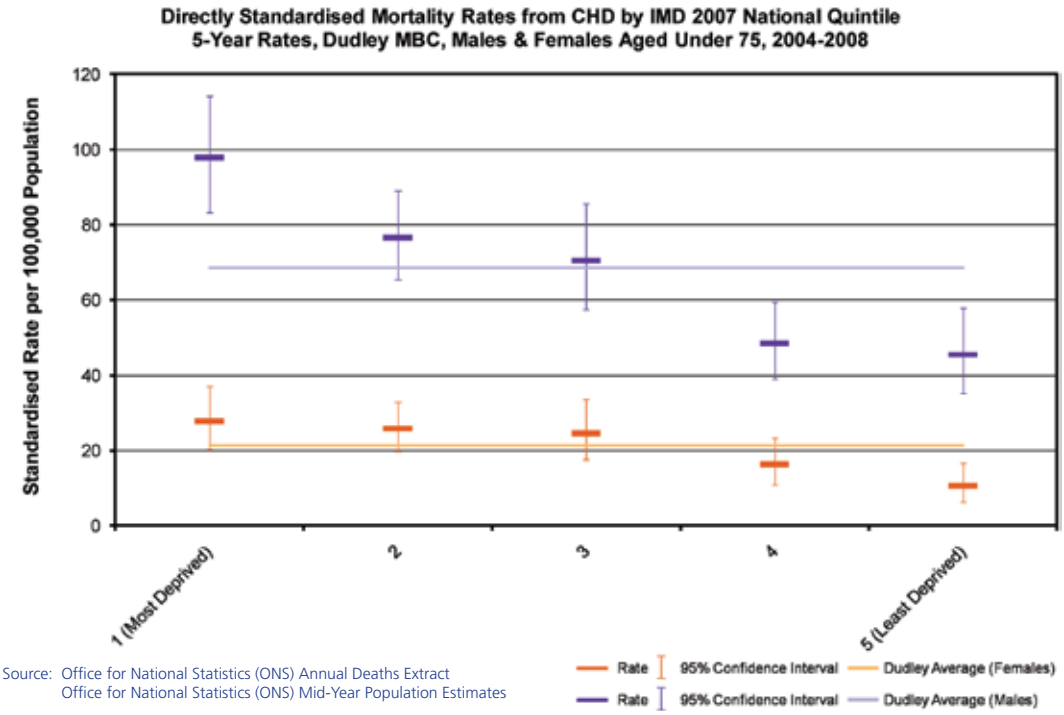
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.12b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.12c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from coronary heart disease across Dudley

Table 8.10

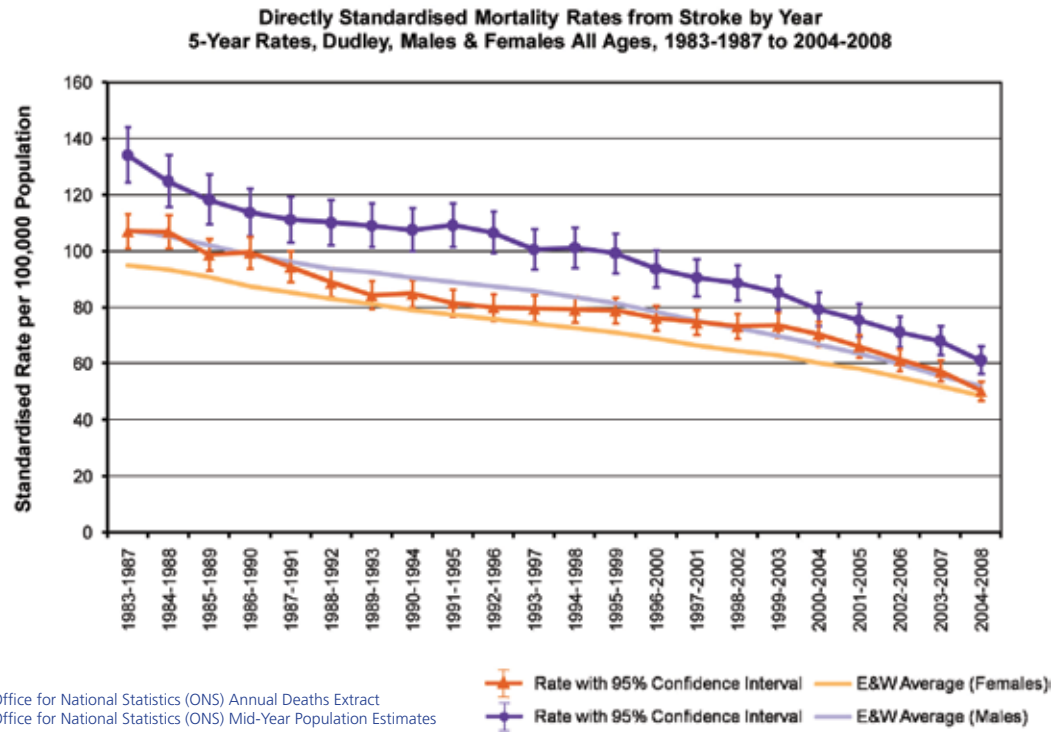
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from coronary heart disease males (DSR per 100,000 population)	68	70	46	98	0.97	-2	2.13*	52
Premature mortality from coronary heart disease females (DSR per 100,000 population)	21	22	11	28	0.95	-1	2.55*	17
Premature mortality from coronary heart disease persons (DSR per 100,000 population)	44	46	28	62	0.96	-2	2.21*	34

Stroke

All Ages

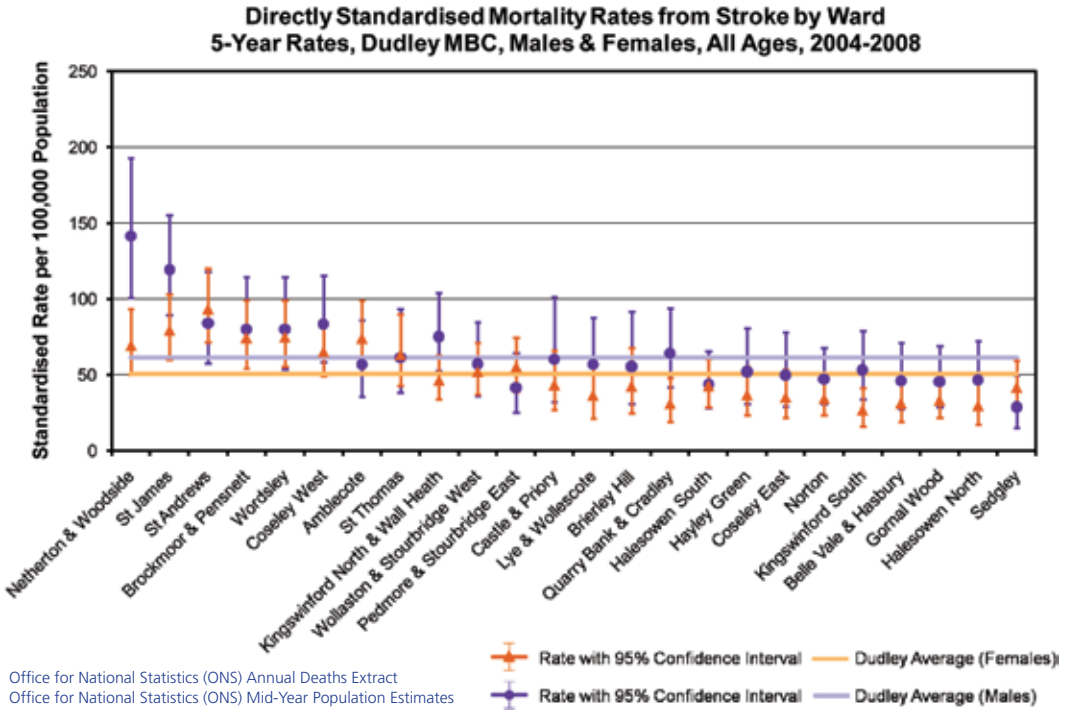
Death rates from stroke are similar to the national rates for women and significantly higher than the national figures for men (Figure 8.13a). There is a social gradient for stroke with males in the most deprived areas over one and a half times more likely as males in the least deprived areas to die from stroke (Figure 8.13c).

Figure 8.13a



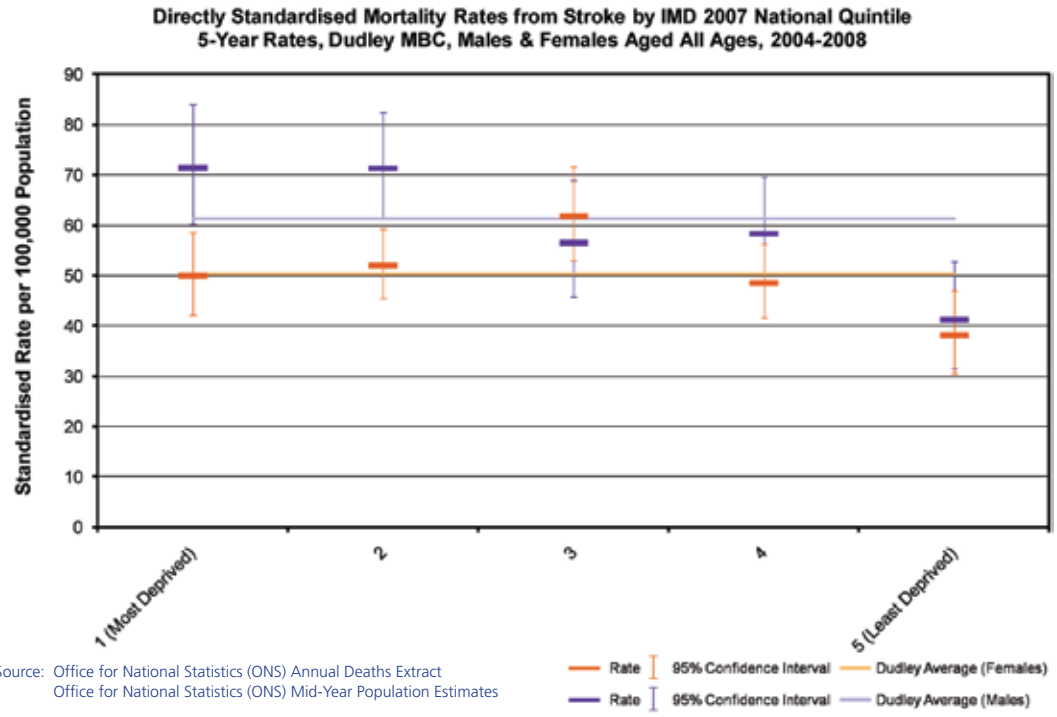
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.13b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.13c



Inequality in mortality from stroke across Dudley

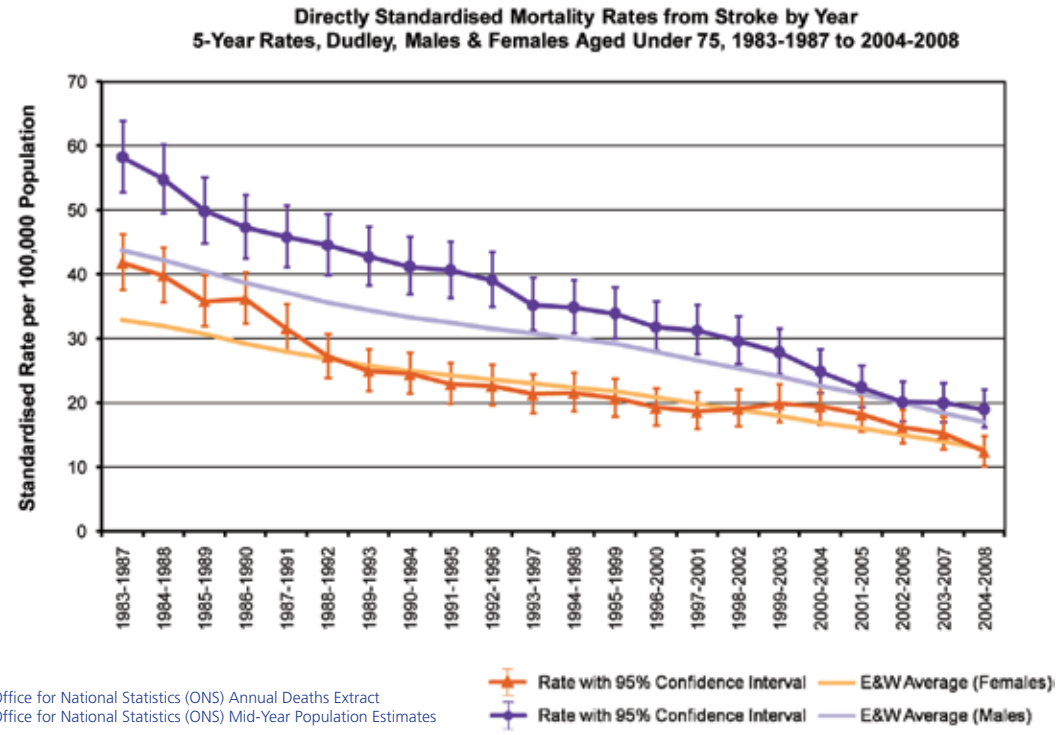
Table 8.11

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from stroke males (DSR per 100,000 population)	61	52	41	71	1.17	9	1.73*	30
Mortality from stroke females (DSR per 100,000 population)	50	49	38	50	1.02	1	1.32*	12
Mortality from stroke persons (DSR per 100,000 population)	55	51	40	59	1.08	4	1.48*	19

Aged under 75

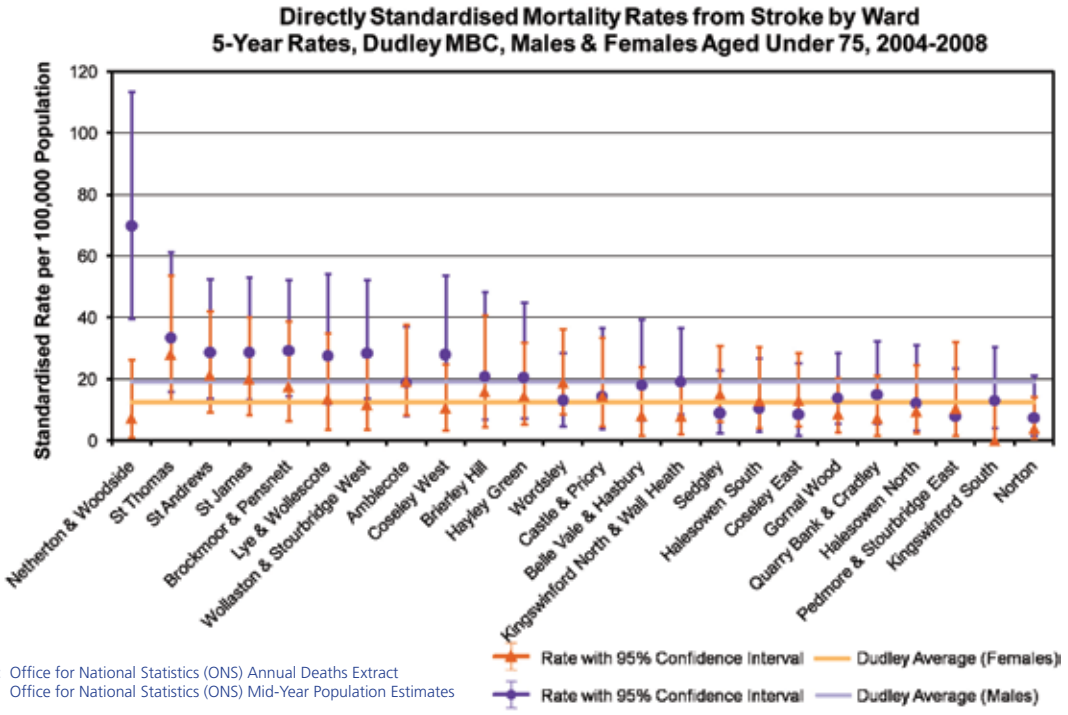
For premature mortality from stroke there is little difference in the rate for Dudley and that for England and Wales, and the rate has continued to have a downward trend closing the external gap of previous years. Despite this success in reducing the external inequality there remains a significant internal inequality. Those in the most deprived quintile are more than two and a half times more likely to suffer premature death due to stroke than in the least deprived (Figure 8.14c).

Figure 8.14a



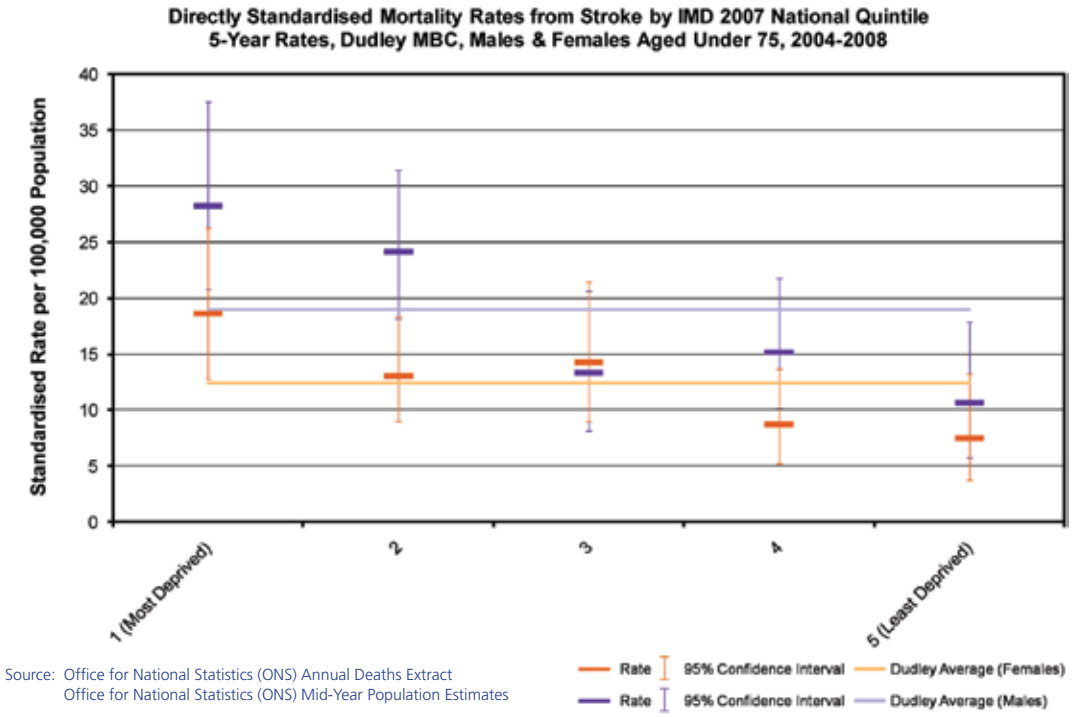
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.14b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.14c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from stroke across Dudley

Table 8.12

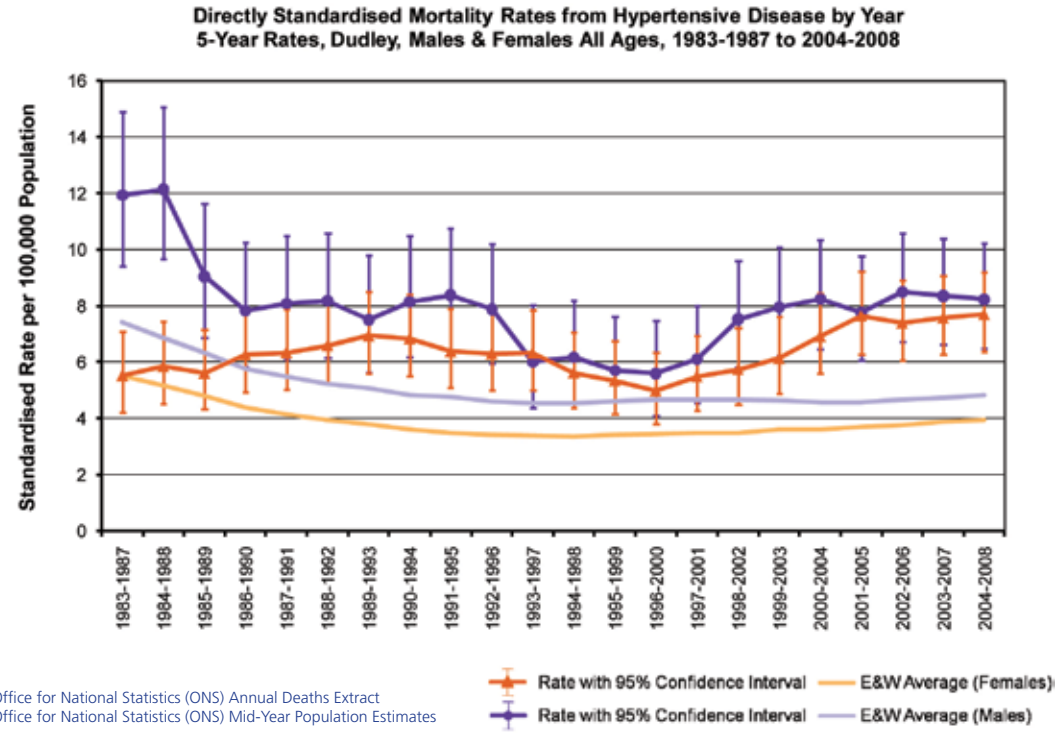
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from stroke males (DSR per 100,000 population)	19.0	17.1	10.7	28.2	1.11	1.9	2.64*	17.5
Premature mortality from stroke females (DSR per 100,000 population)	12.4	12.9	7.5	18.6	0.96	-0.5	2.48*	11.1
Premature mortality from stroke persons (DSR per 100,000 population)	15.7	14.9	9.1	23.3	1.05	0.8	2.56*	14.2

Hypertensive disease

All Ages

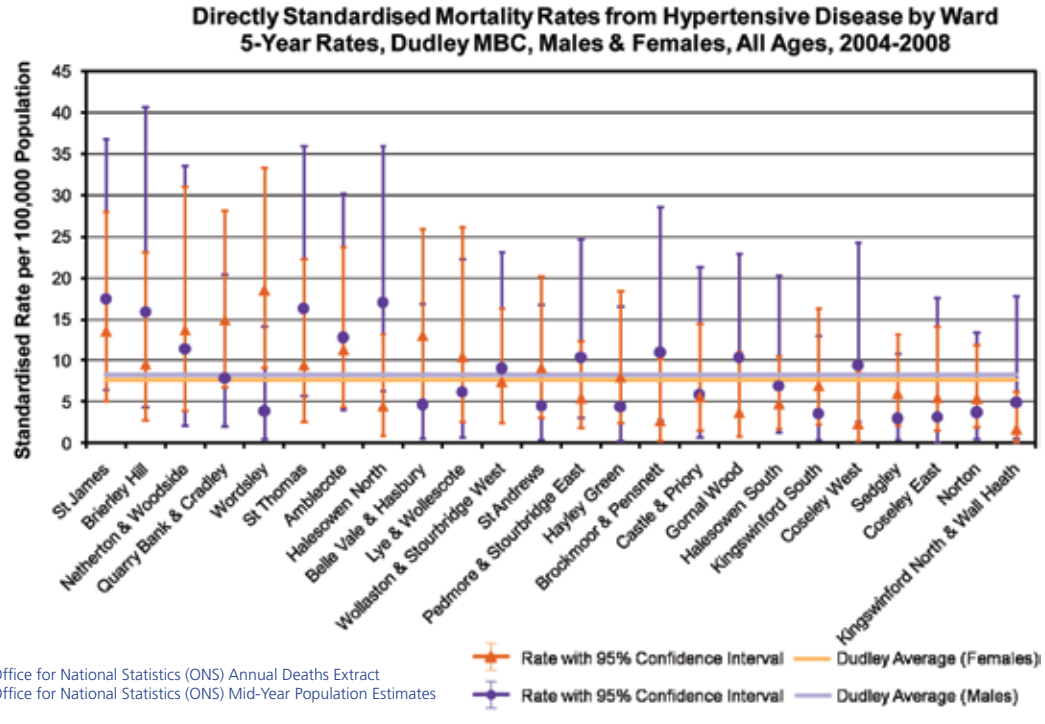
Death rates from hypertensive disease are significantly higher for Dudley compared to the national rates for both men and women (Figure 8.15a) and this has been true for the last ten years for men and even longer for women. There is also a social gradient for mortality from hypertensive disease though due to the low death rates for hypertensive disease this is not statistically significant (Figure 8.15c).

Figure 8.15a



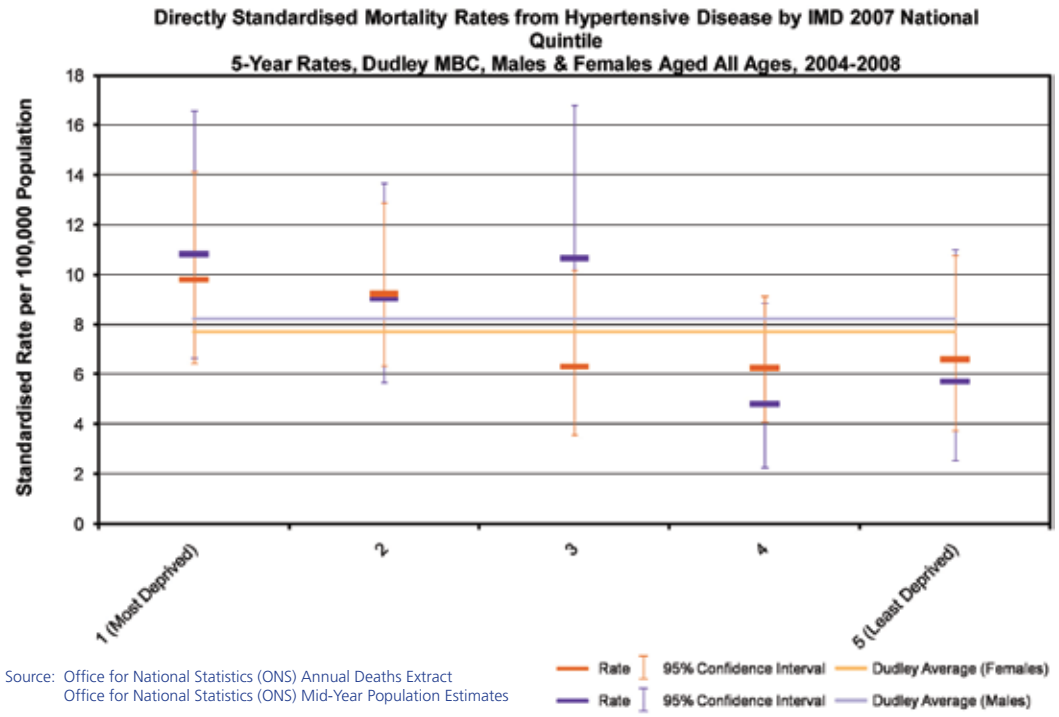
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.15b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.15c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from hypertensive disease across Dudley

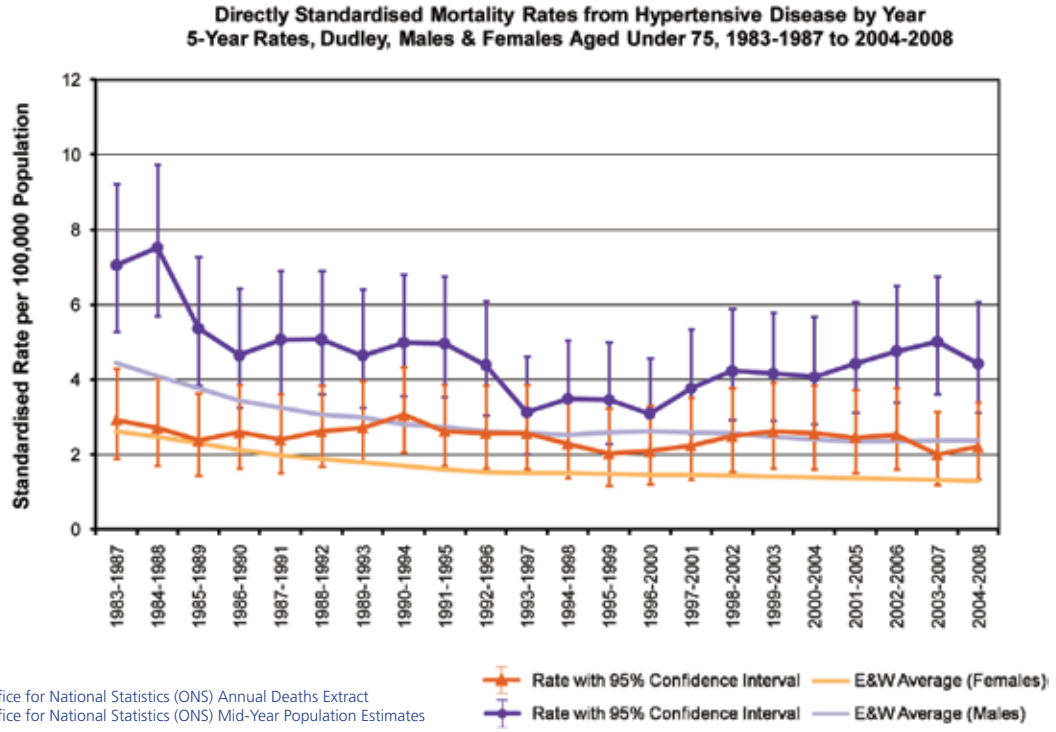
Table 8.13

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from hypertensive disease males (DSR per 100,000 population)	8.2	4.8	5.7	10.8	1.71	3.4	1.89*	5.1
Mortality from hypertensive disease females (DSR per 100,000 population)	7.7	4.0	6.6	9.8	1.93*	3.7	1.48*	3.2
Mortality from hypertensive disease persons (DSR per 100,000 population)	8.3	4.4	6.5	10.8	1.89*	3.9	1.69*	4.3

Aged under 75

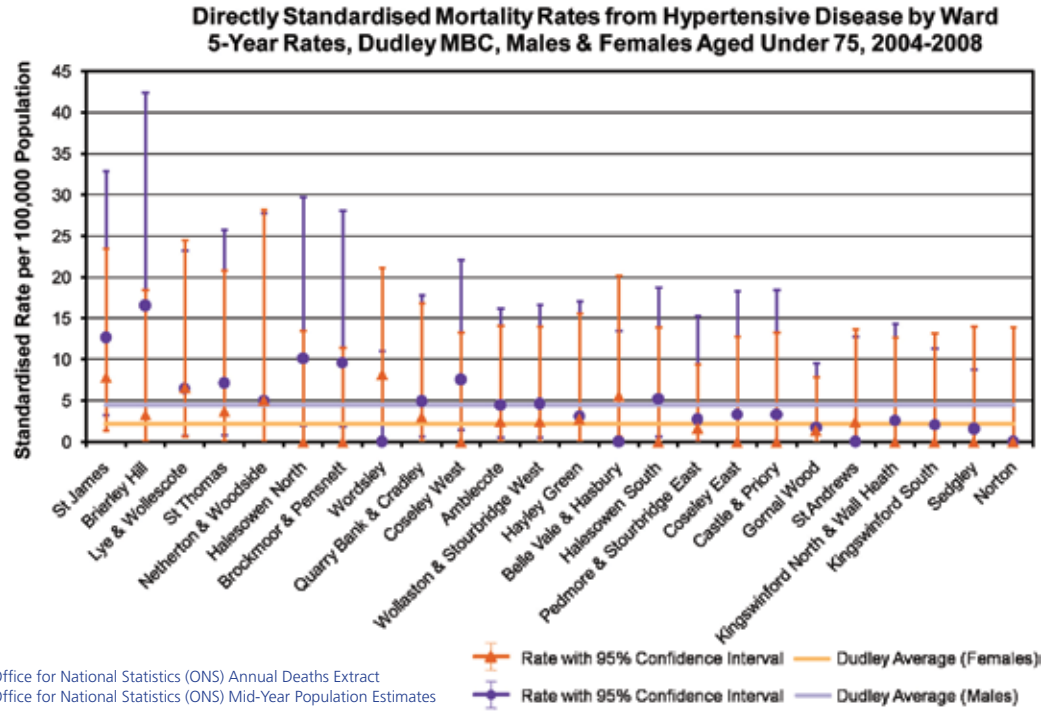
For premature mortality from hypertensive disease there is a significantly higher death rate for Dudley than that of England and Wales, and this gap in the rate has not closed at all in the last twenty years. There also remains an internal inequality though this is not statistically significant (Figure 8.16c).

Figure 8.16a



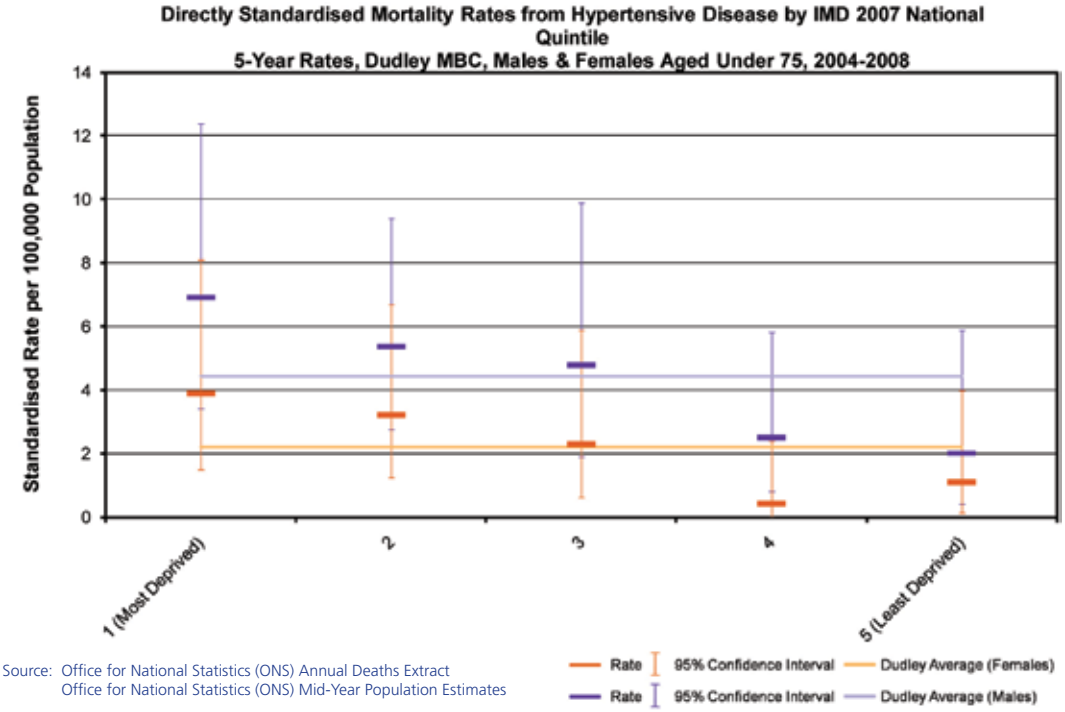
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.16b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.16c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from hypertensive disease across Dudley

Table 8.14

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from hypertensive disease males (DSR per 100,000 population)	4.4	2.4	2.0	6.9	1.83*	2.0	3.45*	4.9
Premature mortality from hypertensive disease females (DSR per 100,000 population)	2.2	1.3	1.1	3.9	1.69*	0.9	3.55*	2.8
Premature mortality from hypertensive disease persons (DSR per 100,000 population)	3.3	1.8	1.6	5.4	1.83*	1.5	3.38*	3.8

Cancer

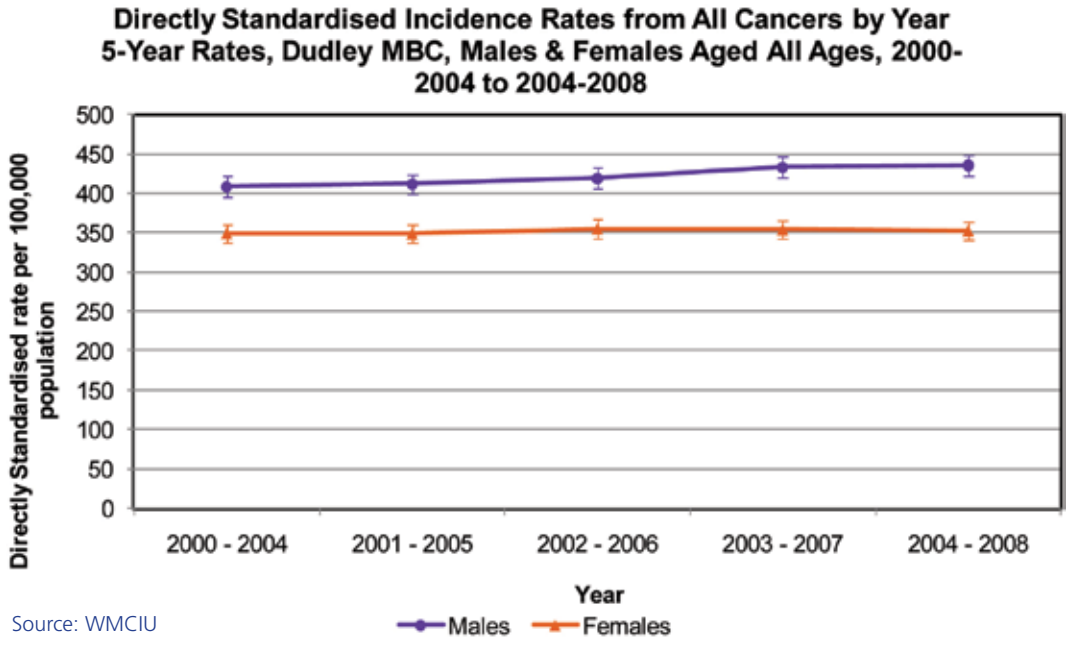
Cancer is one of the main causes of reduced life expectancy for people in Dudley.

All Cancers

All Ages

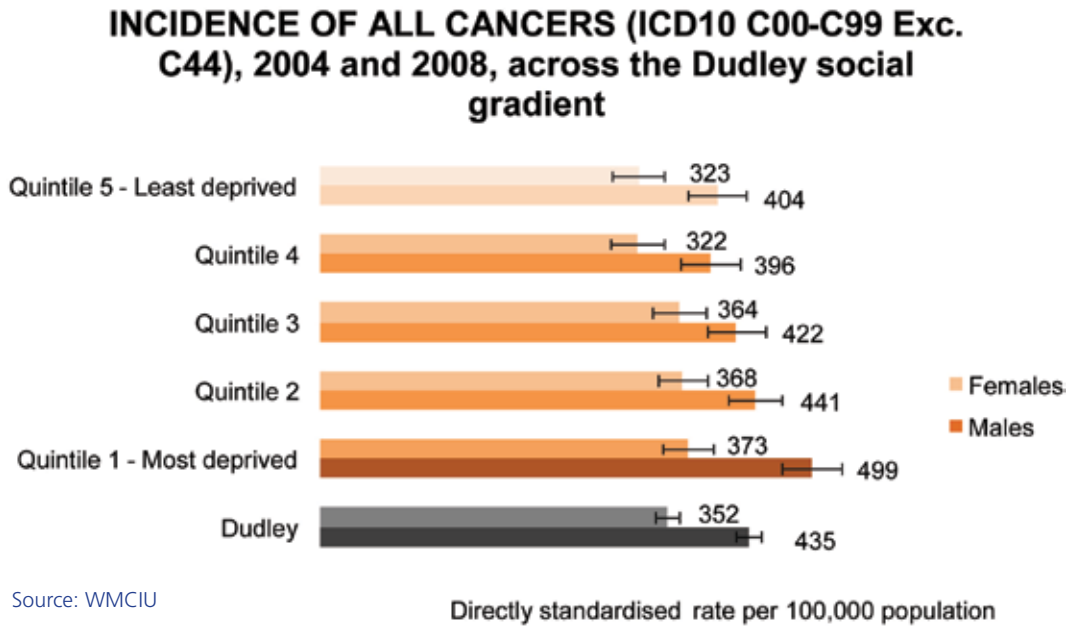
Cancer incidence rates have increased between 2000 and 2008 both nationally and locally. The rate of increase has been greater locally for males and has been similar or slower than national for females (Figure 8.17a). There is a slight internal social gradient which is more marked for males than females, with those living in the most deprived areas approximately 20% more likely to get cancer than those in the least deprived areas (Figure 8.17b).

Figure 8.17a



Source: WMCIU

Figure 8.17b



Source: WMCIU

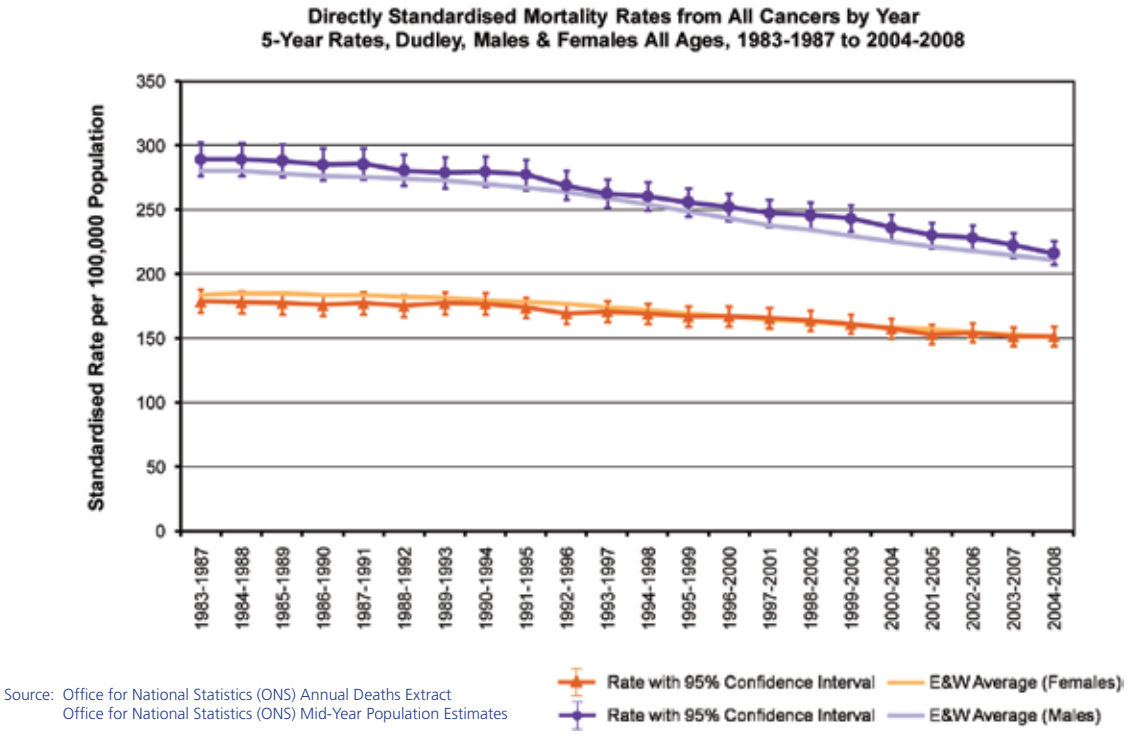
Inequality in incidence of all cancers across Dudley

Table 8.15

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Incidence of all cancers males (DSR per 100,000 population)	435	417	404	499	1.04	18	1.24*	95
Incidence of all cancers females (DSR per 100,000 population)	352	361	323	373	0.98	-9	1.15*	50
Incidence of all cancers persons (DSR per 100,000 population)	394	389	363	436	1.01	5	1.20*	73

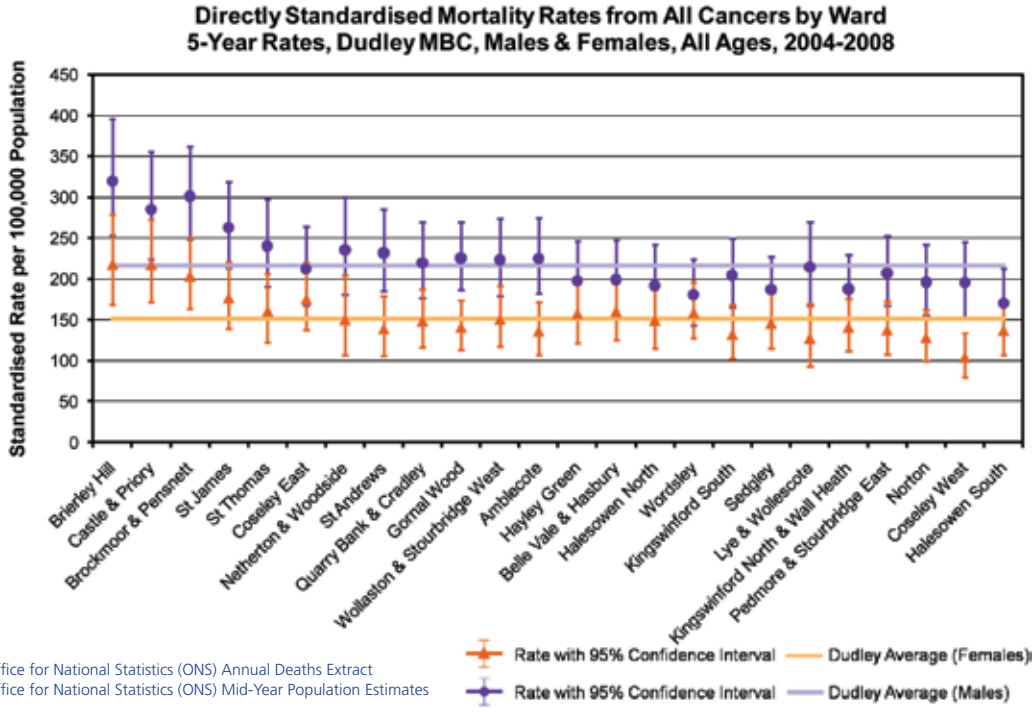
Mortality from cancer in Dudley is similar to national rates (Figure 8.18a) and for mortality there is, as with incidence, a similar deprivation gradient, which is stronger for males than in females (Figure 8.18c).

Figure 8.18a



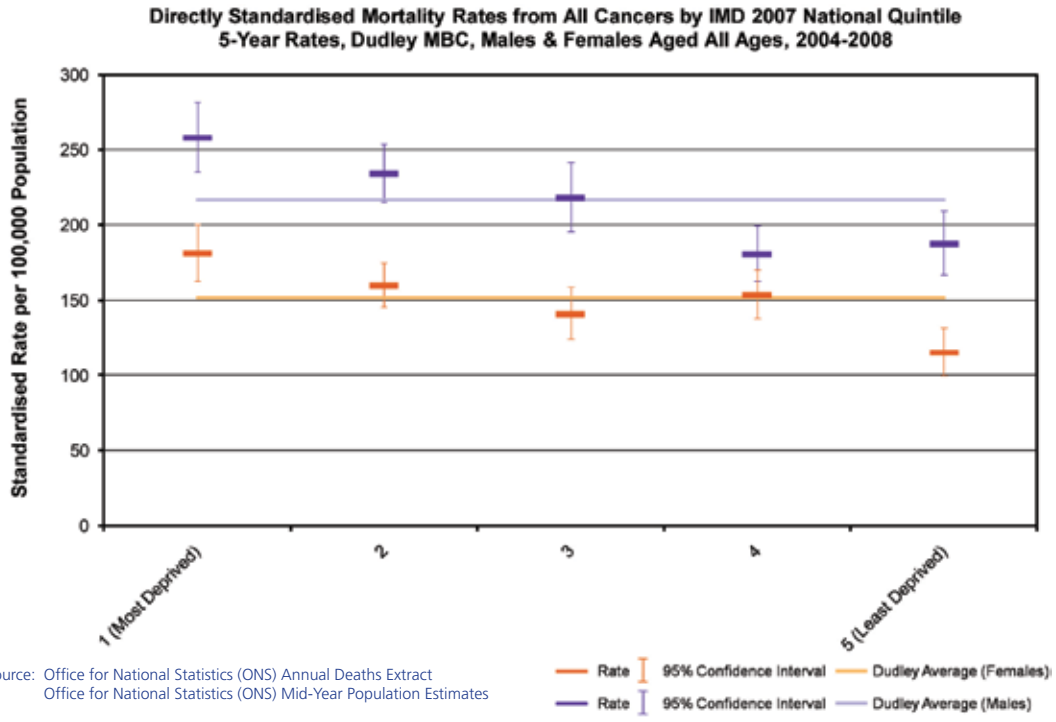
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.18b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.18c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from all cancers across Dudley

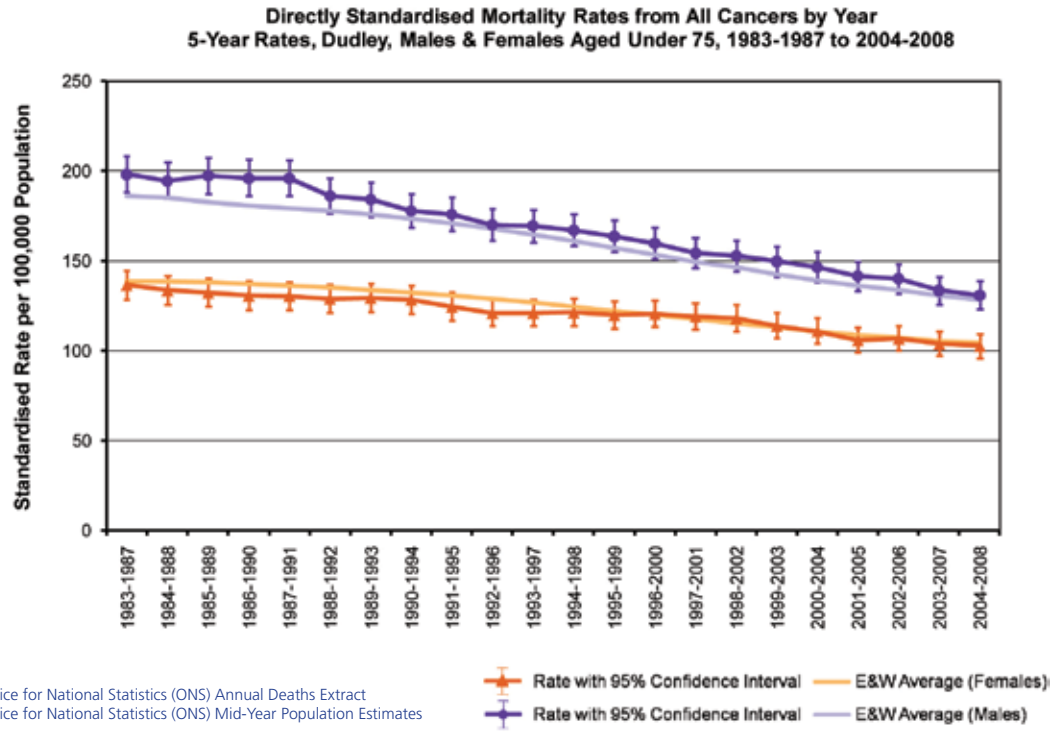
Table 8.16

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from all cancers males (DSR per 100,000 population)	216	211	187	258	1.02	5	1.38*	71
Mortality from all cancers females (DSR per 100,000 population)	152	152	115	181	1.00	0	1.57*	66
Mortality from all cancers persons (DSR per 100,000 population)	178	176	147	212	1.01	2	1.44*	65

Aged under 75

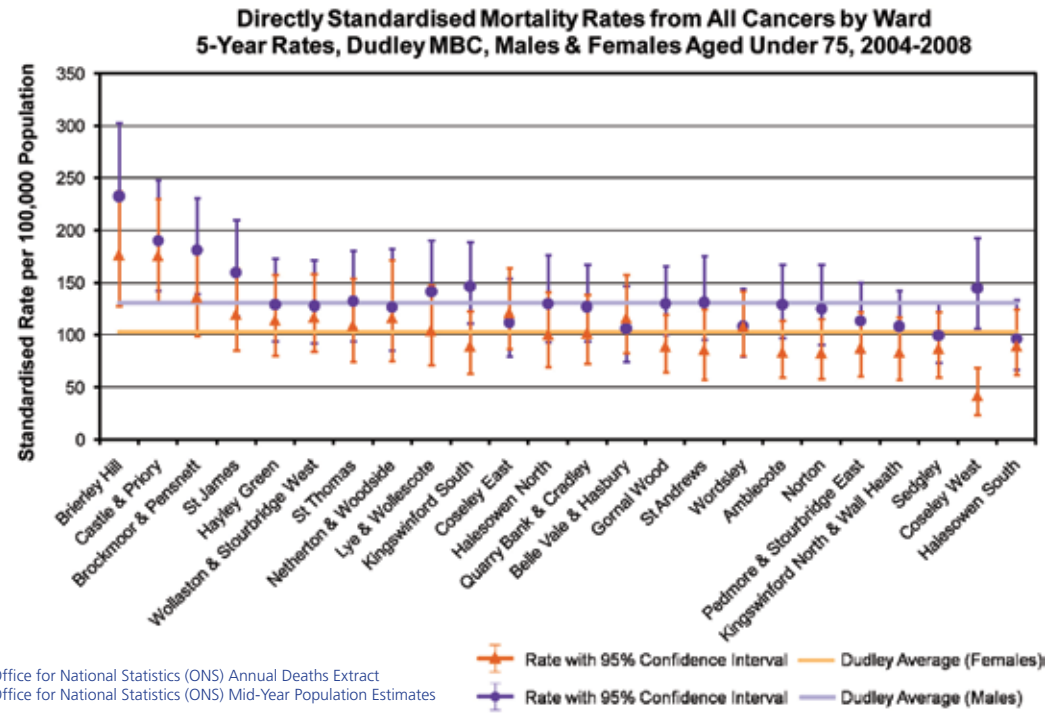
Premature mortality from all cancers has continued to decline over time and there is no significant gap for mortality between Dudley and national across the time trend (Figure 8.19a). The social gradient is stronger for premature mortality from all cancers compared with all age mortality with people in the most deprived areas 72% more likely to die than in the least deprived area (Figure 8.19c and Table 8.17).

Figure 8.19a



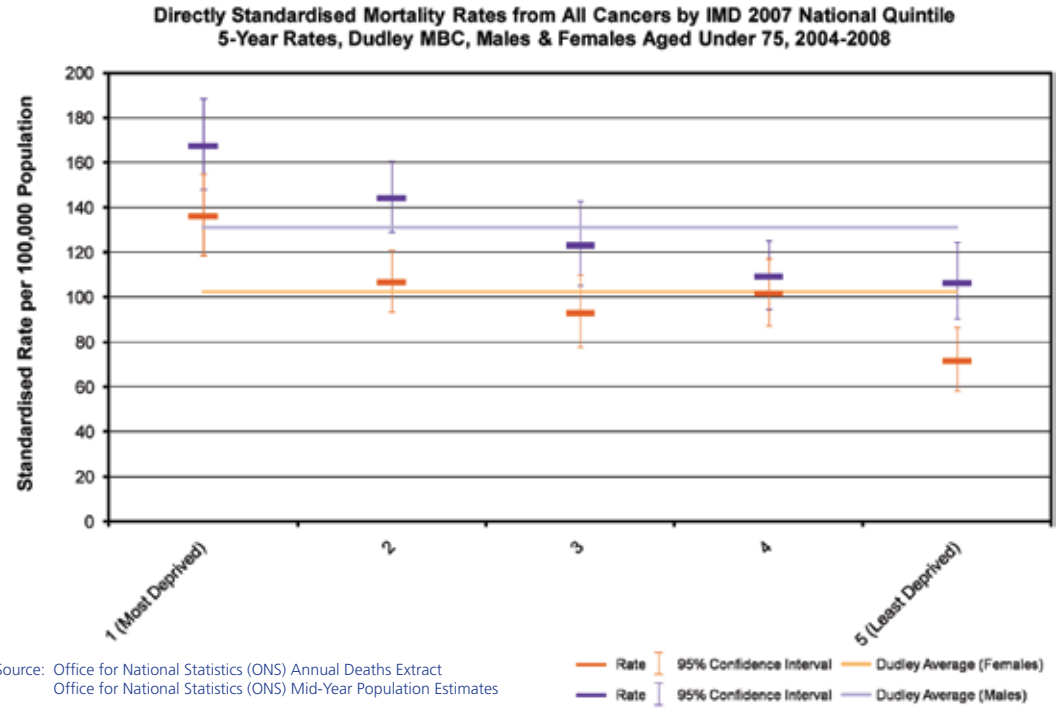
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.19b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.19c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from all cancers across Dudley

Table 8.17

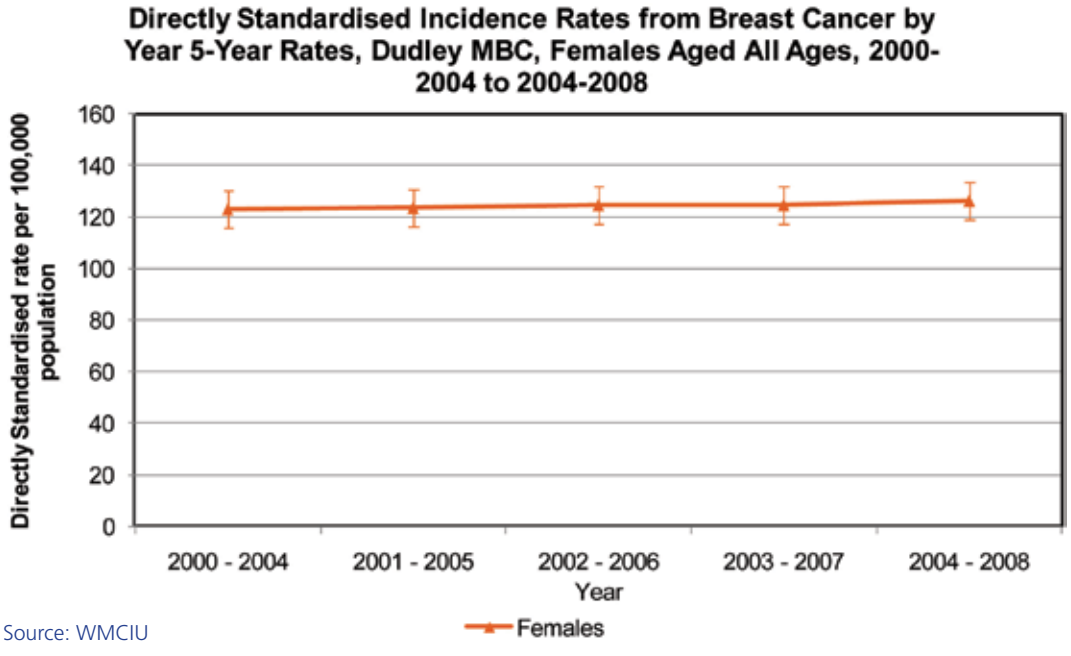
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from all cancers males (DSR per 100,000 population)	131	128	106	167	1.02	3	1.58*	61
Premature mortality from all cancers females (DSR per 100,000 population)	103	104	72	136	0.99	-1	1.89*	64
Premature mortality from all cancers persons (DSR per 100,000 population)	116	116	88	151	1.00	0	1.72*	63

Breast Cancer

All Ages

Breast cancer incidence rates have remained relatively constant between 2000 and 2008 in Dudley whilst the national incidence rate has continued to rise, hence the external gap has closed (Figure 8.20a). Internally there is no social gradient for the incidence of breast cancer (Figure 8.20b).

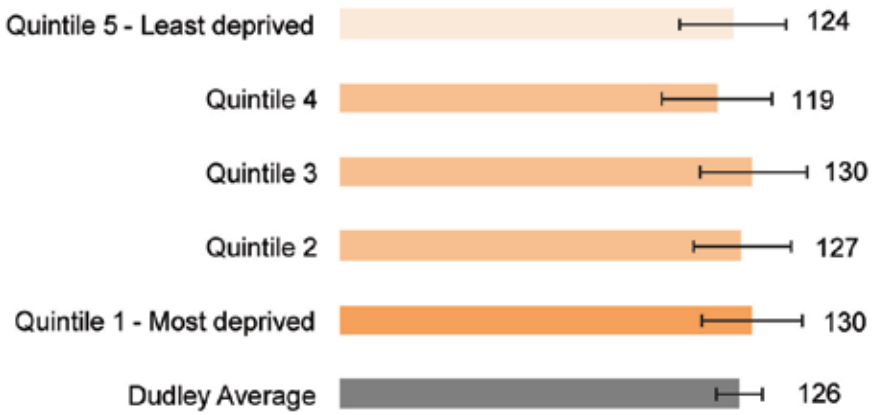
Figure 8.20a



Source: WMCIU

Figure 8.20b

INCIDENCE OF BREAST CANCERS (ICD10 C50), 2004 and 2008, across the Dudley social gradient



Source: WMCIU

Directly standardised rate per 100,000 population

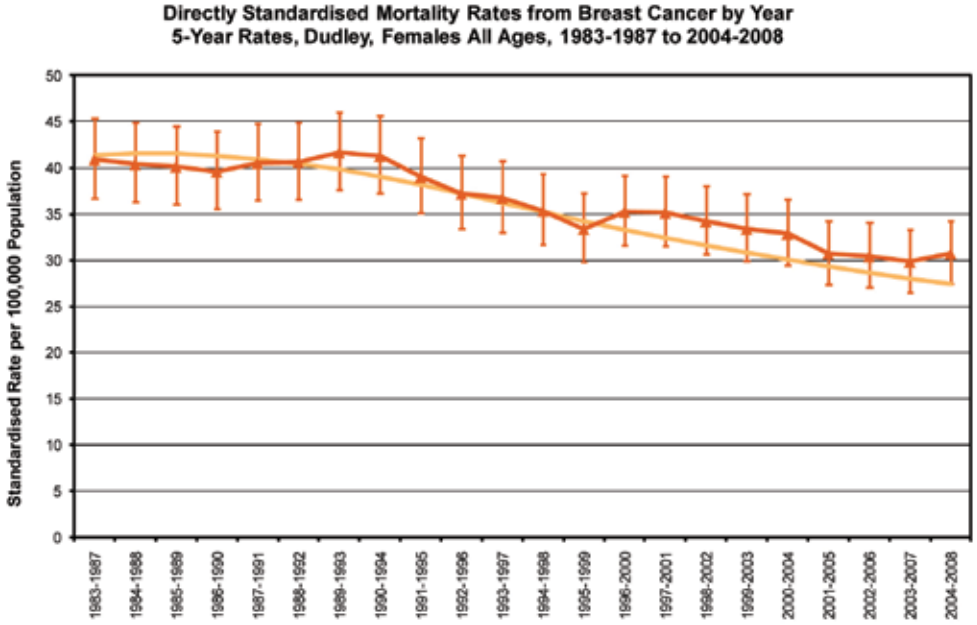
Table 8.18

Inequality in incidence of breast cancer across Dudley

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Incidence of breast cancer females (DSR per 100,000 population)	126	124	124	130	1.02	2	1.05	6

Mortality from breast cancer in Dudley is similar to national levels, though in 2008 there is an indication that mortality from breast cancer is worsening relative to the national picture (Figure 8.21a). For mortality there is, as with incidence, no social deprivation gradient (Figure 8.21c).

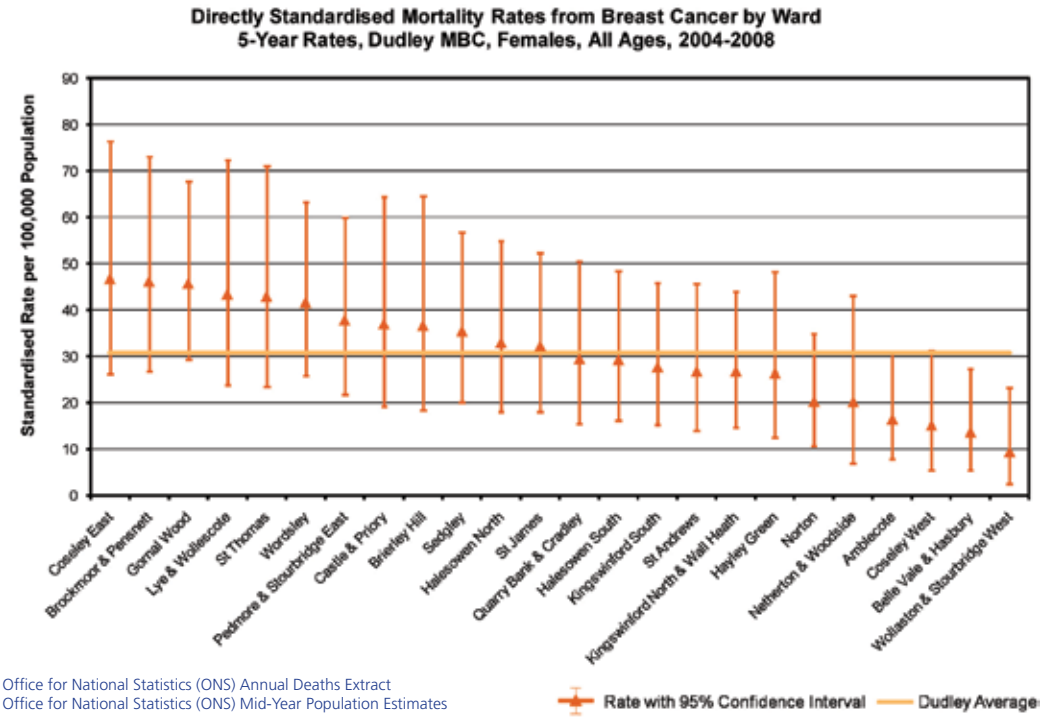
Figure 8.21a



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Rate with 95% Confidence Interval — E&W Average

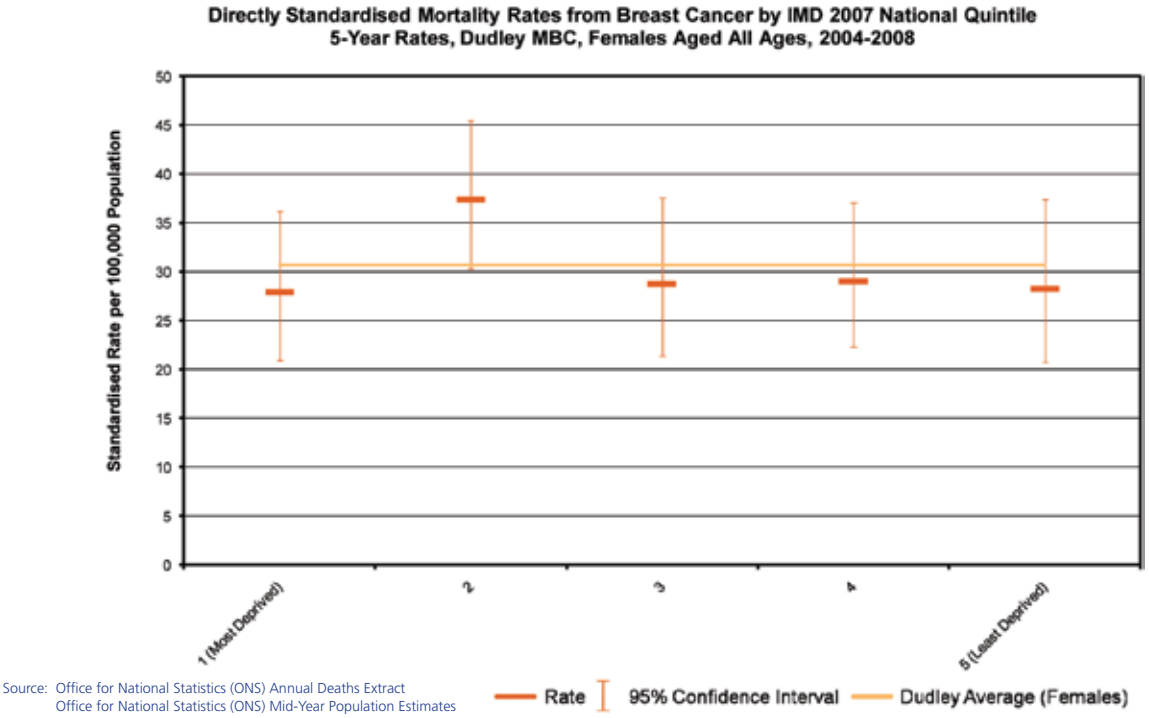
Figure 8.21b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Rate with 95% Confidence Interval — Dudley Average

Figure 8.21c



Inequality in mortality from breast cancer across Dudley

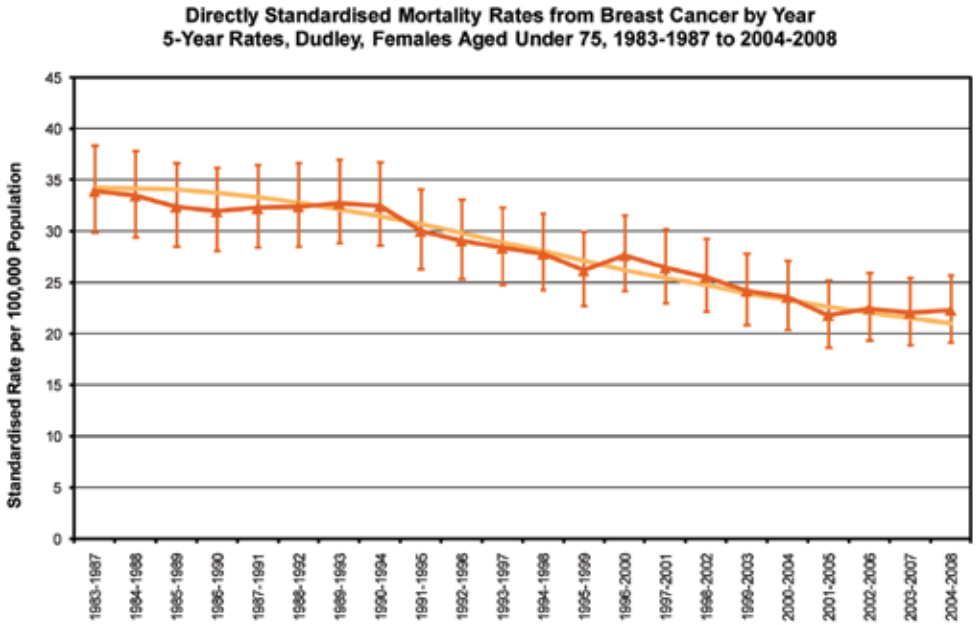
Table 8.19

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from breast cancer females (DSR per 100,000 population)	30.7	27.4	28.3	27.9	1.12	3.3	0.99	-0.4

Aged under 75

Premature mortality from breast cancer has continued to decline over time and there is no significant gap for mortality between Dudley and national figures, across the time trend (Figure 8.22a). As with all age breast cancer mortality there is no social deprivation gradient (Figure 8.22c and Table 8.20).

Figure 8.22a



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

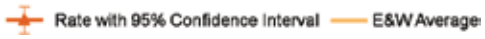
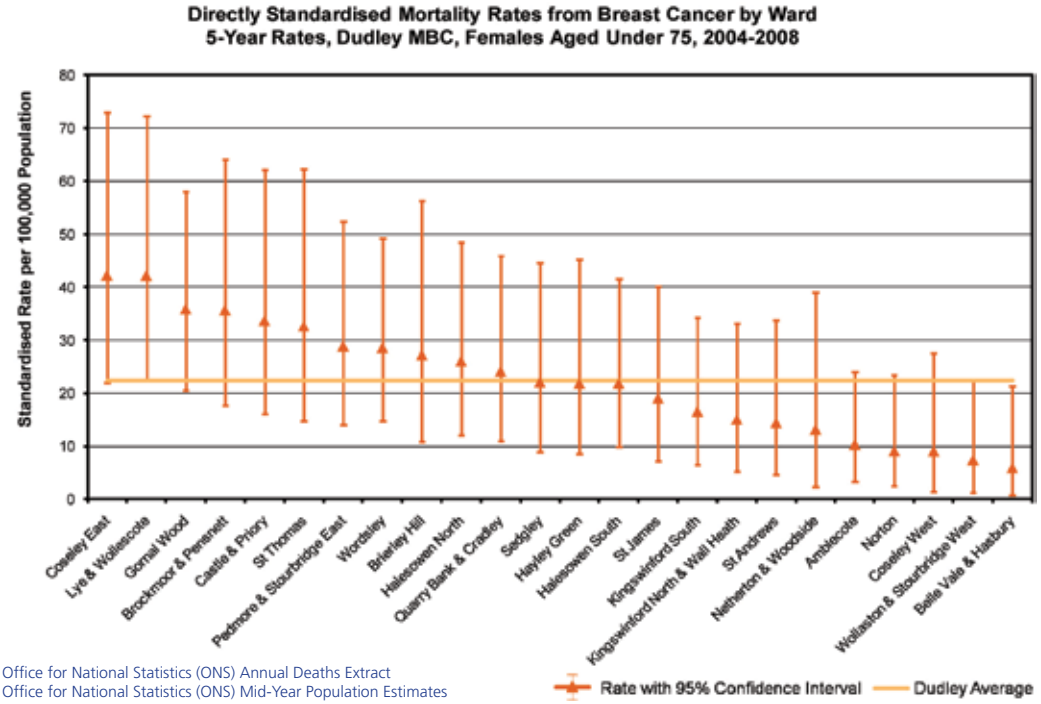
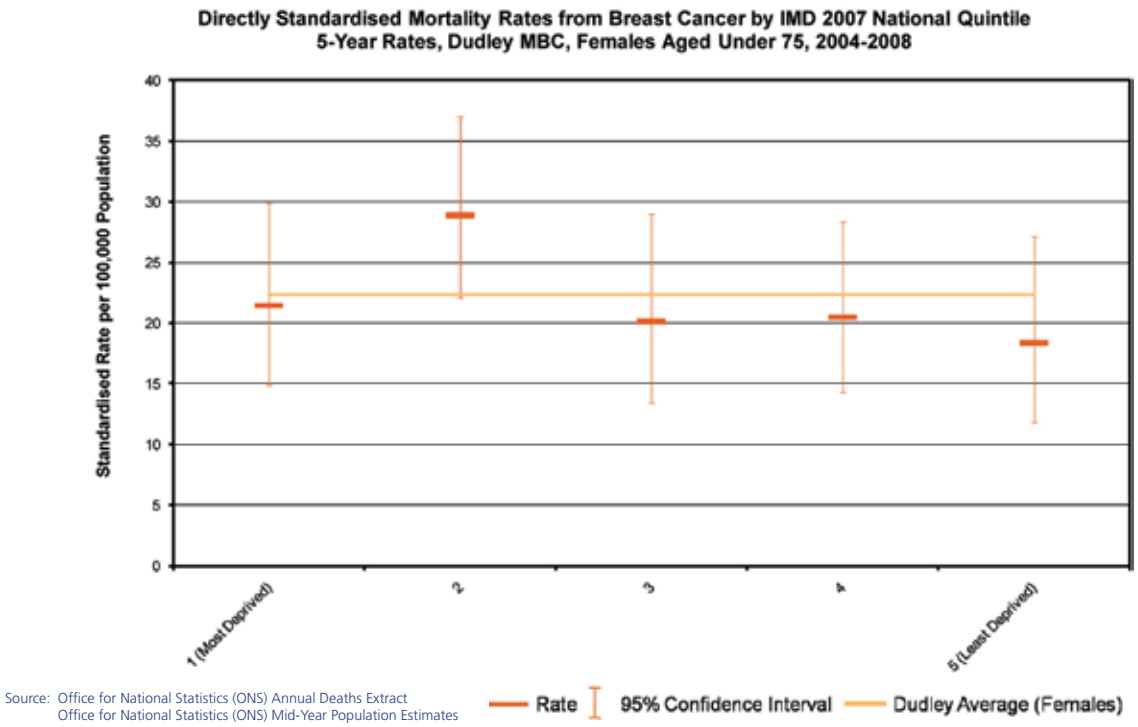


Figure 8.22b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.22c



Inequality in premature mortality from breast cancer across Dudley

Table 8.20

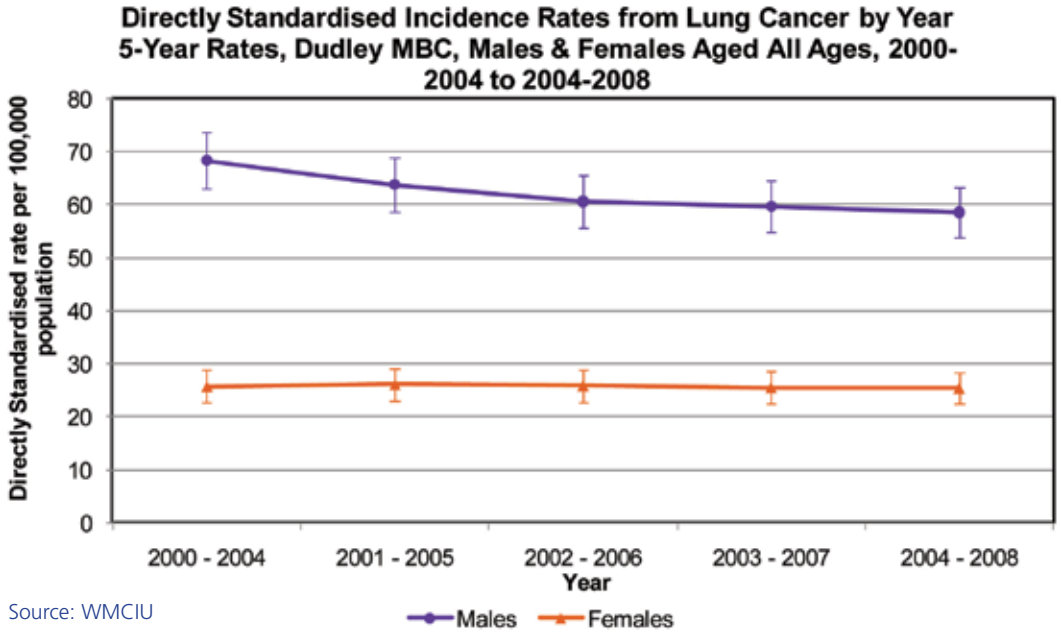
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from breast cancer females (DSR per 100,000 population)	22.3	21.0	18.4	21.4	1.06	1.3	1.16*	3.0

Lung Cancer

All Ages

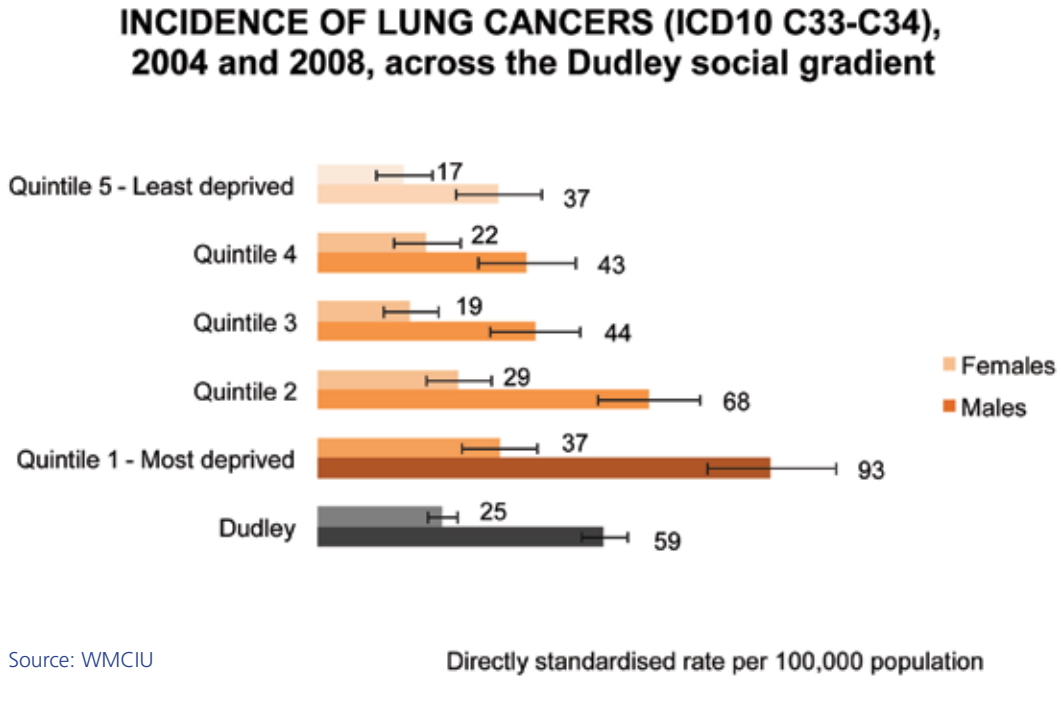
Lung cancer incidence rates have decreased between 2000 and 2008 both nationally and locally for males and remained relatively static for females. The rate of decrease has been greater locally for males and has been similar or slower than national for females and hence the external gap for females has remained (Figure 8.23a). There is a strong internal social gradient which is more marked for males than females, with those living in the most deprived areas two and a half times more likely to get lung cancer than those in the least deprived areas (Figure 8.23b).

Figure 8.23a



Source: WMCIU

Figure 8.23b



Source: WMCIU

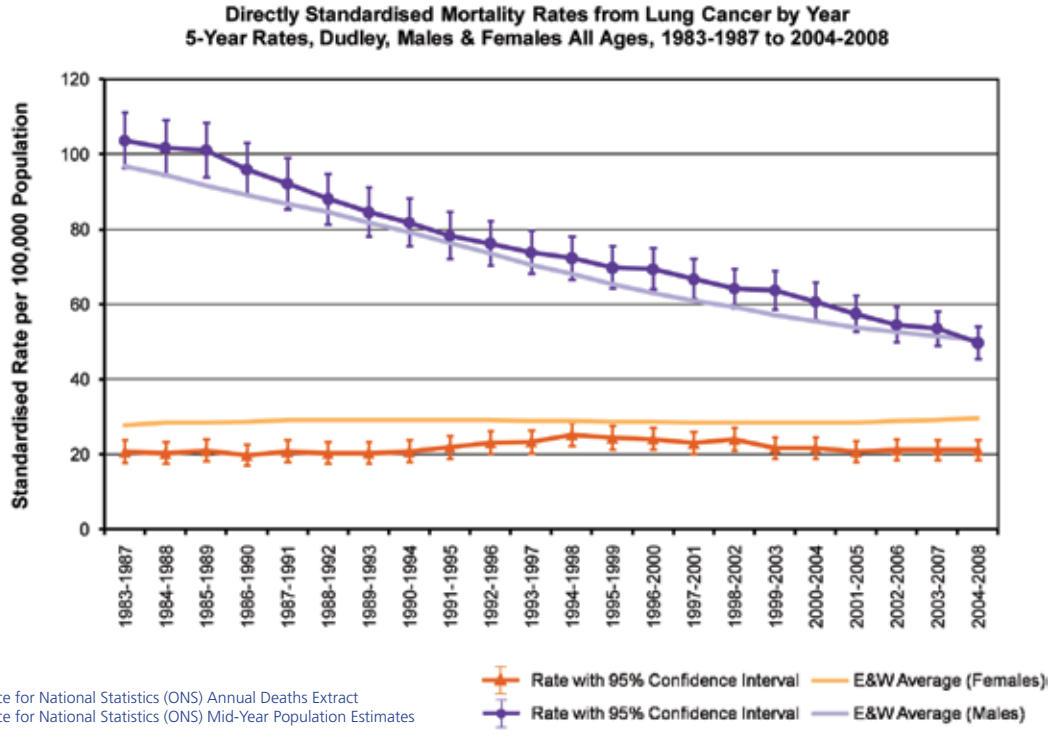
Inequality in incidence of Lung cancer across Dudley

Table 8.21

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Incidence of Lung cancer males (DSR per 100,000 population)	59	60	37	93	0.98	-1	2.51*	56
Incidence of Lung cancer females (DSR per 100,000 population)	25	36	17	37	0.69	-11	2.18*	20
Incidence of Lung cancer persons (DSR per 100,000 population)	42	48	27	65	0.88	-6	2.41*	38

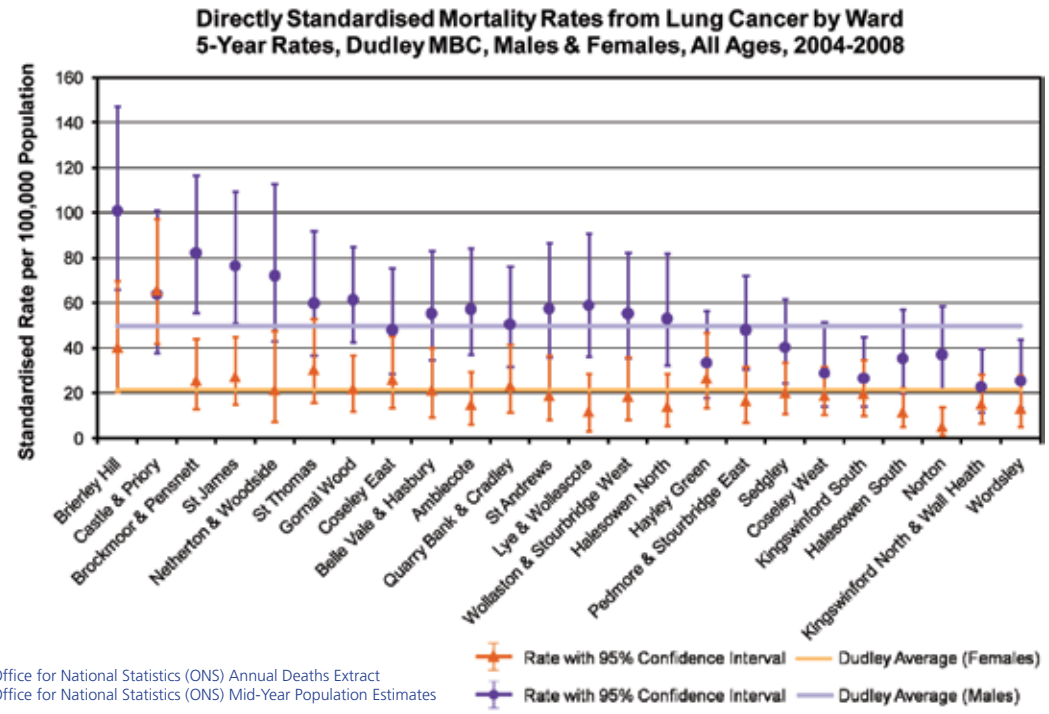
Mortality from lung cancer in Dudley is similar to national levels for males and there is a significant gap against national for females with Dudley having lower mortality (Figure 8.24a). For mortality there is, as with incidence, a similar deprivation gradient, which is stronger for males than in females (Figure 8.24c).

Figure 8.24a



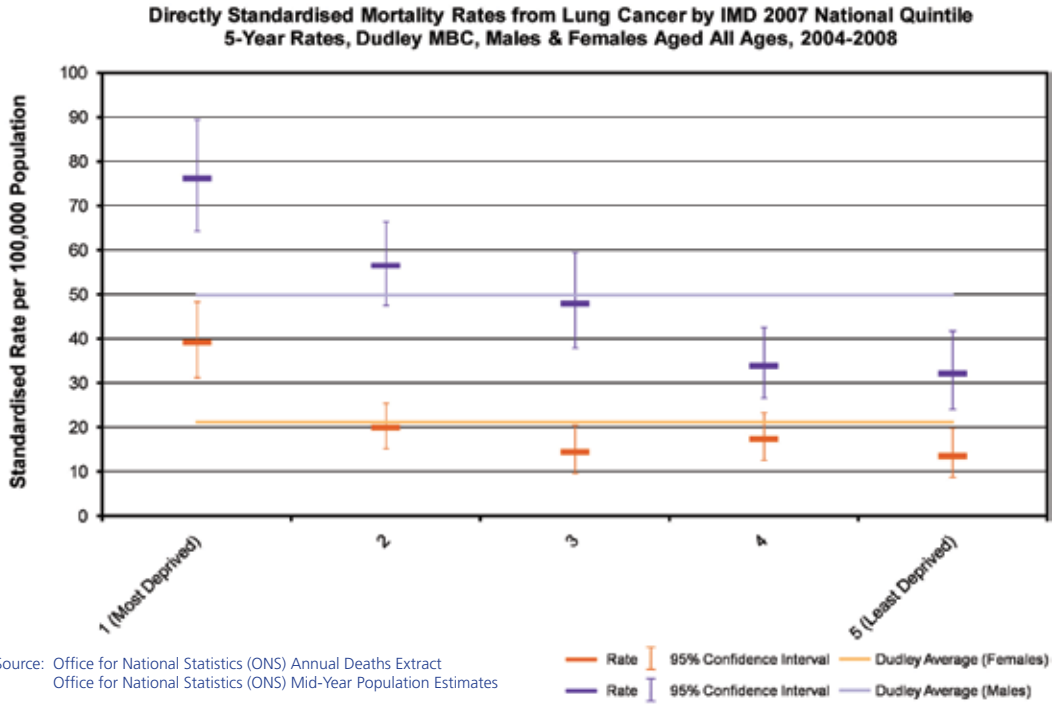
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.24b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.24c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality of Lung cancer across Dudley

Table 8.22

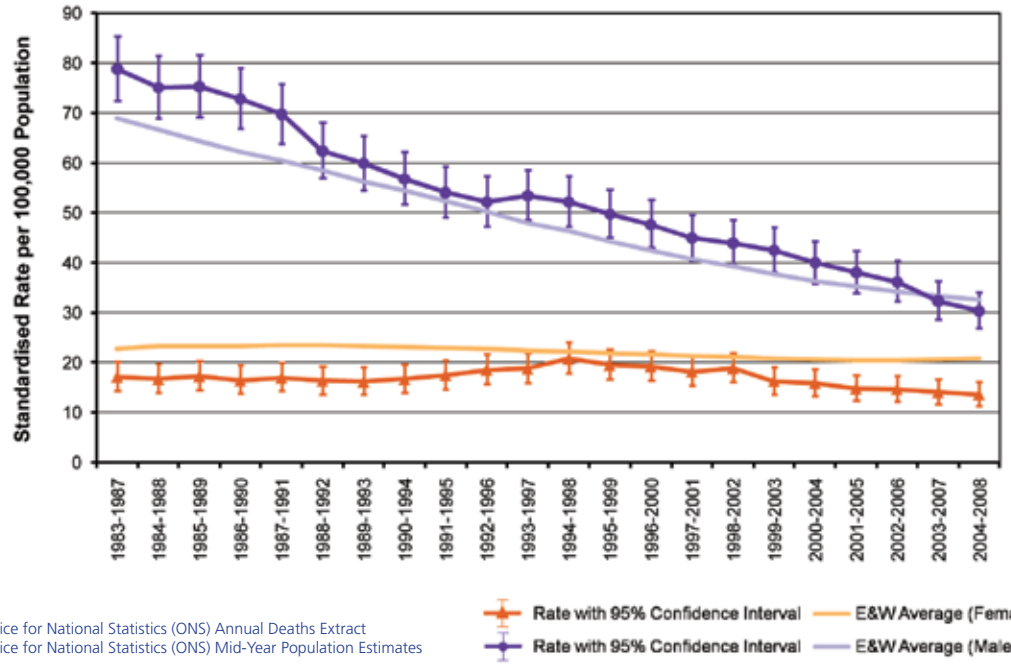
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from Lung cancer males (DSR per 100,000 population)	49.7	50.5	32.1	76.1	0.98	-0.8	2.37*	44.0
Mortality from Lung cancer females (DSR per 100,000 population)	21.0	29.5	13.5	39.1	0.71	-8.5	2.90*	25.6
Mortality from Lung cancer persons (DSR per 100,000 population)	33.5	38.6	21.6	55.6	0.87	-5.1	2.57*	34.0

Aged under 75

Premature mortality from lung cancer has continued to decline over time and there is no significant gap for mortality between Dudley and national across the time trend for males. Mortality is significantly lower than national for females (Figure 8.25a). The social gradient is stronger for premature mortality from lung cancer compared with all age mortality, with people in the most deprived areas over three times more likely to die than in the least deprived area (Figure 8.25c and Table 8.23).

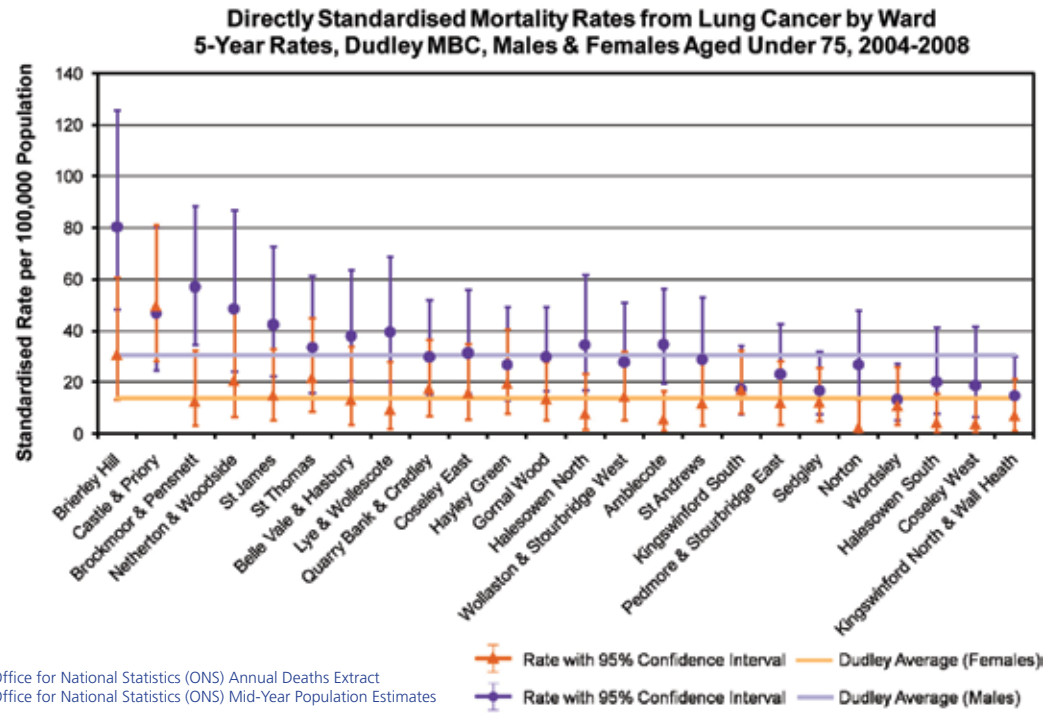
Figure 8.25a

Directly Standardised Mortality Rates from Lung Cancer by Year
5-Year Rates, Dudley, Males & Females Aged Under 75, 1983-1987 to 2004-2008



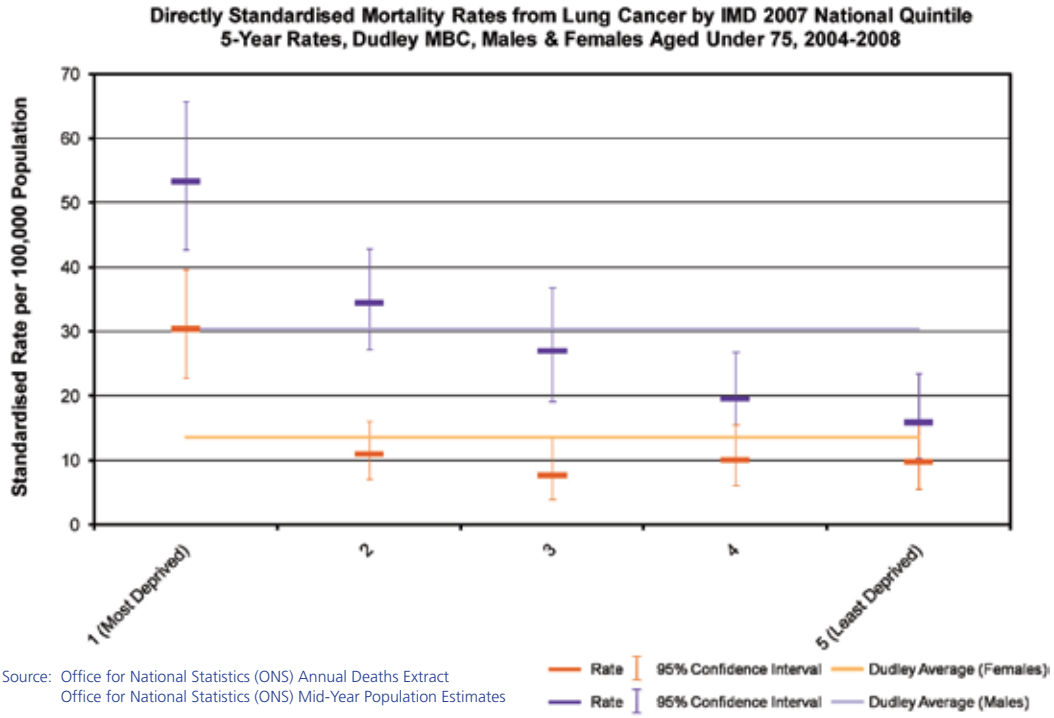
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.25b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.25c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from Lung cancer across Dudley

Table 8.23

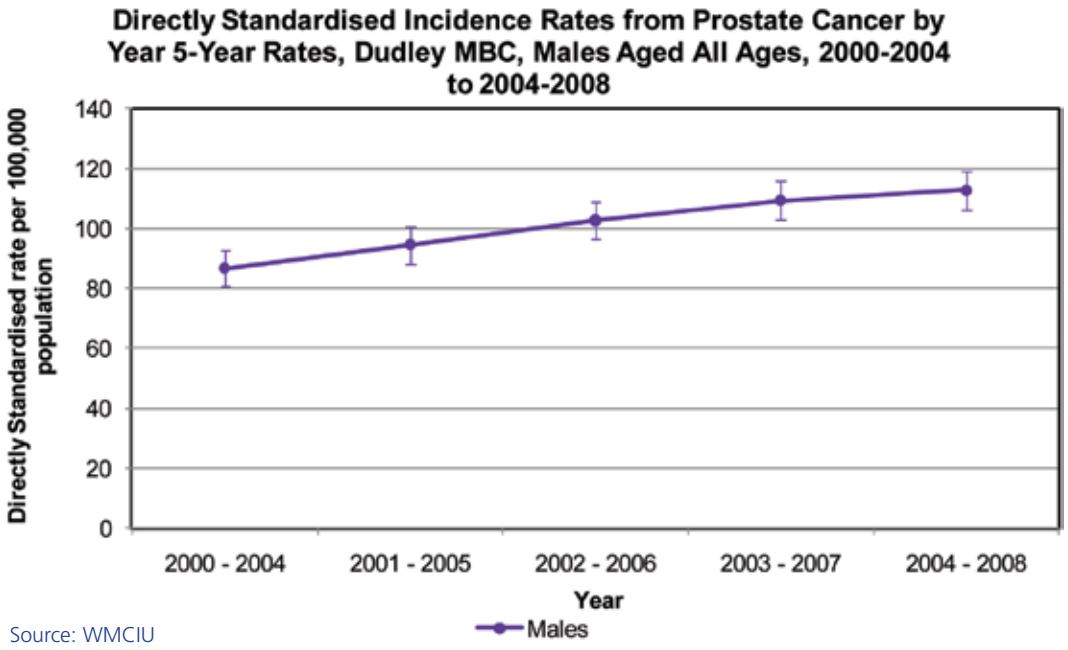
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from Lung cancer males (DSR per 100,000 population)	30.3	32.6	15.9	53.3	0.93	-2.3	3.35*	37.4
Premature mortality from Lung cancer females (DSR per 100,000 population)	13.6	20.9	9.8	30.4	0.65	-7.3	3.10*	20.6
Premature mortality from Lung cancer persons (DSR per 100,000 population)	21.7	26.5	12.7	41.6	0.82	-4.8	3.28*	28.7

Prostate Cancer

All Ages

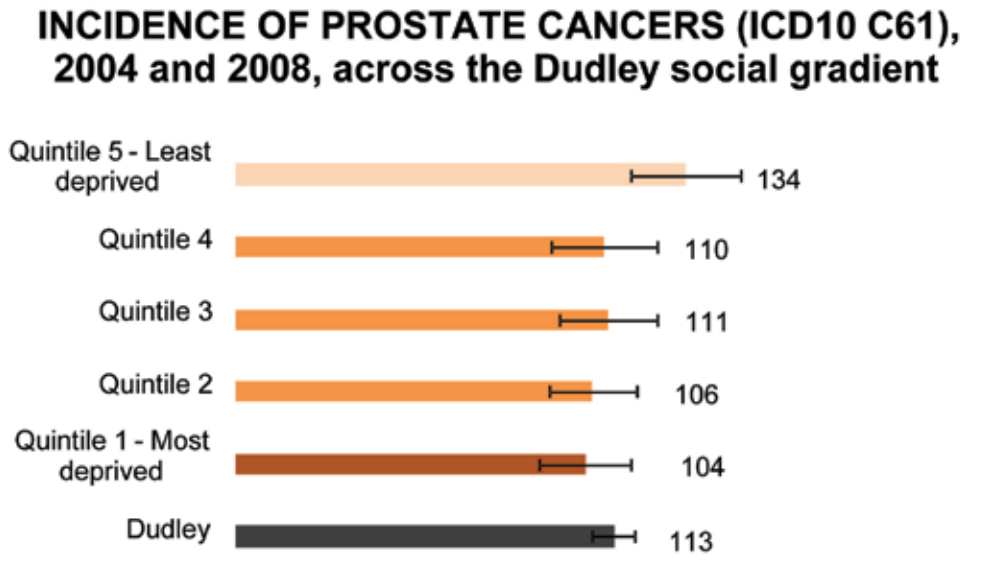
Prostate cancer incidence rates have risen rapidly between 2000 and 2008 in Dudley whilst the national incidence rate has continued to rise at a much slower rate, hence an external gap has opened (Figure 8.26a). This rise may be linked to increased/earlier case ascertainment in Dudley rather than a change in underlying morbidity. Internally there is a positive though not significant social gradient for the incidence of prostate cancer with the recorded incidence of the most affluent area being 25% more than the most deprived area (Figure 8.26b).

Figure 8.26a



Source: WMCIU

Figure 8.26b



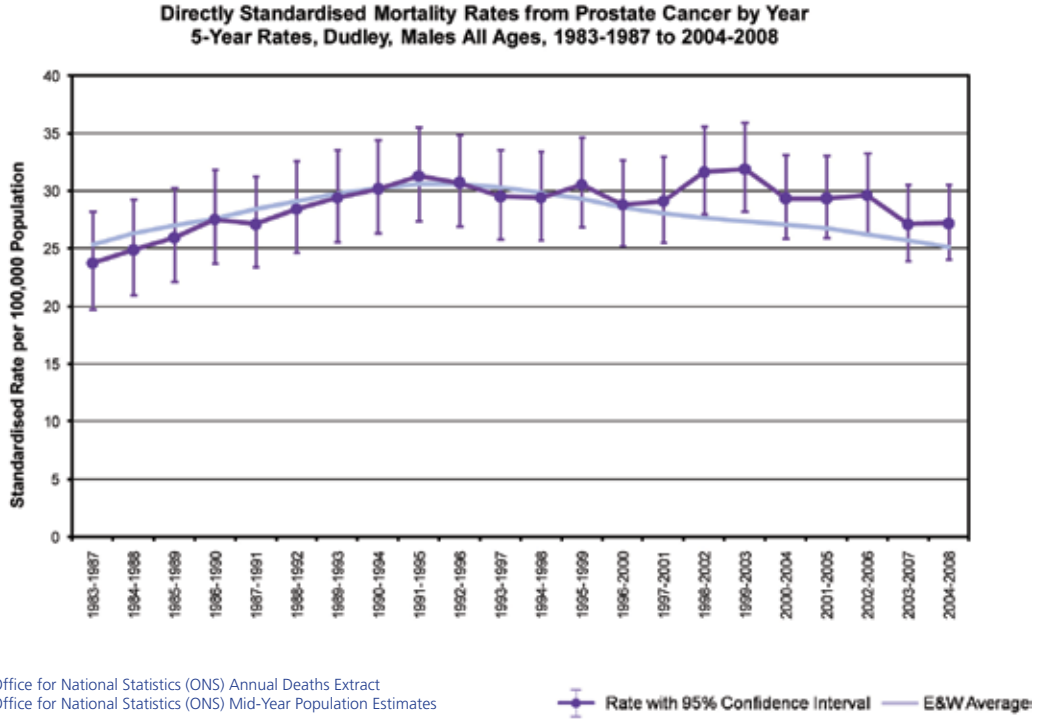
Inequality in incidence of prostate cancer across Dudley

Table 8.24

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Incidence prostate cancer males (DSR per 100,000 population)	113	101	134	104	1.12	12	0.78	-30

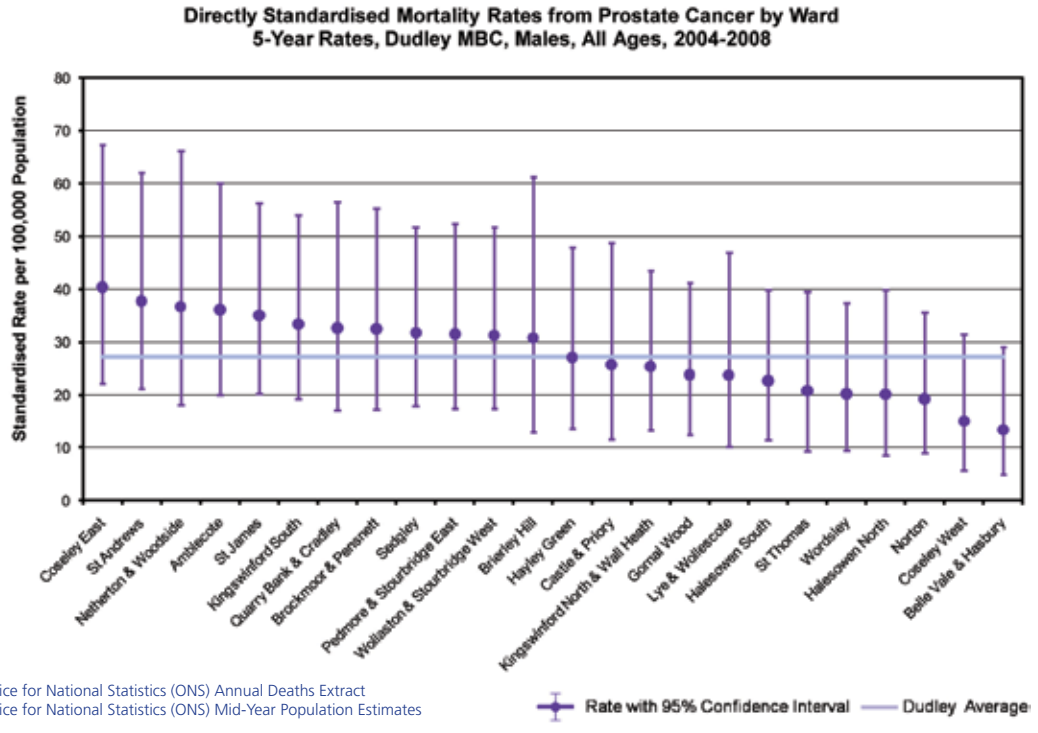
Mortality from prostate cancer in Dudley is similar to national levels, though from the late 1990s they are consistently running above the average mortality for England and Wales (Figure 8.27a). For mortality there is, as with incidence, no social deprivation gradient (Figure 8.27c).

Figure 8.27a



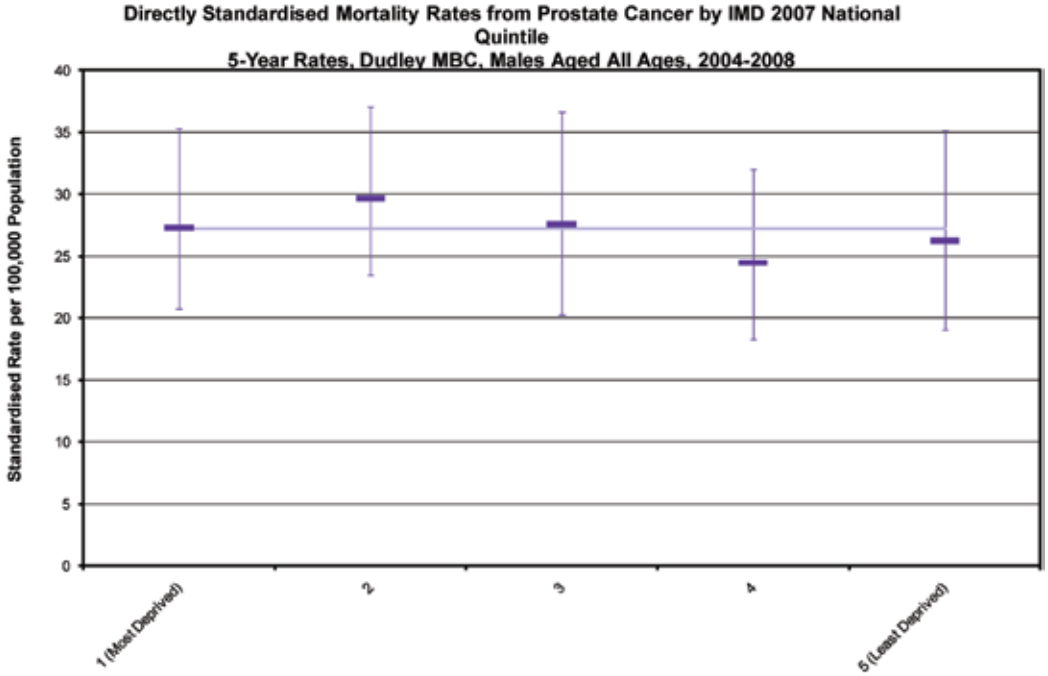
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.27b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.27c



Inequality in mortality of prostate cancer across Dudley

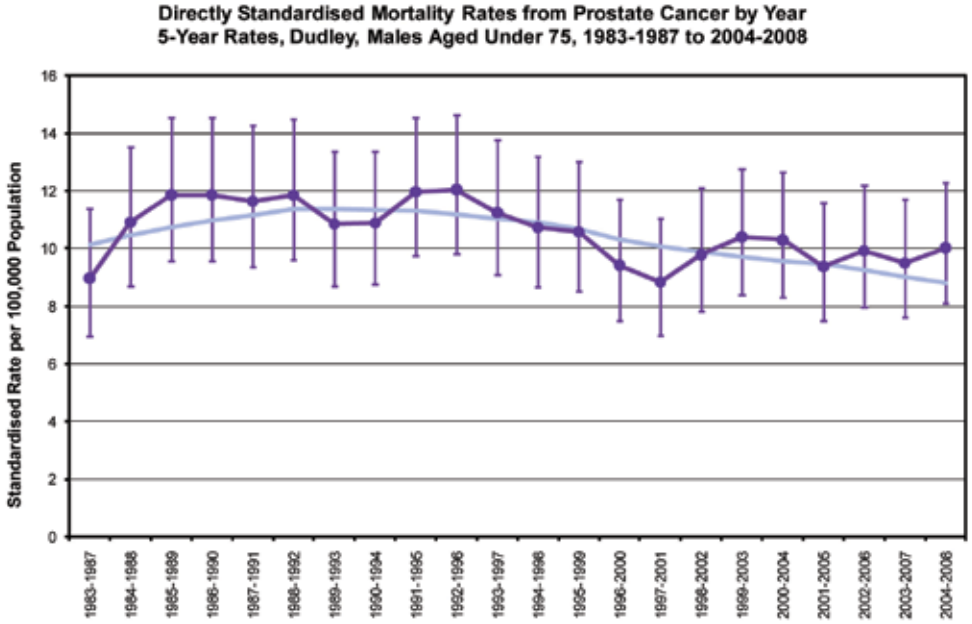
Table 8.25

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from prostate cancer males (DSR per 100,000 population)	27.2	25.1	26.2	27.3	1.08	2.2	1.04	1.1

Aged under 75

Premature mortality from prostate cancer has continued to decline over time and there is no significant gap for mortality between Dudley and national across the time trend (Figure 8.28a). As with all age prostate cancer mortality, there is no social deprivation gradient (Figure 8.28c and Table 8.26).

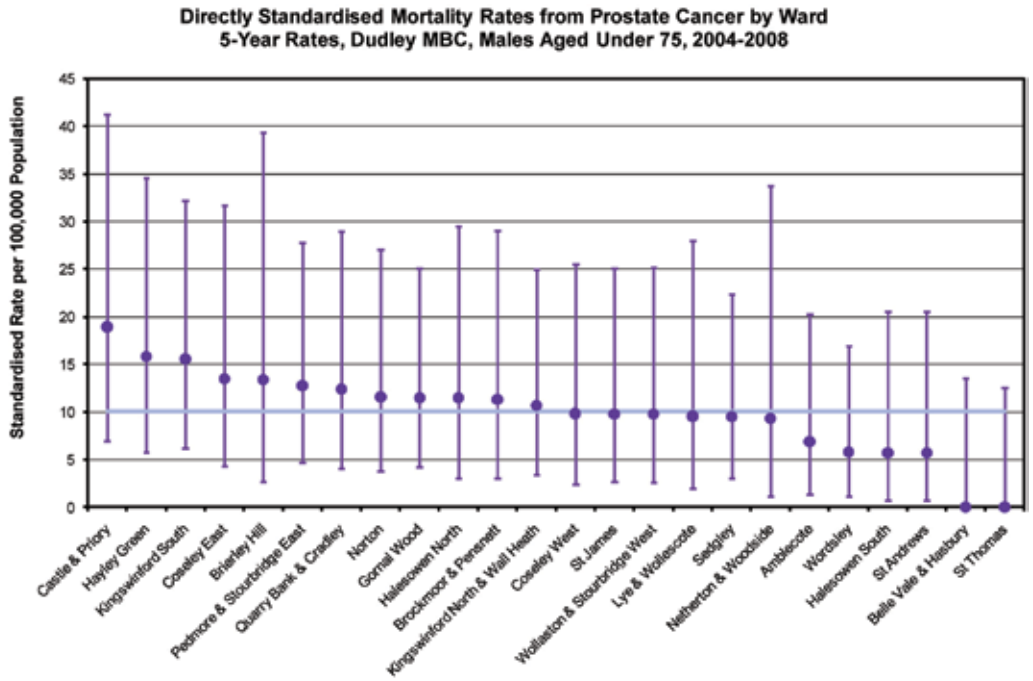
Figure 8.28a



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Rate with 95% Confidence Interval — E&W Average

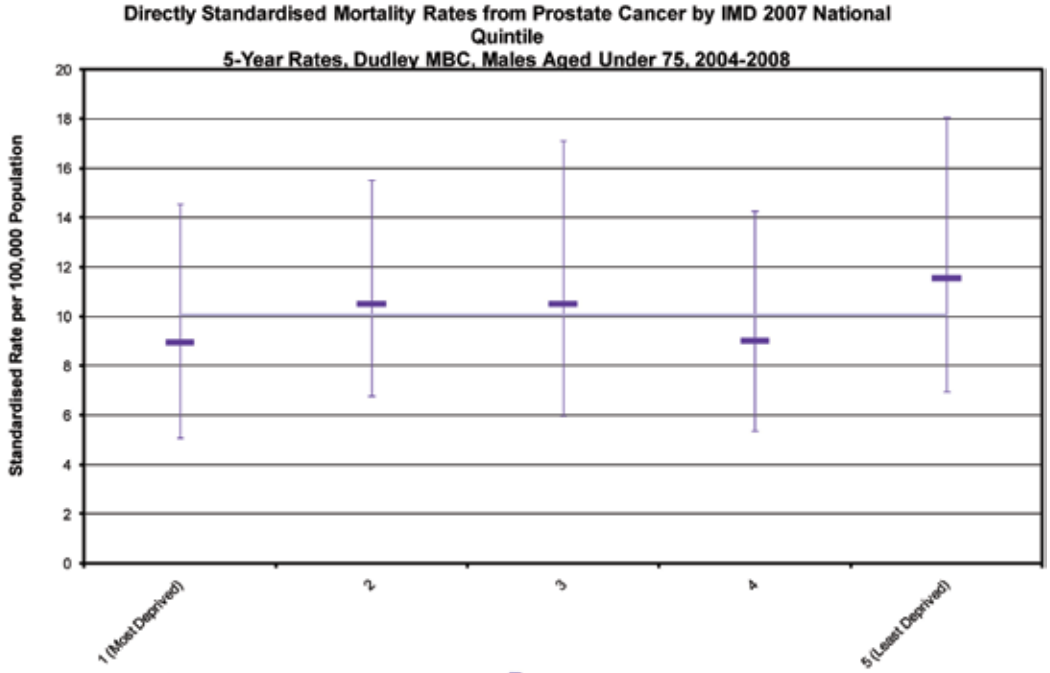
Figure 8.28b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Rate with 95% Confidence Interval — Dudley Average

Figure 8.28c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from prostate cancer across Dudley

Table 8.26

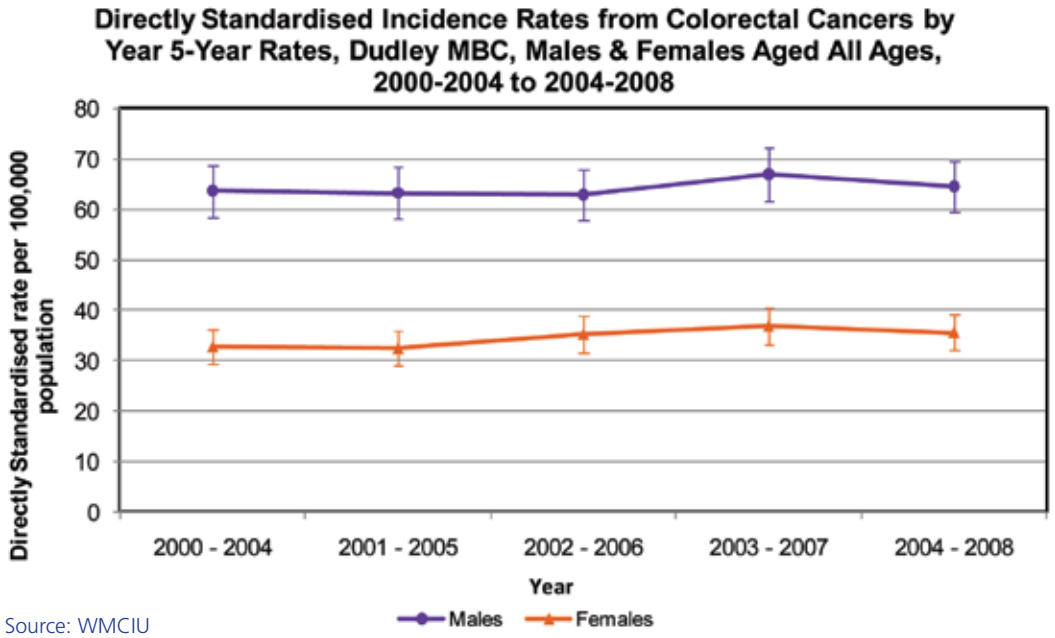
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from prostate cancer males (DSR per 100,000 population)	10.0	8.8	11.5	8.9	1.14	1.2	0.77	-2.6

Colorectal Cancer

All Ages

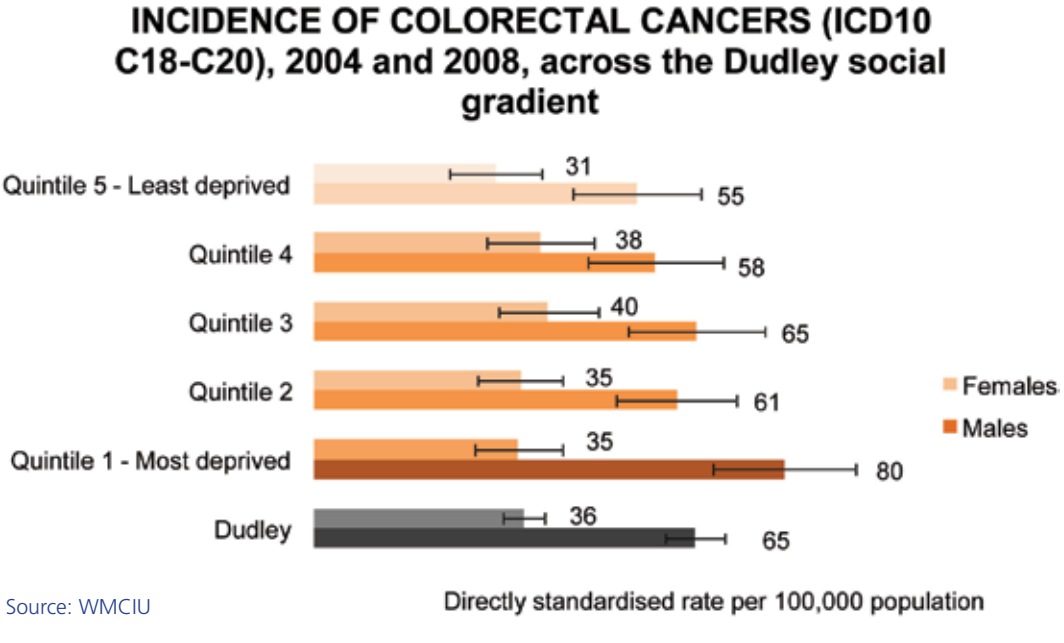
Colorectal cancer incidence rates have remained relatively constant between 2000 and 2008 both nationally and locally for males and for females. The rate for Dudley compared with national, is similar for females, but there is an external gap for males with incidence rates higher in Dudley (Figure 8.29a). There is a strong internal social gradient for males but this is not evident for females. For males, those living in the most deprived areas are one and a half times more likely to be diagnosed with colorectal cancer than those in the least deprived areas (Figure 8.29b).

Figure 8.29a



Source: WMCIU

Figure 8.29b



Source: WMCIU

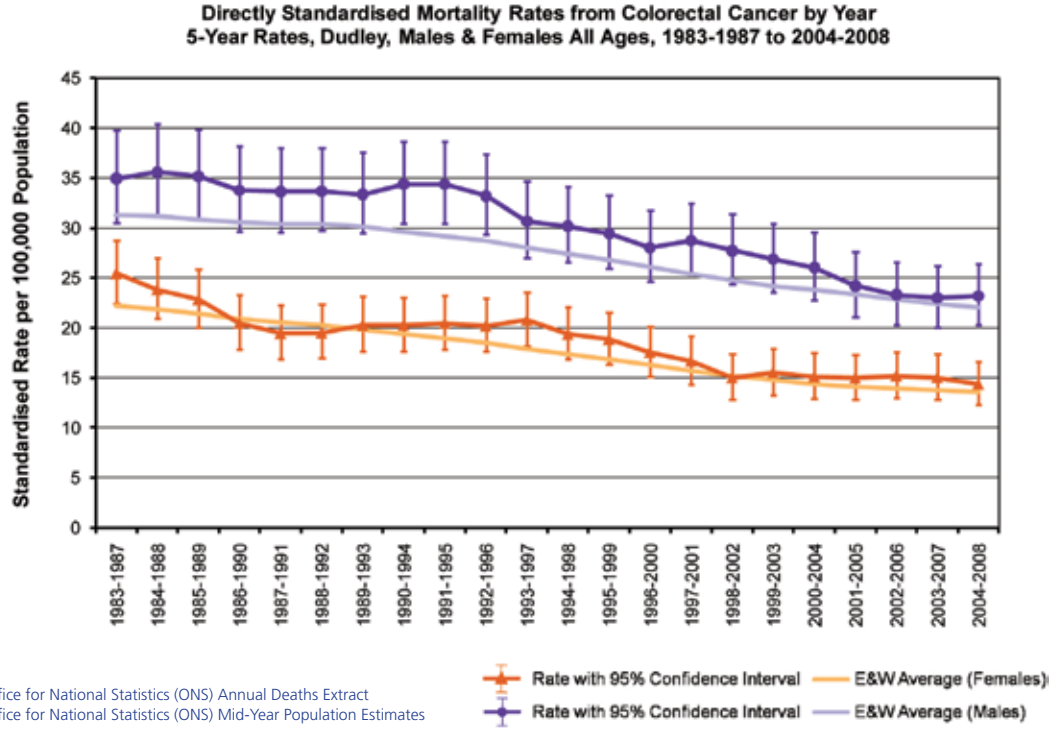
Inequality in incidence of Colorectal cancer across Dudley

Table 8.27

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Incidence of Colorectal cancer males (DSR per 100,000 population)	65	55	55	80	1.18	10	1.45*	25
Incidence of Colorectal cancer females (DSR per 100,000 population)	36	35	31	35	1.03	1	1.13*	4
Incidence of Colorectal cancer persons (DSR per 100,000 population)	50	45	43	57	1.11	5	1.33*	14

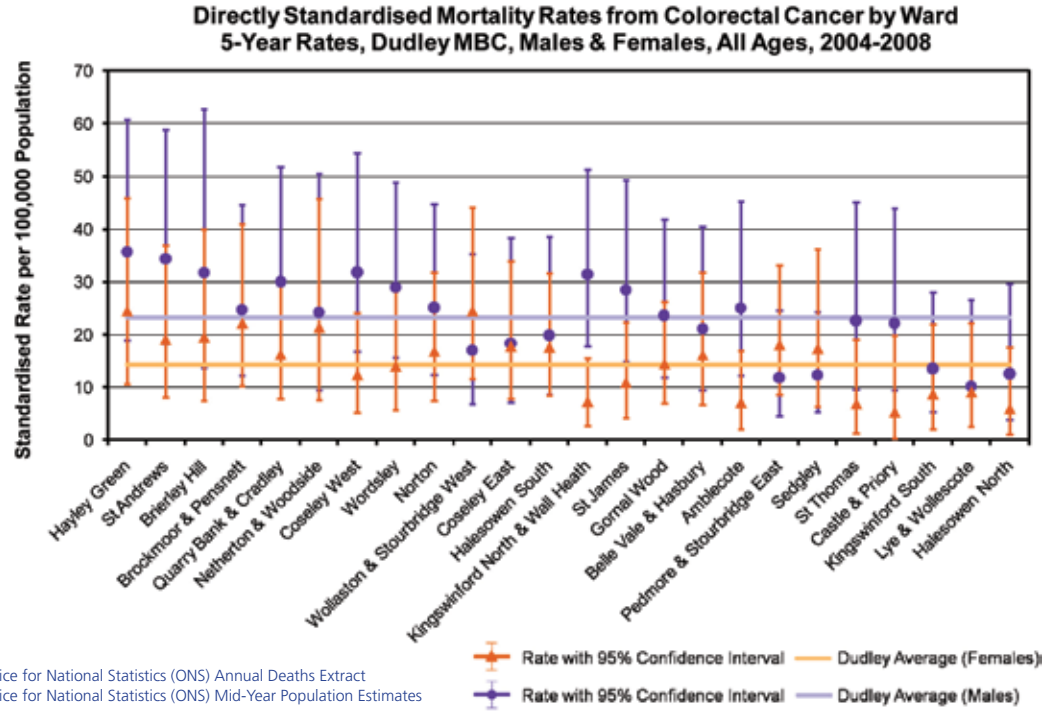
Mortality from colorectal cancer in Dudley is similar to national levels for males and females (Figure 8.30a) and for mortality there is, as with incidence, a similar deprivation gradient, for males only, with the most deprived areas being one and a half times more likely to die from colorectal cancer than the least deprived area (Figure 8.30c).

Figure 8.30a



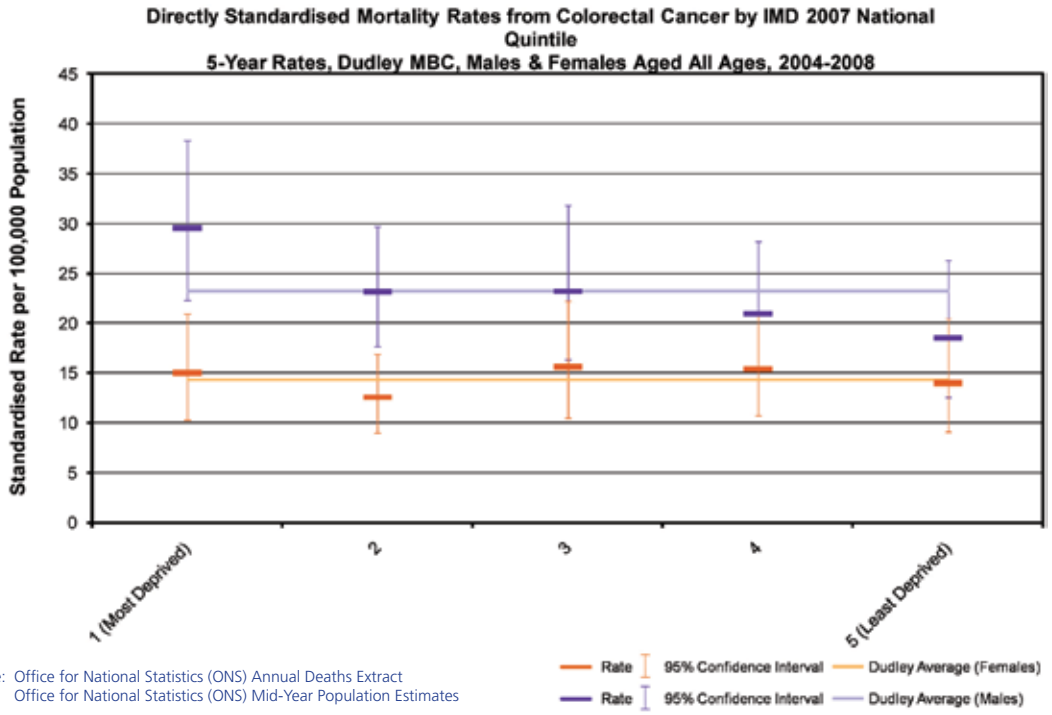
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.30b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.30c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from Colorectal cancer across Dudley

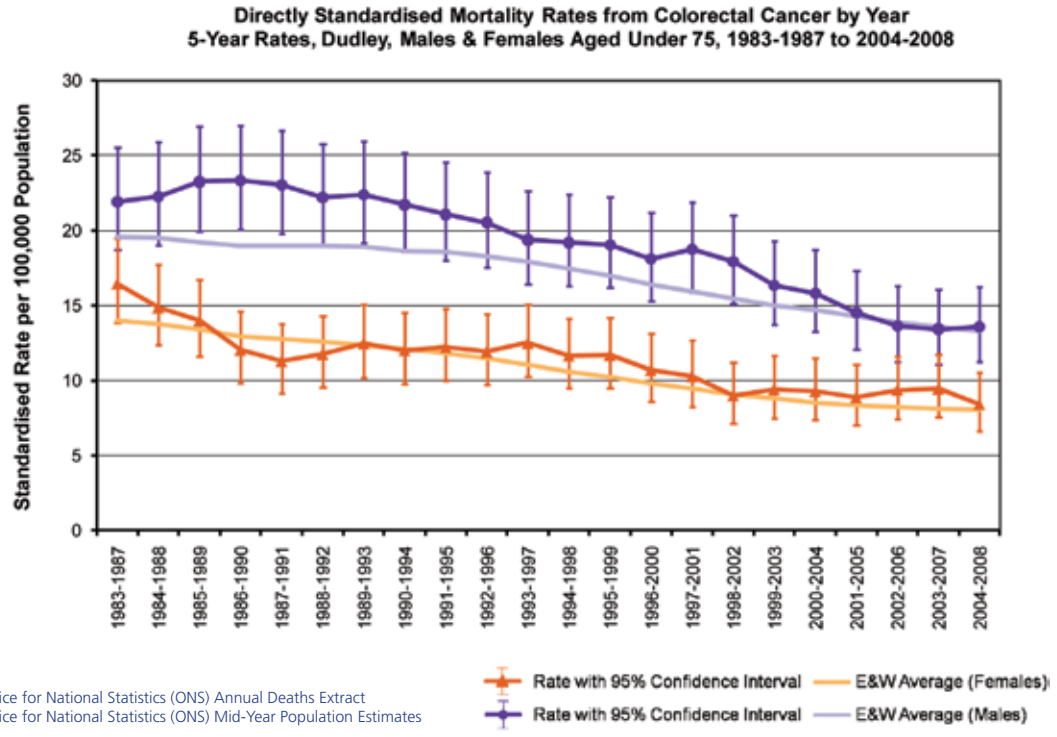
Table 8.28

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from Colorectal cancer males (DSR per 100,000 population)	23.2	22.0	18.5	29.6	1.05	1.2	1.60*	11.1
Mortality from Colorectal cancer females (DSR per 100,000 population)	14.3	13.6	14.0	15.0	1.05	0.7	1.07*	1.0
Mortality from Colorectal cancer persons (DSR per 100,000 population)	18.2	17.3	16.2	21.3	1.05	0.9	1.31*	5.1

Aged under 75

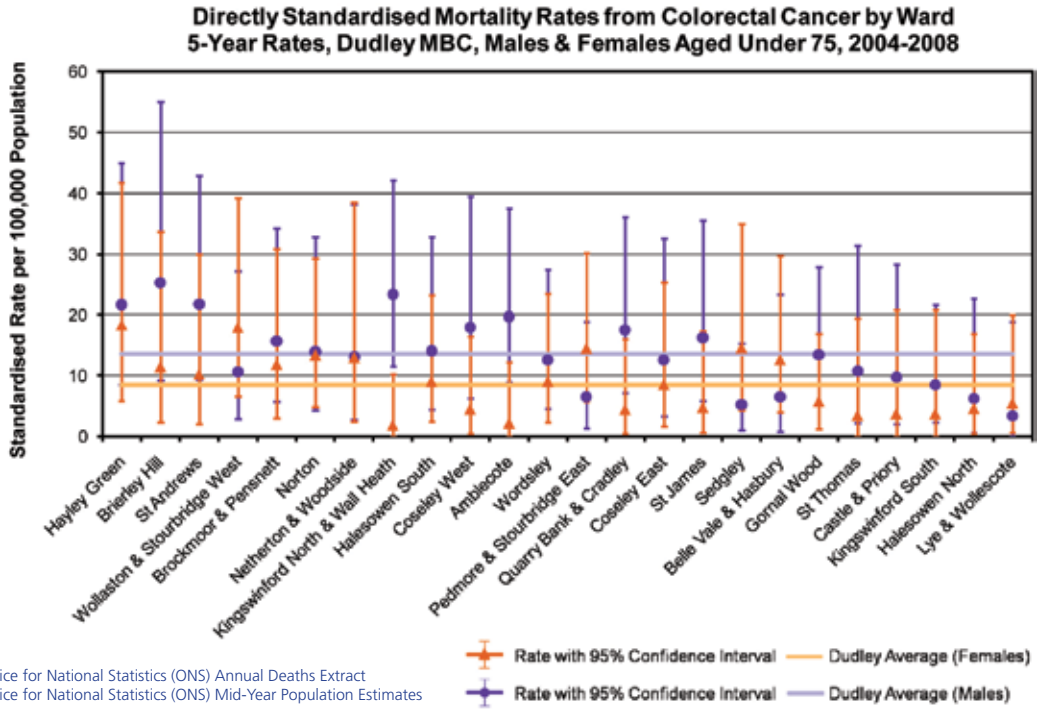
Premature mortality from colorectal cancer has continued to decline over time and there is no significant gap for mortality between Dudley and national across the time trend for males or females (Figure 8.31a). The social gradient is not quite as strong for premature mortality from colorectal cancer compared with all age mortality (Figure 8.31c and Table 8.29).

Figure 8.31a



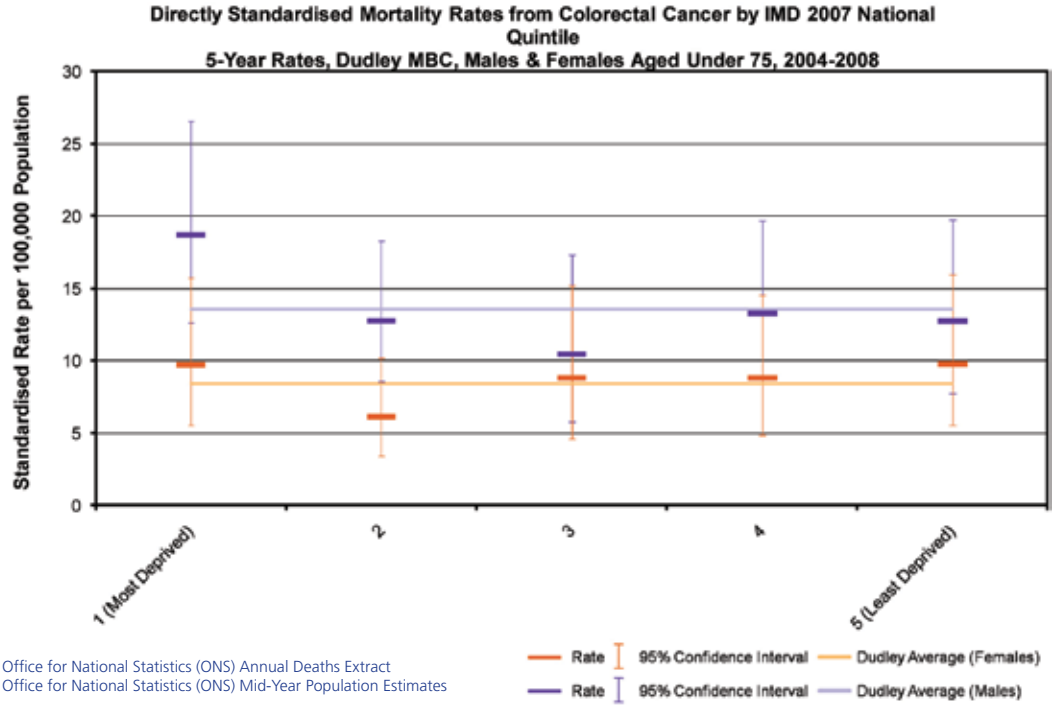
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.31b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.31c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Table 8.29

Inequality in premature mortality from Colorectal cancer across Dudley

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from Colorectal cancer males (DSR per 100,000 population)	13.6	13.3	12.8	18.7	1.02	0.3	1.46*	5.9
Premature mortality from Colorectal cancer females (DSR per 100,000 population)	8.4	8.0	9.8	9.7	1.05	0.4	1.01	-0.1
Premature mortality from Colorectal cancer persons (DSR per 100,000 population)	10.9	10.6	11.2	14.1	1.03	0.3	1.26*	2.9

Respiratory disease

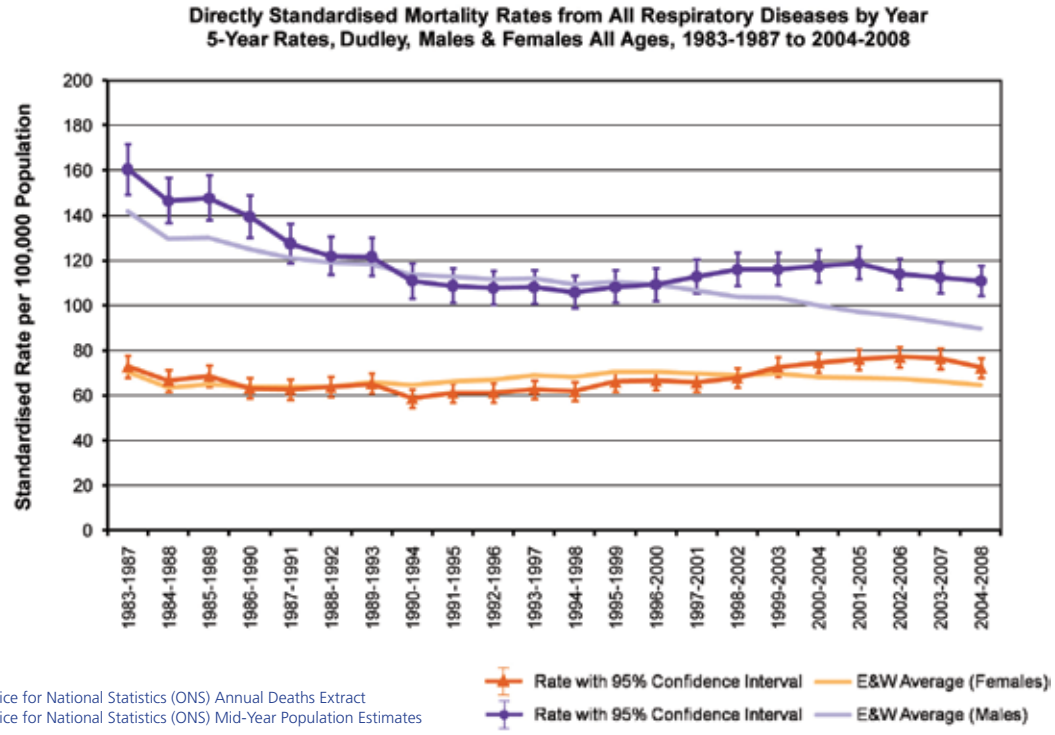
Respiratory disease includes chronic obstructive pulmonary disease (COPD), lower respiratory, chronic respiratory, pneumonia, asthma and other disease of the respiratory tract system. It is one of the main causes of reduced life expectancy of residents in the most deprived areas across Dudley, particularly for females. Prevalence is linked to a range of factors including lifestyle, particularly smoking as well as environmental factors. Analysis in this section includes all respiratory diseases and COPD.

All respiratory diseases

All Ages

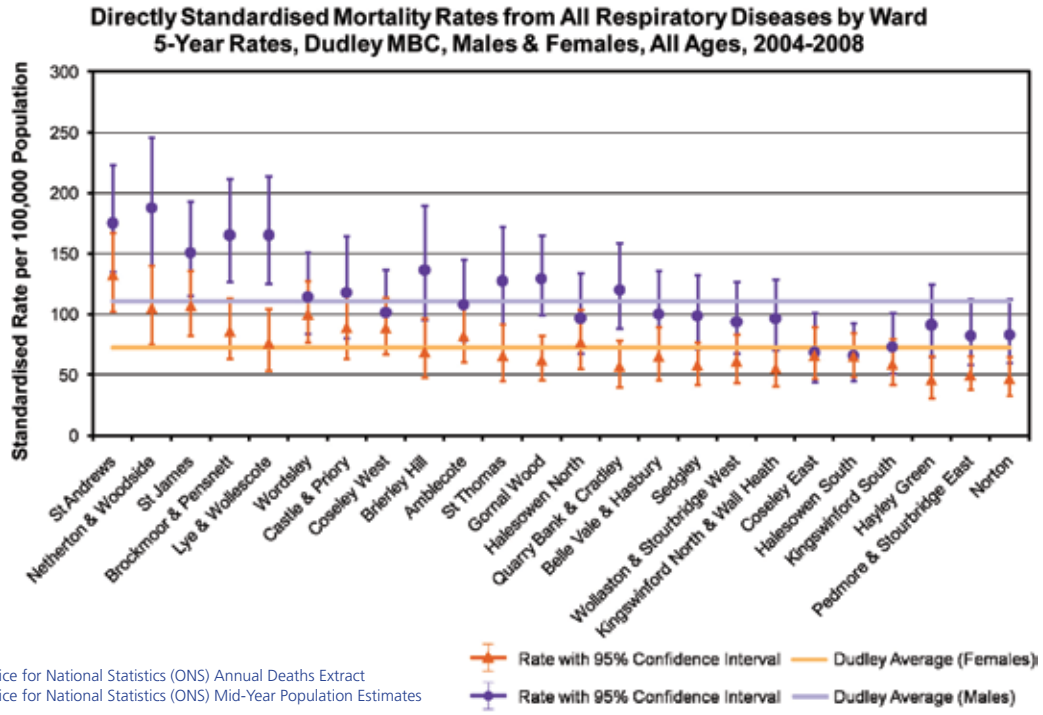
There has been a decline in mortality rate from all respiratory diseases over time nationally, but this is not being reflected in Dudley where they have started to increase in both males and females. The gap with England and Wales has widened significantly for both sexes, but more so for males (Figure 8.32a). There is a clear social gradient for mortality from all respiratory diseases, with those people in the most deprived quintile more than twice as likely to die from respiratory diseases than those in the least deprived quintile. The gradient is stronger in men than women.

Figure 8.32a



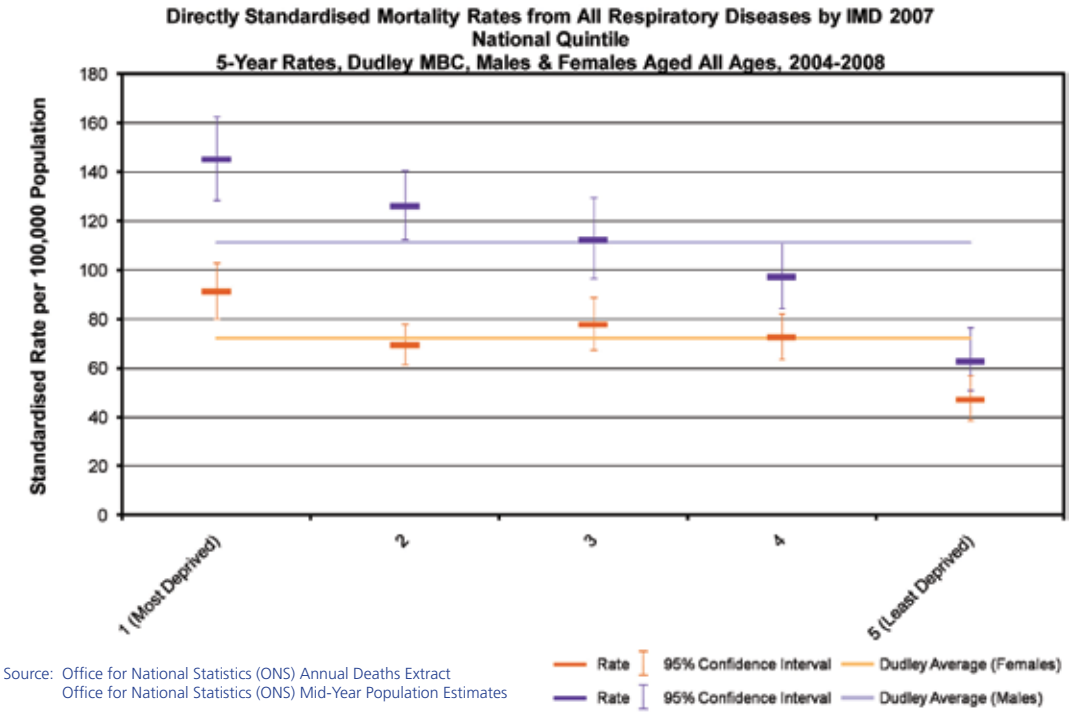
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.32b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.32c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from all respiratory diseases across Dudley

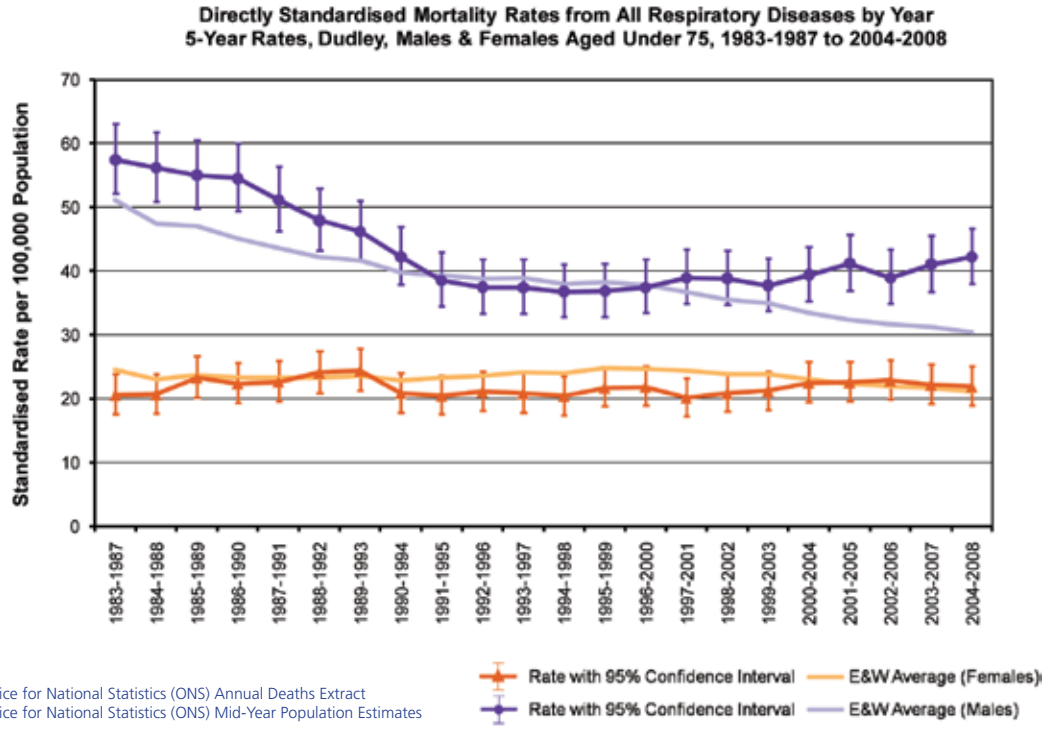
Table 8.30

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from all respiratory diseases males (DSR per 100,000 population)	110.9	89.5	62.8	145.1	1.24*	21.4	2.31*	82.3
Mortality from all respiratory diseases females (DSR per 100,000 population)	72.3	64.5	47.0	91.1	1.12*	7.8	1.94*	44.1
Mortality from all respiratory diseases persons (DSR per 100,000 population)	88.4	74.6	53.8	113.4	1.18*	13.8	2.11*	59.6

Aged under 75

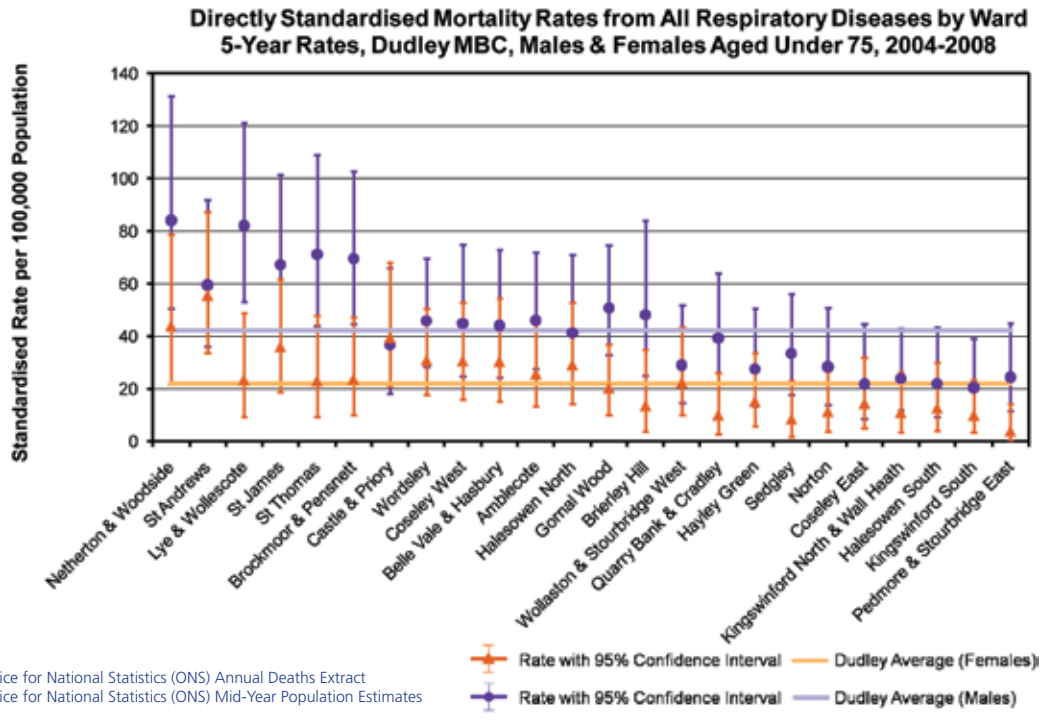
For premature mortality from all respiratory diseases, there is little difference in the rate for Dudley and that for England and Wales for women, so the majority of the rise in mortality rate is in the 75+ age band. For men, the rise in mortality rate is the same as for all ages. Nationally the mortality rate has continued to decline but this is not the case in Dudley. There remains a significant internal inequality. Those in the most deprived quintile are more than four times more likely to suffer premature death due to respiratory diseases than in the least deprived quintile.

Figure 8.33a



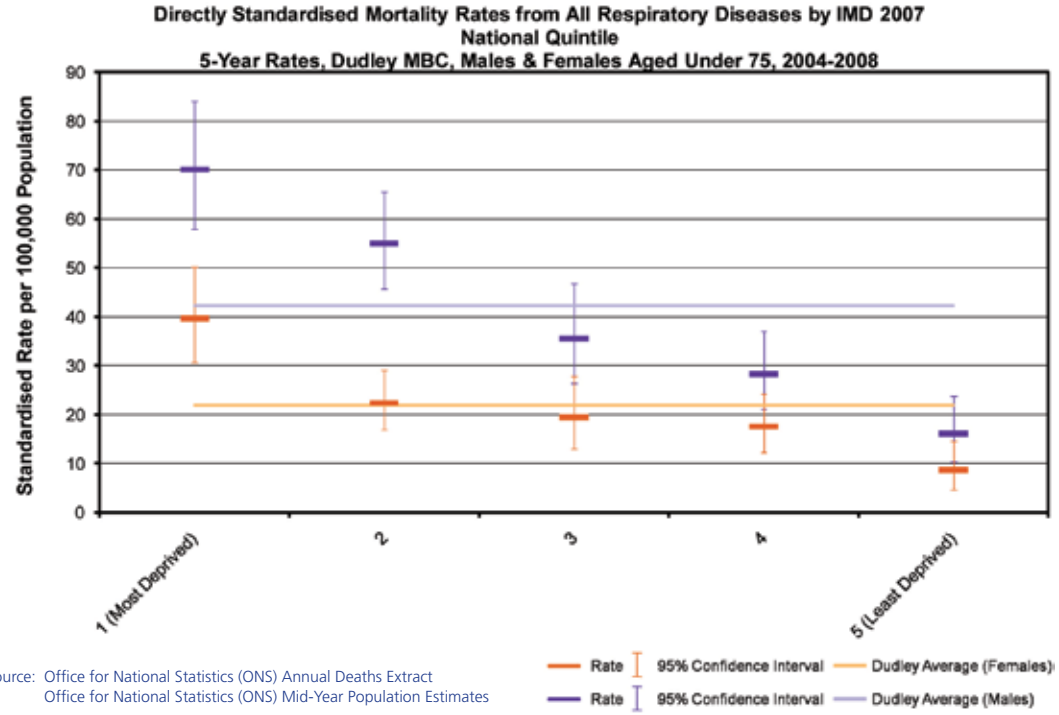
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.33b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.33c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from all respiratory diseases across Dudley

Table 8.31

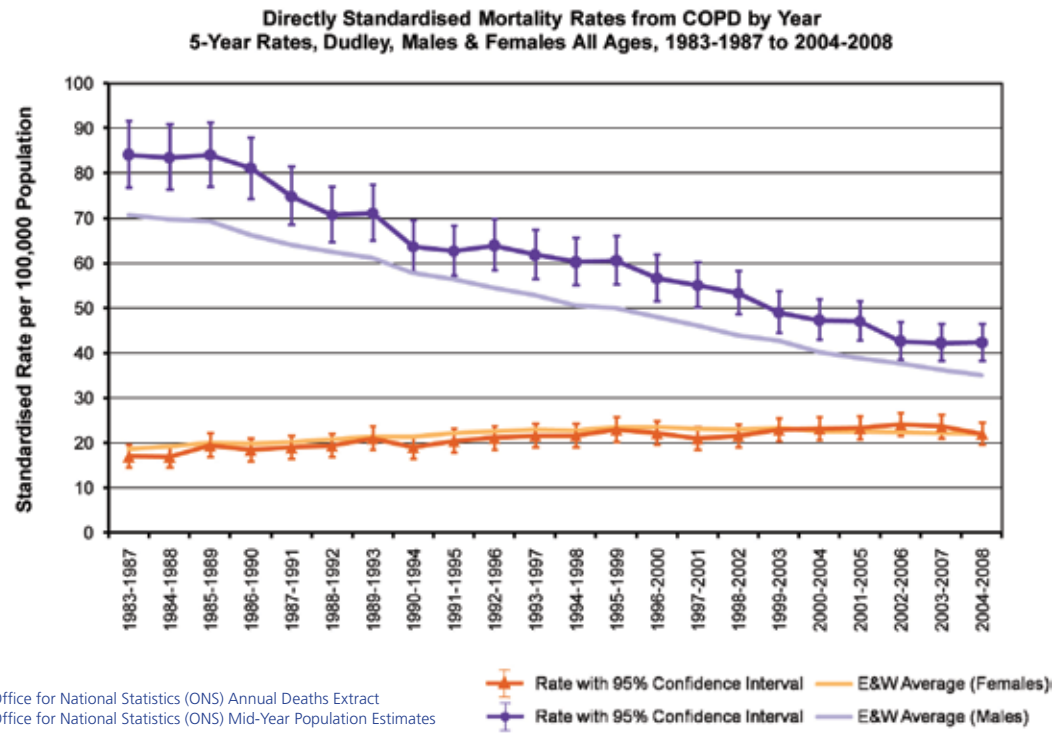
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from all respiratory diseases males (DSR per 100,000 population)	42.2	30.5	16.1	70.2	1.38*	11.7	4.36*	54.1
Premature mortality from all respiratory diseases females (DSR per 100,000 population)	21.9	21.1	8.7	39.6	1.04	0.8	4.55*	30.9
Premature mortality from all respiratory diseases persons (DSR per 100,000 population)	31.8	25.6	12.3	54.4	1.24*	6.2	4.42*	42.1

Chronic obstructive pulmonary disease

All Ages

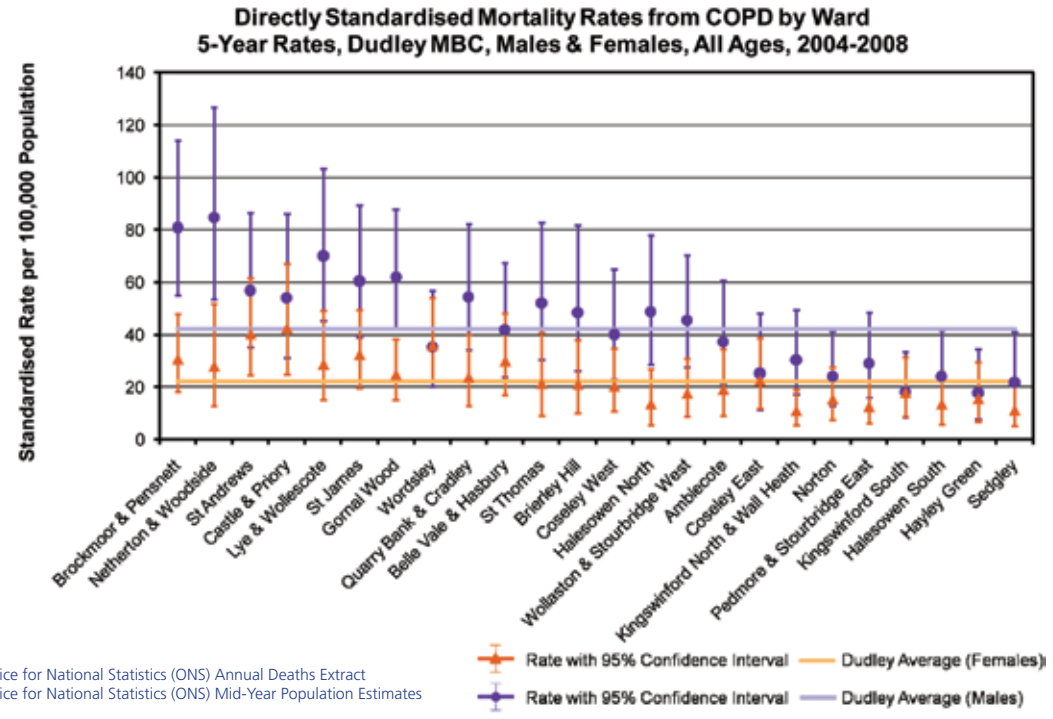
Death rates from COPD are higher than the national rates for men and the same for women (Figure 8.34a) and this has been true for the last twenty years. There is a strong social gradient for COPD, with people in the most deprived areas over four times more likely than those in the least deprived areas to die from COPD. The gradient is over five times for males and over 3 times for females (Figure 8.34c).

Figure 8.34a



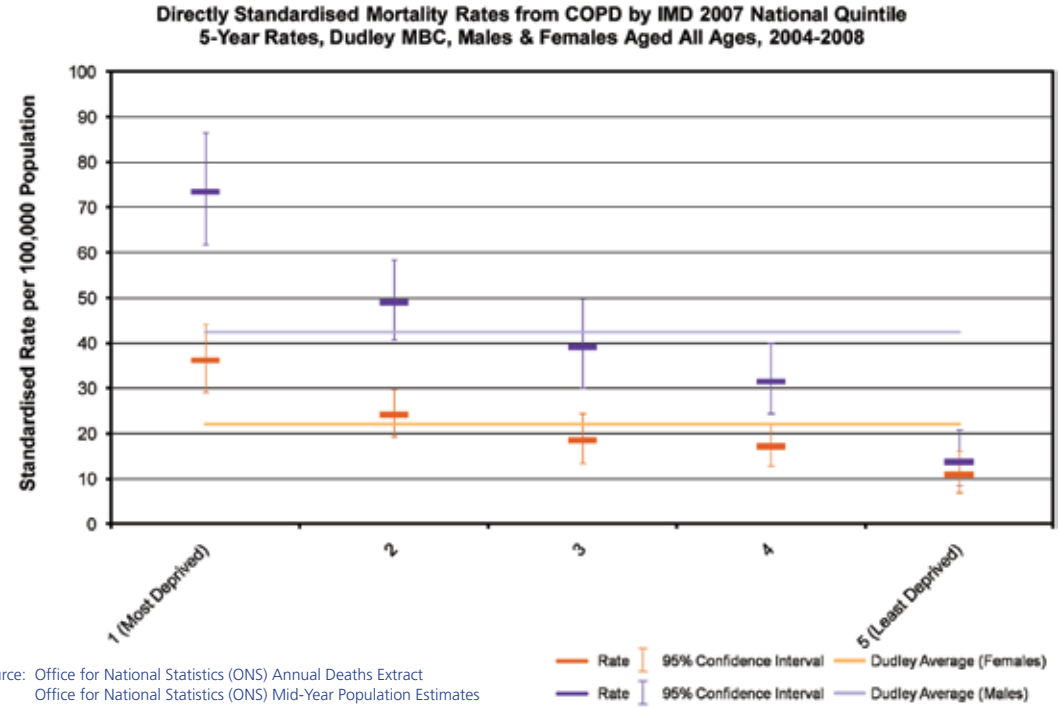
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.34b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.34c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from COPD across Dudley

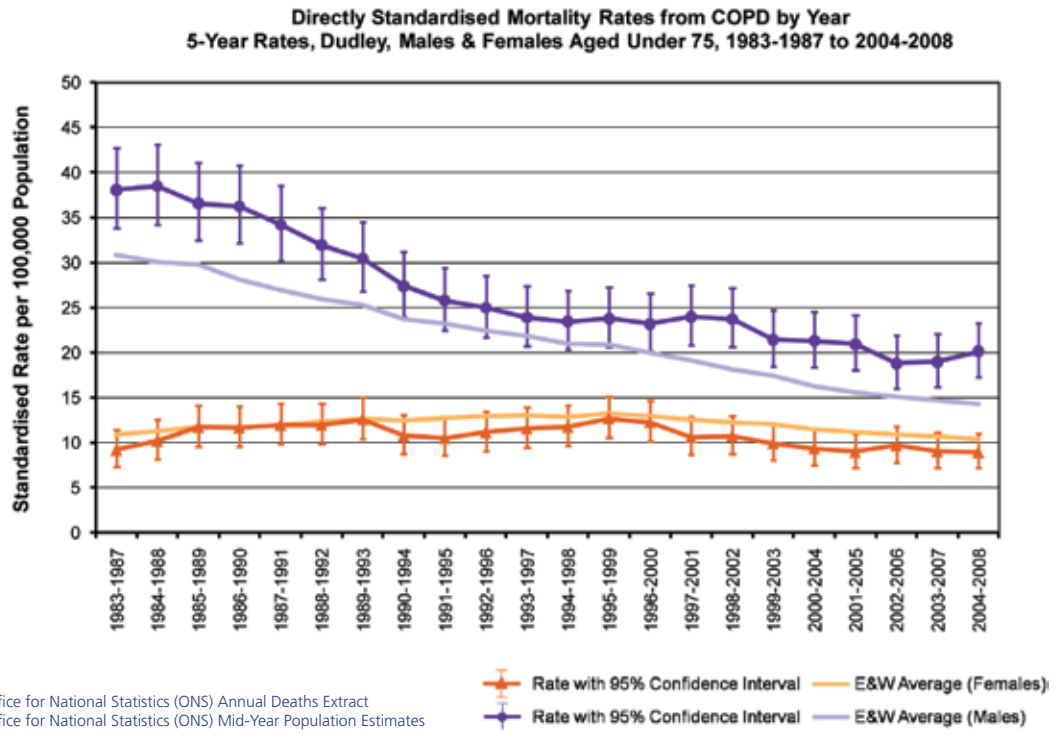
Table 8.32

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from COPD males (DSR per 100,000 population)	42.3	35.1	13.8	73.4	1.21*	7.2	5.32*	59.6
Mortality from COPD females (DSR per 100,000 population)	22.0	21.9	10.8	36.2	1.00	0.1	3.35*	25.4
Mortality from COPD persons (DSR per 100,000 population)	30.5	27.0	11.8	52.7	1.13*	3.5	4.47*	40.9

Aged under 75

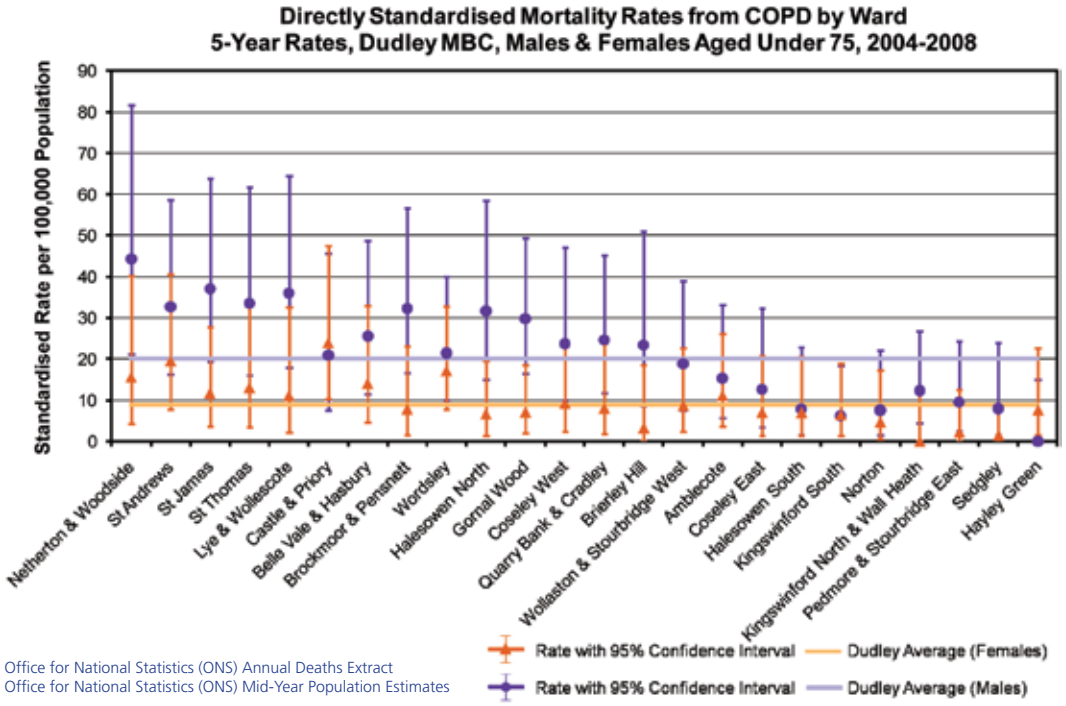
For premature mortality from COPD the difference in the rate for Dudley and that for England and Wales for males is the same as that seen for all ages, whereas for females premature mortality from COPD in Dudley is lower than for England and Wales. A significant internal inequality still exists for premature mortality from COPD. Those in the most deprived quintile are more than twelve times more likely to suffer premature death due to COPD than in the least deprived quintile and this goes up to over eighteen times more likely for males.

Figure 8.35a



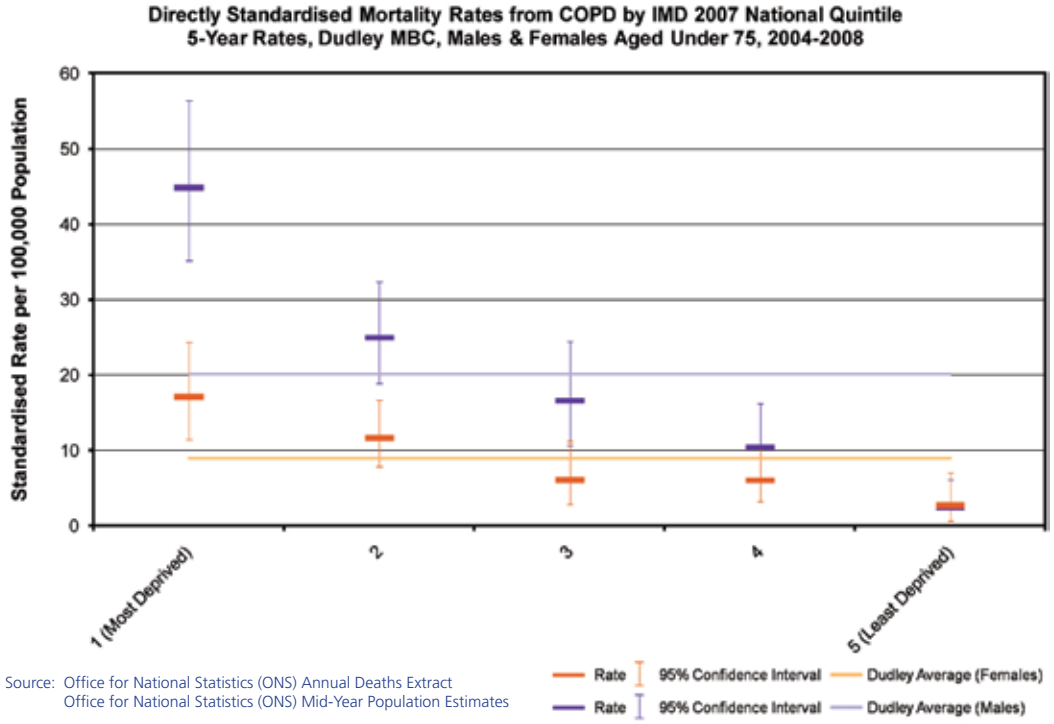
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.35b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.35c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from COPD across Dudley

Table 8.33

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from COPD males (DSR per 100,000 population)	20.1	14.3	2.4	44.8	1.41*	5.8	18.67*	42.4
Premature mortality from COPD females (DSR per 100,000 population)	8.9	10.4	2.7	17.1	0.86	-1.5	6.33*	14.4
Premature mortality from COPD persons (DSR per 100,000 population)	14.4	12.3	2.5	30.7	1.17*	2.1	12.28*	28.2

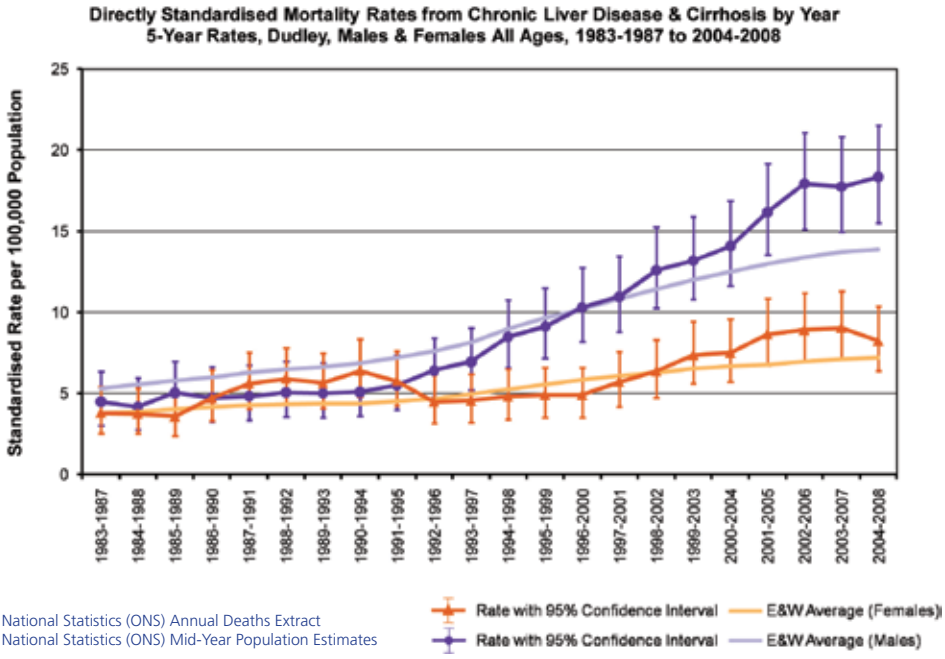
Chronic liver disease

Chronic liver disease, including cirrhosis, is often related to alcohol and some categories of the disease are completely attributable to alcohol. Obesity and Hepatitis C infections are also risk factors.

All Ages

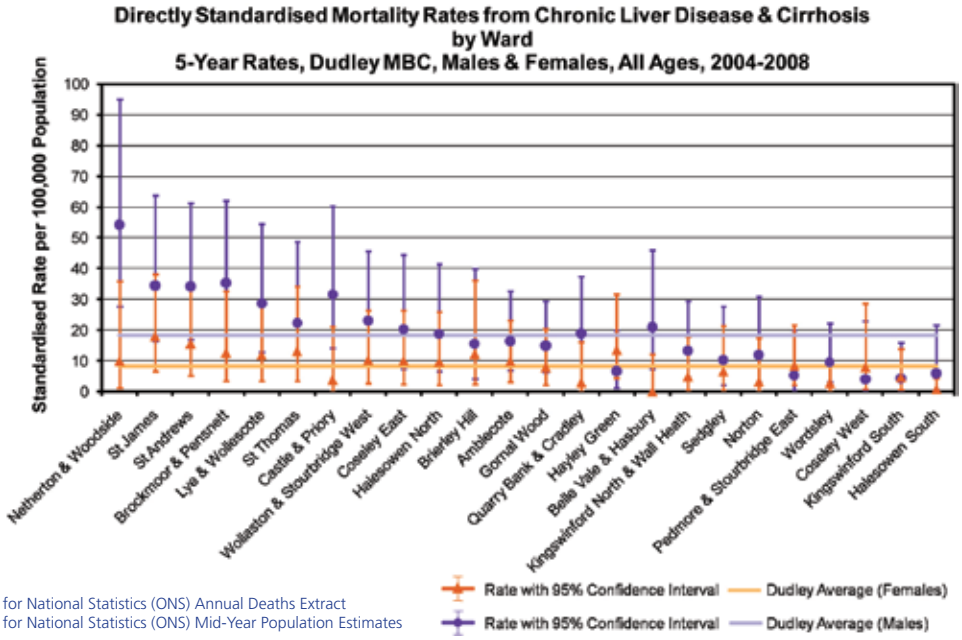
There has been a marked rise in death rates from chronic liver disease both nationally and locally from the early 1990s. Dudley rates are higher than the national rates for men and similar for women (Figure 8.36a). There is a social deprivation gradient for males, with the most deprived quintile having more than 7 times the mortality of the least deprived quintile. There is no significant social deprivation gradient for females (Figure 8.36c).

Figure 8.36a



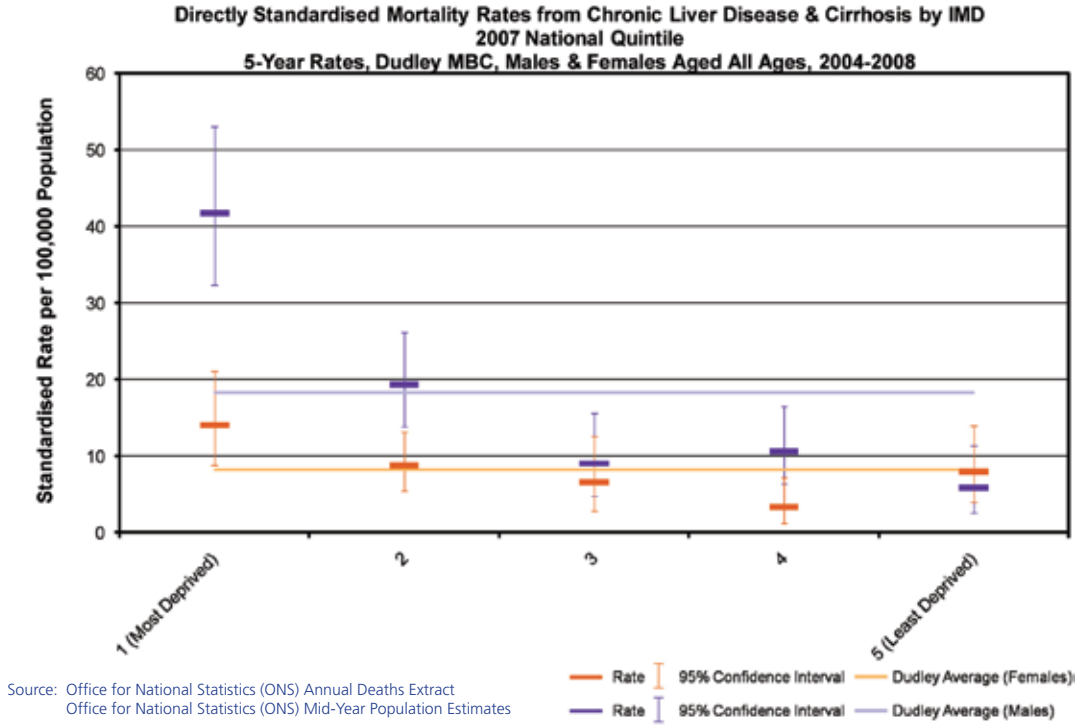
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.36b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.36c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from chronic liver disease across Dudley

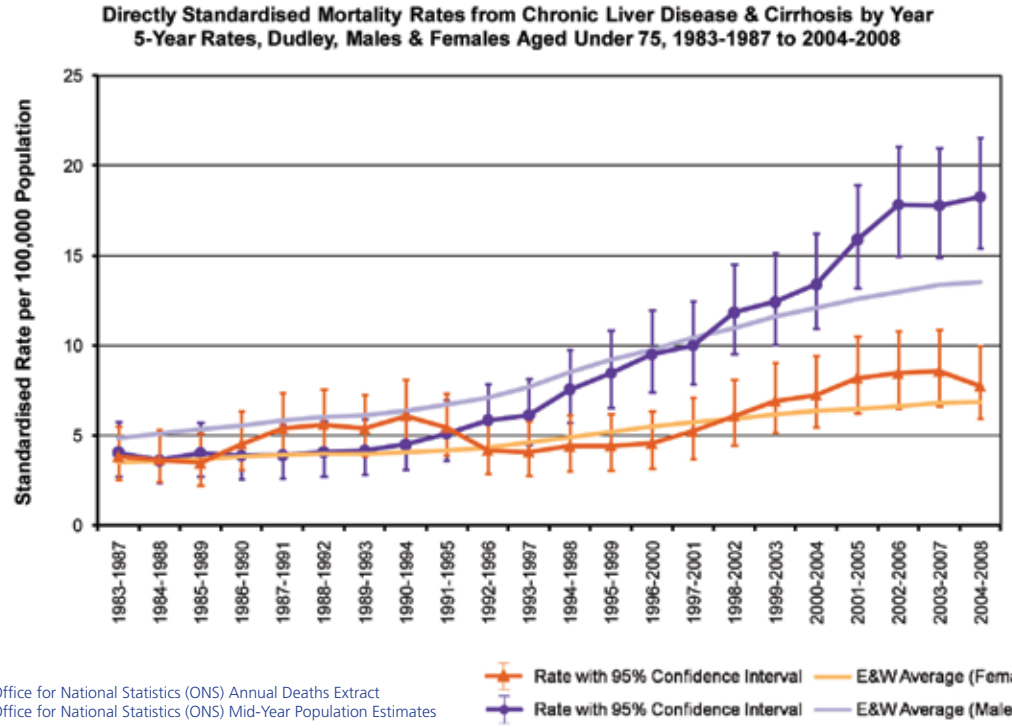
Table 8.34

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from chronic liver disease males (DSR per 100,000 population)	18.3	13.8	5.9	41.8	1.33*	4.5	7.08*	35.9
Mortality from chronic liver disease females (DSR per 100,000 population)	8.2	7.2	8.0	14.0	1.14*	1.0	1.75*	6.0
Mortality from chronic liver disease persons (DSR per 100,000 population)	13.2	10.4	6.9	28.2	1.27*	2.8	4.09*	14.3

Aged under 75

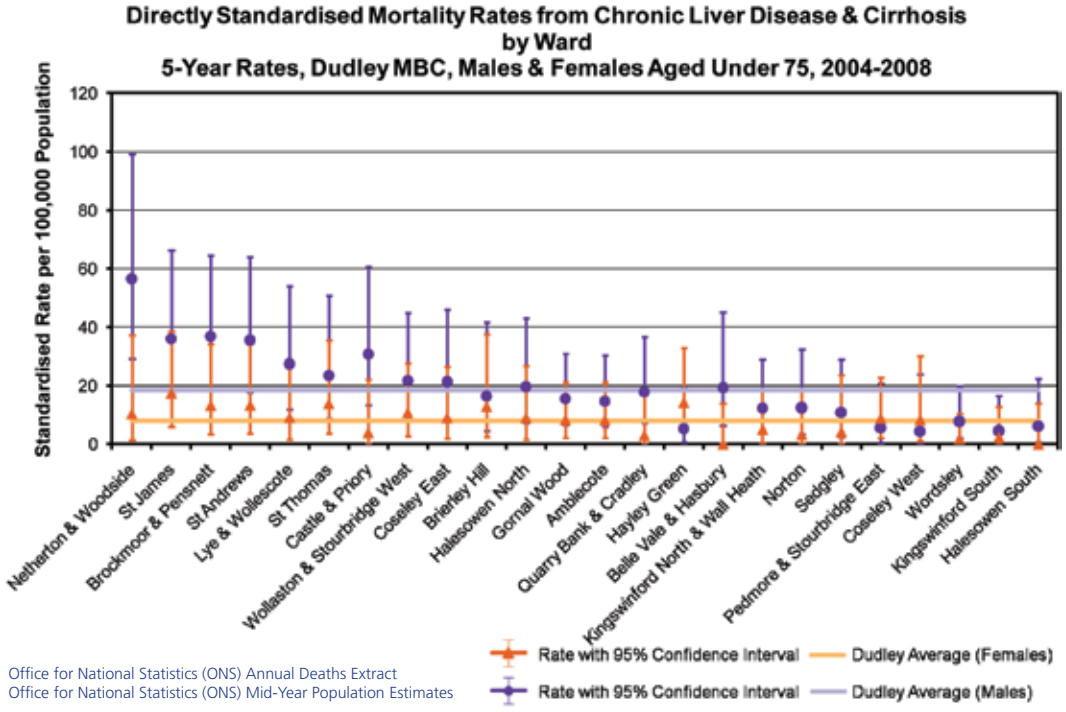
For premature mortality from chronic liver disease, the difference in the rate for Dudley and that for England and Wales is the same as that seen for all ages as the majority of deaths from chronic liver disease occur in the under 75 age band. A significant internal inequality still exists for premature mortality from chronic liver disease. Those in the most deprived quintile are more than four times more likely to suffer premature death due to chronic liver disease than in the least deprived quintile and this goes up to over eight times more likely for males.

Figure 8.37a



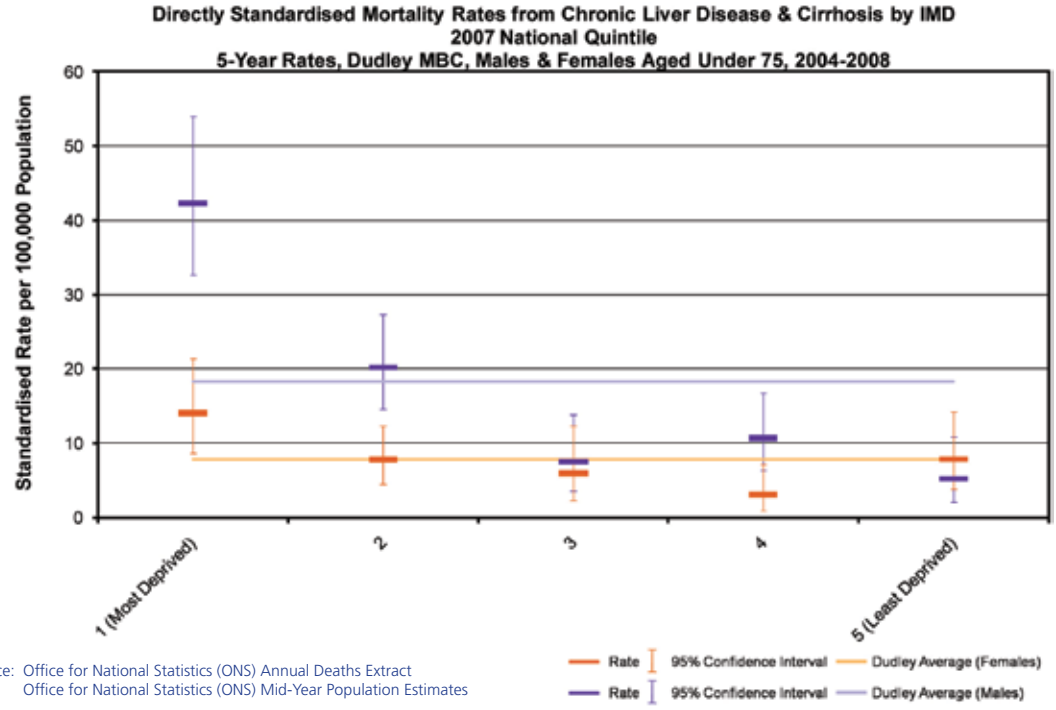
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.37b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.37c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from chronic liver disease across Dudley

Table 8.35

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from chronic liver disease males (DSR per 100,000 population)	18.3	13.5	5.2	42.3	1.36*	4.8	8.13*	37.1
Premature mortality from chronic liver disease females (DSR per 100,000 population)	7.7	6.9	7.9	14.0	1.11	0.8	1.77*	6.1
Premature mortality from chronic liver disease persons (DSR per 100,000 population)	13.0	10.1	6.6	28.5	1.29*	2.9	4.32*	21.9

External Causes

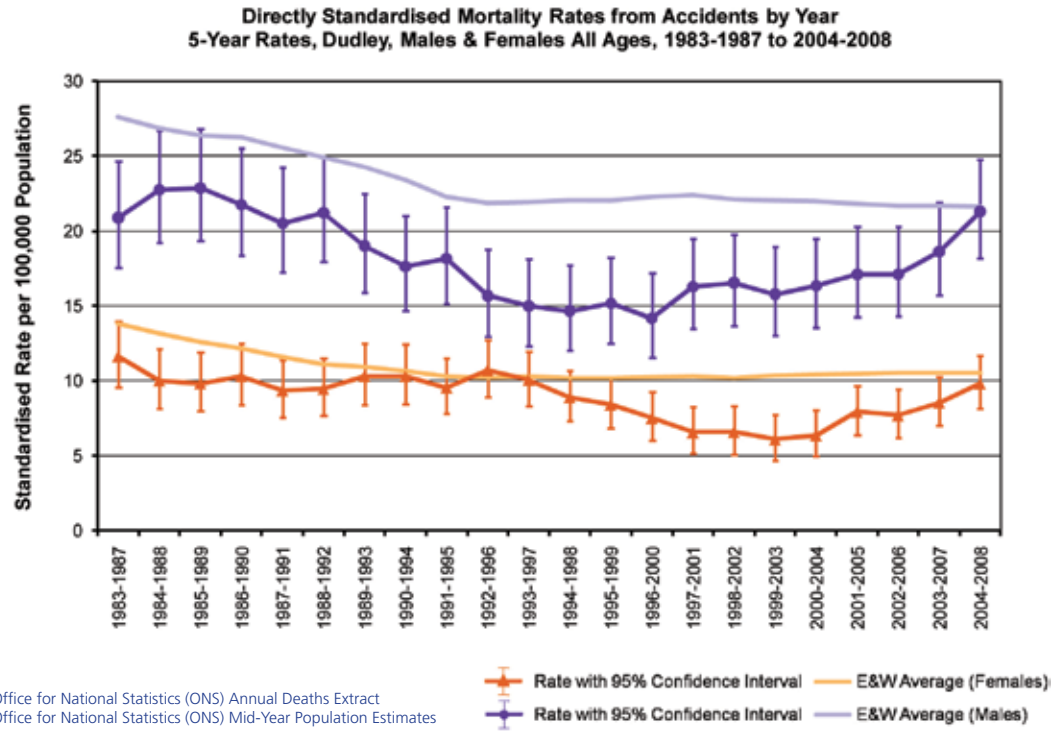
All Ages

The external causes of death are defined as those from injury and poisoning and they account for less than 5 per cent of all deaths in England and Wales (3.5% in 2008, Vital Statistics). In Dudley for the same period, 1.5% of deaths were due to injury and poisoning. Deaths from injury and poisoning account for nearly half of all deaths in the 15-34 age group for England and Wales (48.4% in 2008) and 21.4% in the same age group in Dudley. This proportion is significantly higher in men than women. Therefore, deaths from injury and poisoning have a large impact in terms of premature deaths and potential years of life lost. In addition to this there is considerable published research confirming that the risks of both unintentional and intentional injury are related to deprivation status, with those at the greatest risk living in the most deprived areas (WHO, 2009).

Deaths from injury and poisoning make a significant contribution to the gap seen in life expectancy between the most and least deprived quintiles in Dudley (LHO, 2010). The estimated life expectancy years gained (2001-2005) if the Most Deprived Quintile (MDQ) of Dudley MCD had the same mortality rate as the least deprived quintile in the local authority for external causes are 1.09 years (16.6%) for men and 0.03 years (0.8%) for women.

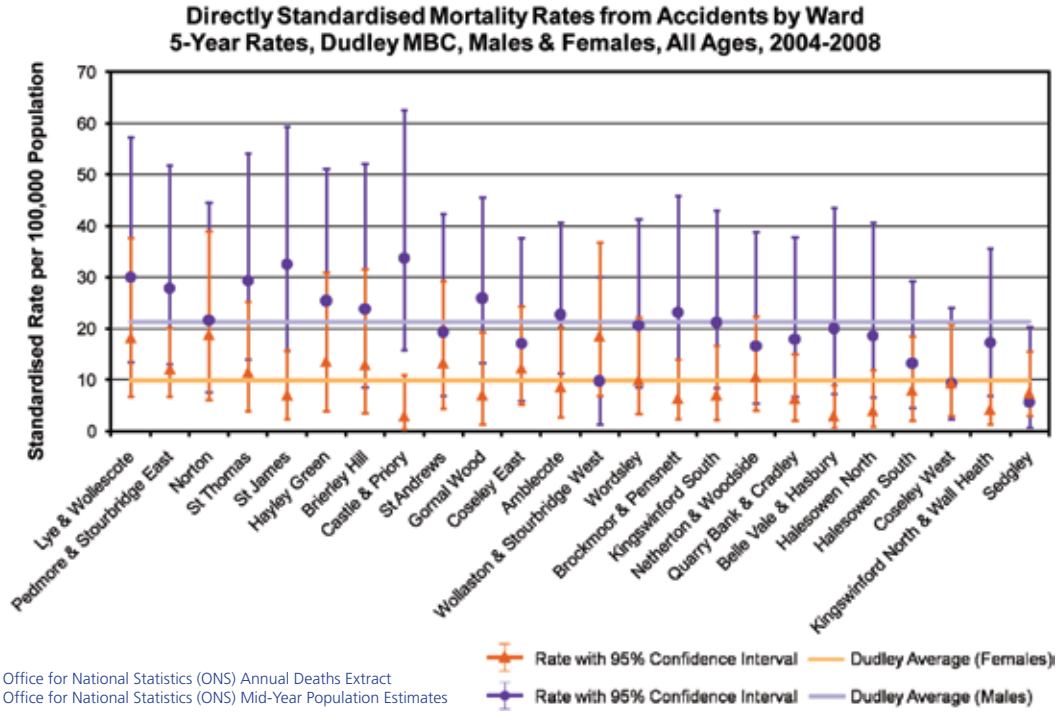
Death rates from accidents are now the same as the national rates for men and for women following a long period where the mortality rate for accidents in Dudley was significantly lower than the national rate (Figure 8.38a). The last 10 years has shown little change in the national death rate for accidents. There is no clear social gradient for accidents regardless of gender (Figure 8.38c).

Figure 8.38a



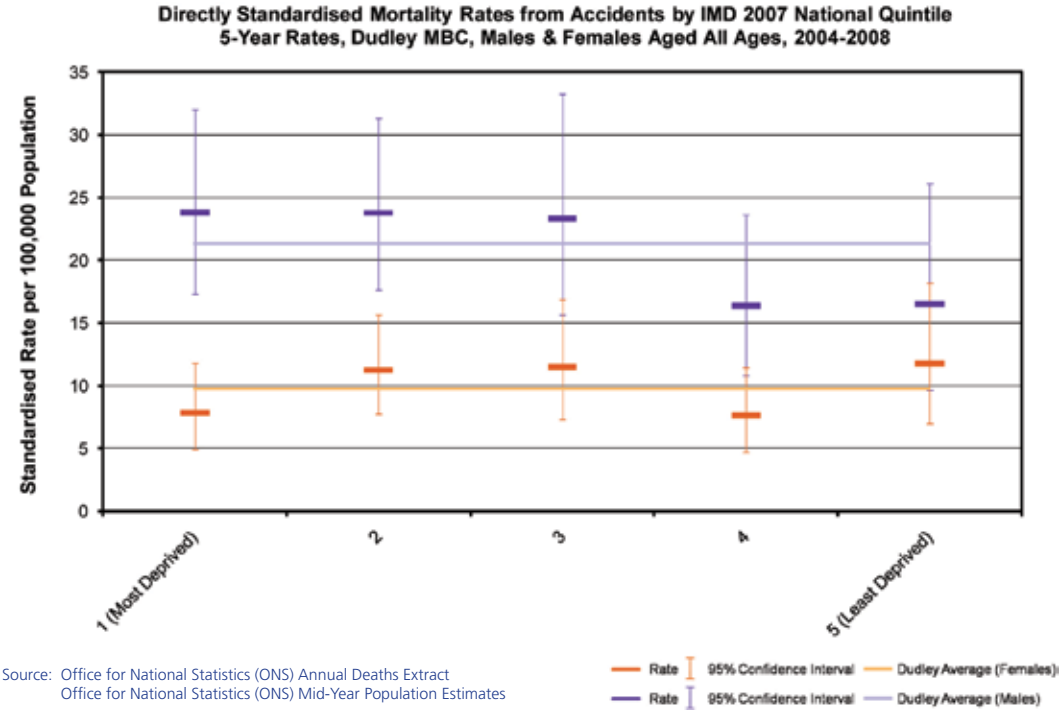
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.38b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.38c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from accidents across Dudley

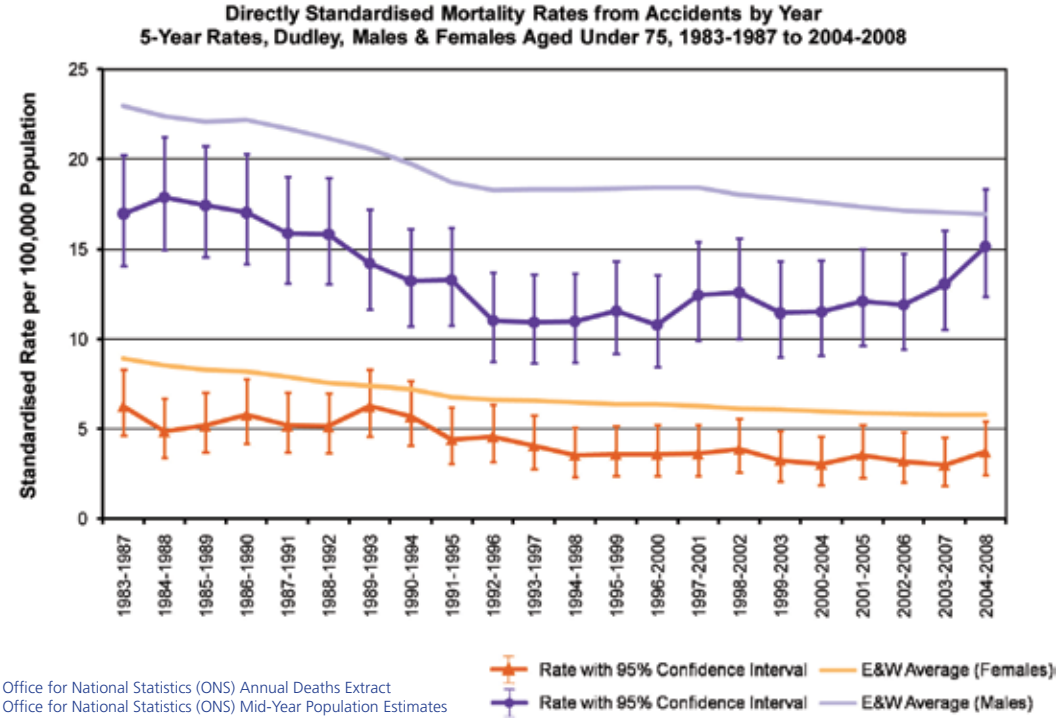
Table 8.36

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from accidents males (DSR per 100,000 population)	21.3	21.6	16.5	23.8	0.99	-0.3	1.44*	7.3
Mortality from accidents females (DSR per 100,000 population)	9.8	10.5	11.7	7.9	0.93	-0.7	0.68	-3.8
Mortality from accidents persons (DSR per 100,000 population)	15.5	16.0	14.3	15.8	0.97	-0.5	1.10*	1.5

Aged under 75

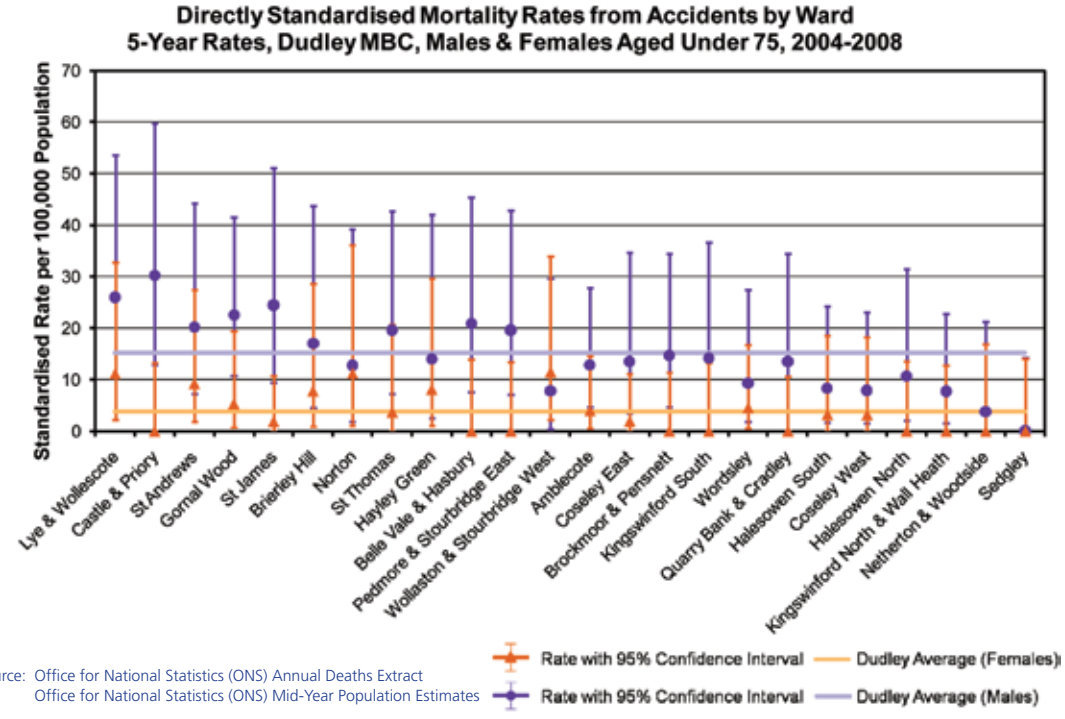
For premature mortality from accidents, the difference in the rate for Dudley and that for England and Wales is the same as that seen for all ages, though the Dudley rates are slightly lower than national. There is no significant internal inequality for premature mortality from accidents (Figure 8.39a).

Figure 8.39a



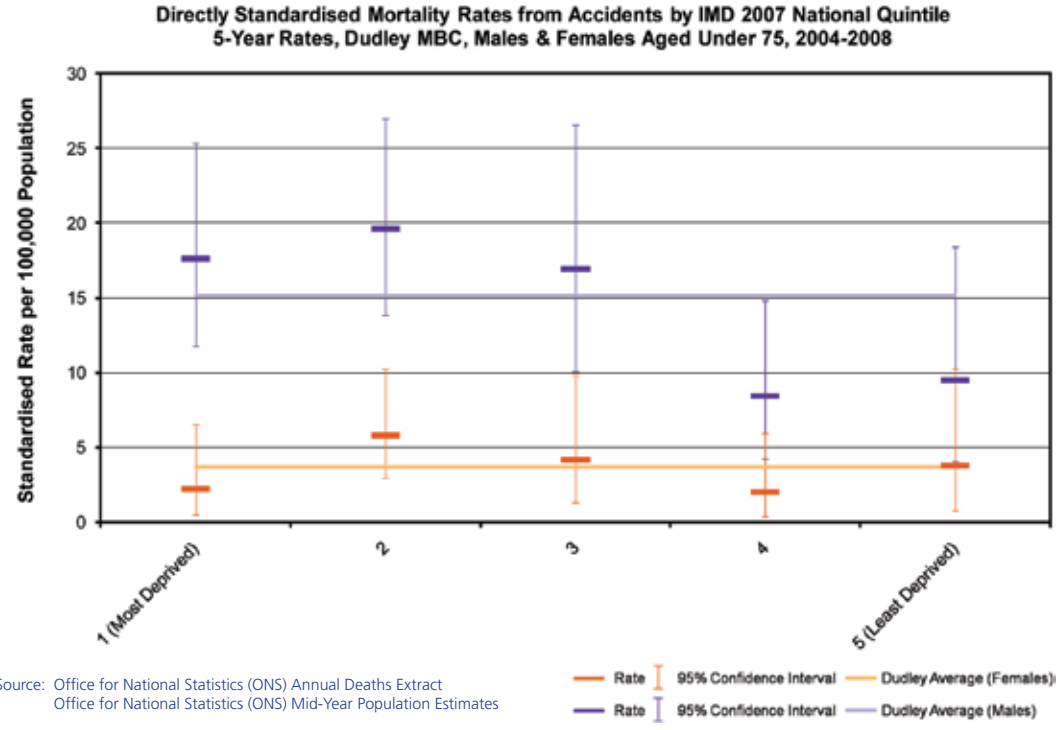
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.39b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.39c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from accidents across Dudley

Table 8.37

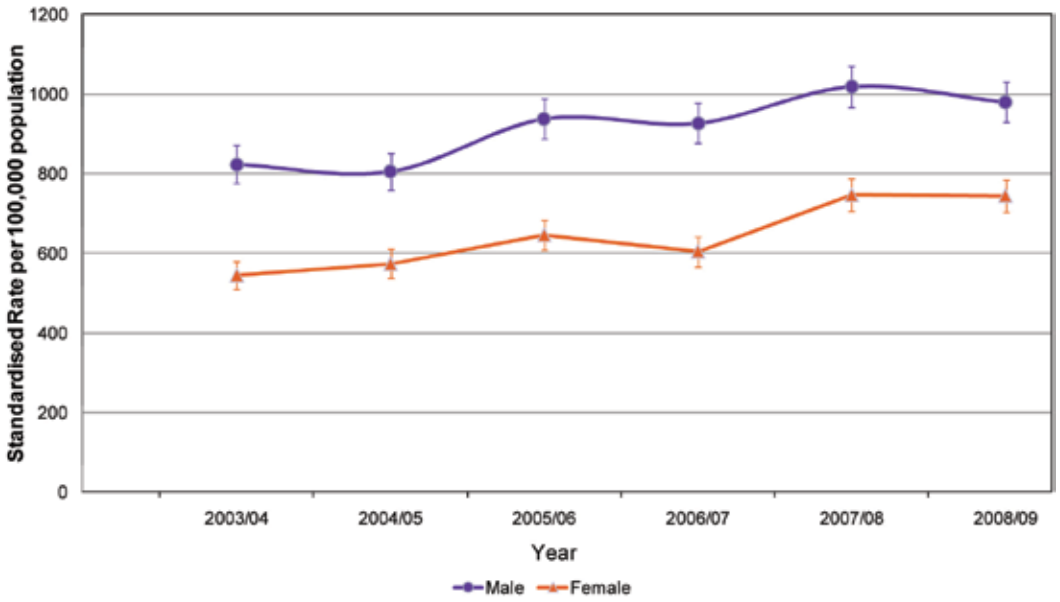
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from accidents males (DSR per 100,000 population)	15.1	16.9	9.5	17.6	0.89	-1.8	1.85*	8.1
Premature mortality from accidents females (DSR per 100,000 population)	3.7	5.8	3.8	2.2	0.64	-2.1	0.58	-1.6
Premature mortality from accidents persons (DSR per 100,000 population)	9.4	11.4	6.6	9.9	0.82	-2.0	1.50*	3.3

Hospital admissions from accidents

For accidents the directly standardised emergency hospital admission rates in Dudley over the last 6 years have been rising and are significantly higher for men than women (Figure 8.40a). There is a strong gradient of deprivation for emergency hospital admissions from accidents and this is greater for males than females (Figure 8.40b).

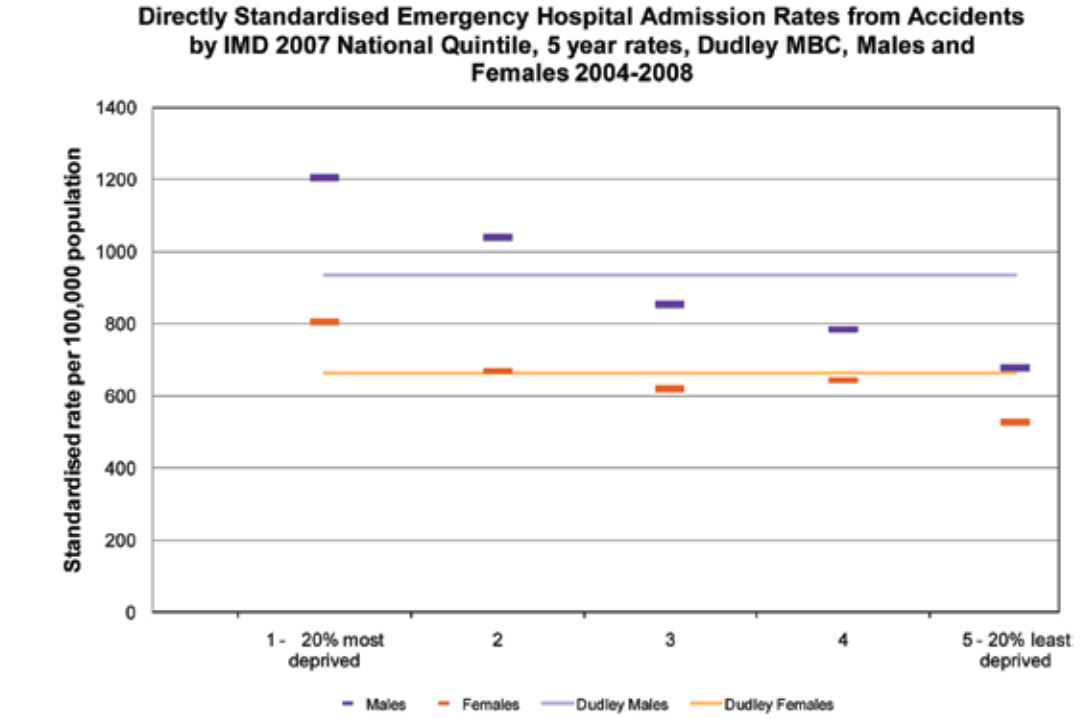
Figure 8.40a

Directly standardised emergency hospital admissions from accidents by year single year rates, males and females, 2003 to 2008, Dudley



Source: Secondary Users Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.40b



Source: Secondary Users Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates
Department of Communities & Local Government Indicies of Deprivation 2007

Inequality in hospital admissions from accidents across Dudley

Table 8.38

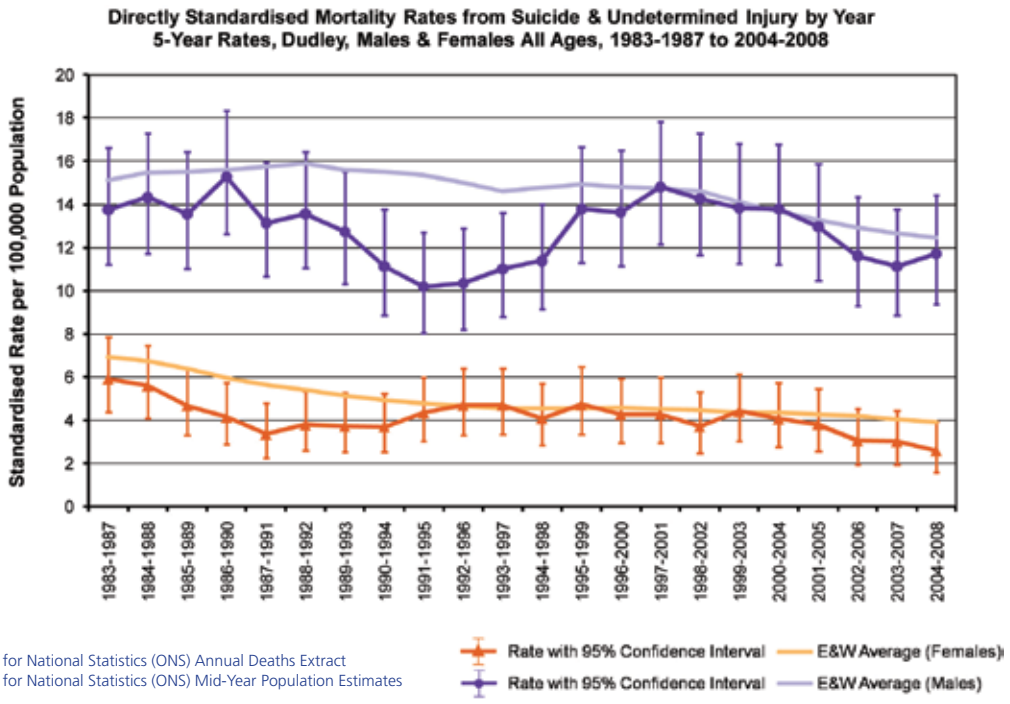
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Hospital admissions from accidents males (DSR per 100,000 population)	935	NA	678	1206	NA	NA	1.78*	528
Hospital admissions from accidents females (DSR per 100,000 population)	663	NA	527	805	NA	NA	1.53*	278
Hospital admissions from accidents persons (DSR per 100,000 population)	808	NA	615	1011	NA	NA	1.64*	396

Suicide and undetermined injury

All Ages

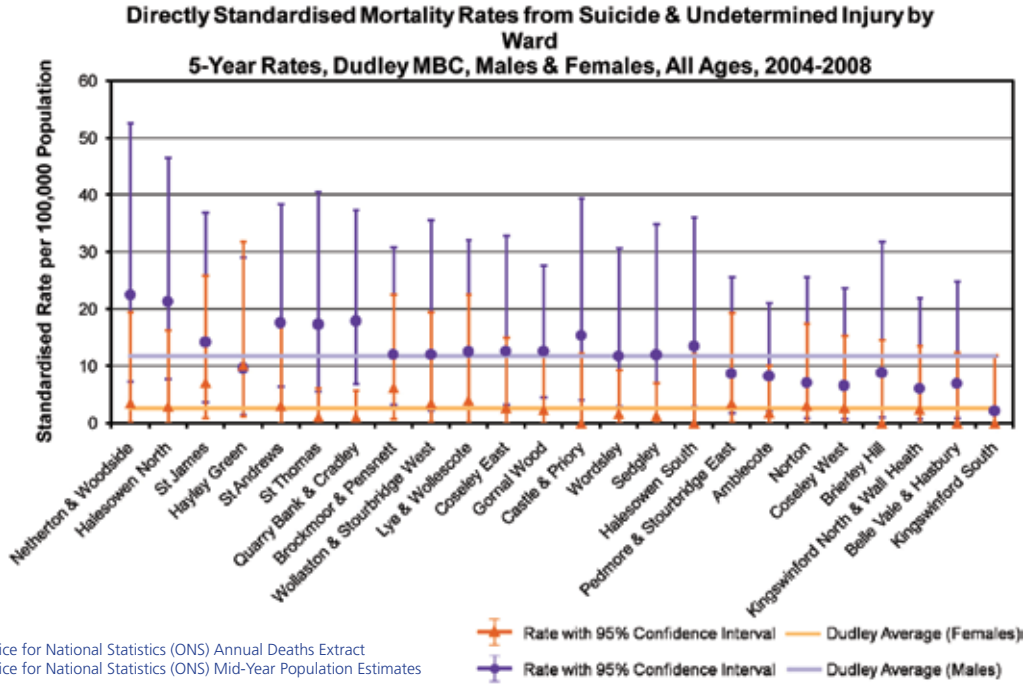
Directly standardised mortality rates for suicides and undetermined injury have declined over the last 20 years and have continued to track levels for England and Wales (Figure 8.41a). Mortality rates from suicide and undetermined injury are higher in men than women. There is a strong gradient of deprivation for mortality from suicide and undetermined injuries for men, but not women (Figure 8.41c).

Figure 8.41a



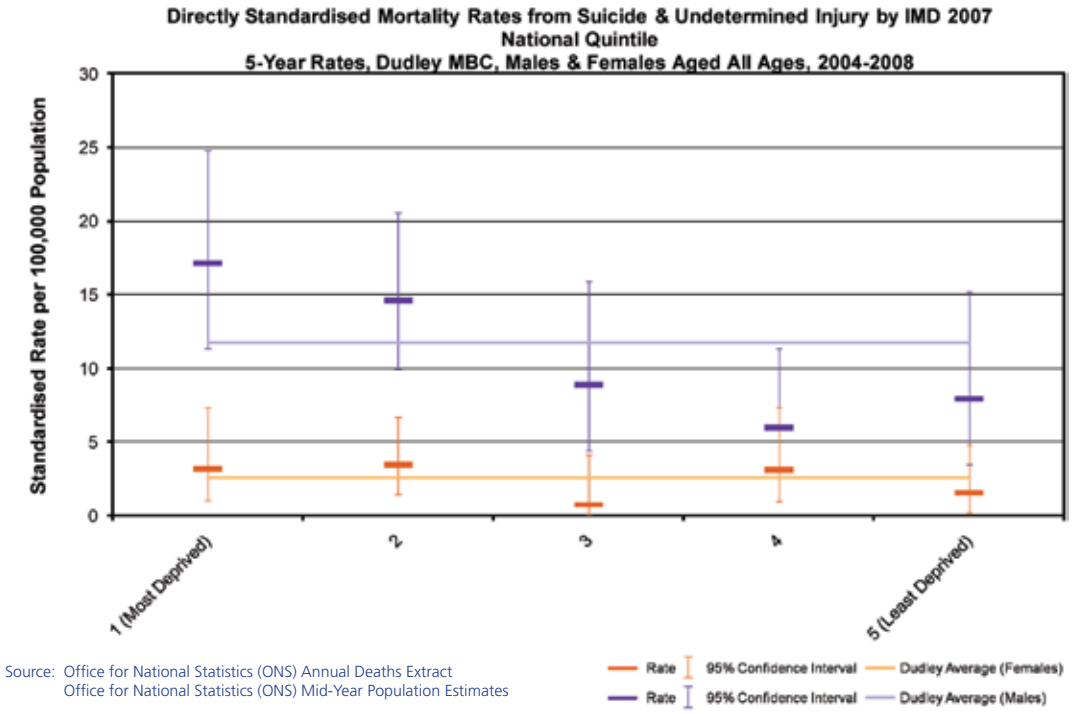
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.41b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.41c



Inequality in mortality from suicide and undetermined injury across Dudley

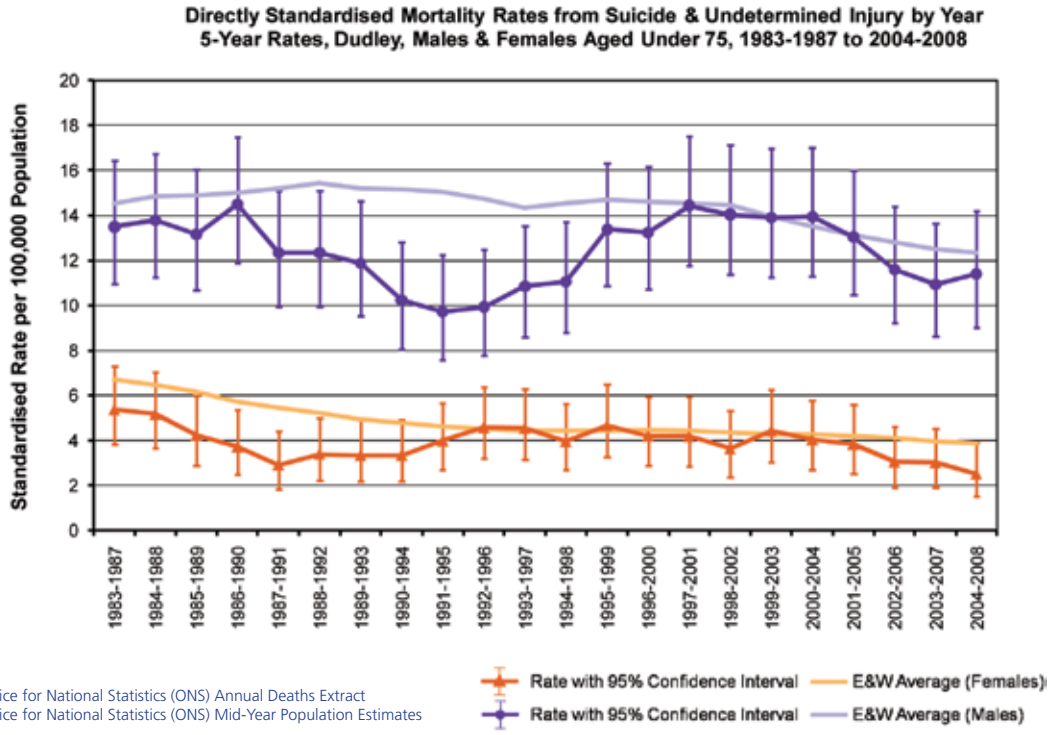
Table 8.39

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from suicide and undetermined injury males (DSR per 100,000 population)	11.7	12.5	7.9	17.1	0.94	-0.8	2.16*	9.2
Mortality from suicide and undetermined injury females (DSR per 100,000 population)	2.6	3.9	1.6	3.1	0.67	-1.3	1.94*	1.5
Mortality from suicide and undetermined injury persons (DSR per 100,000 population)	7.1	8.1	4.8	10.1	0.88	-1.0	2.10*	5.3

Aged under 75

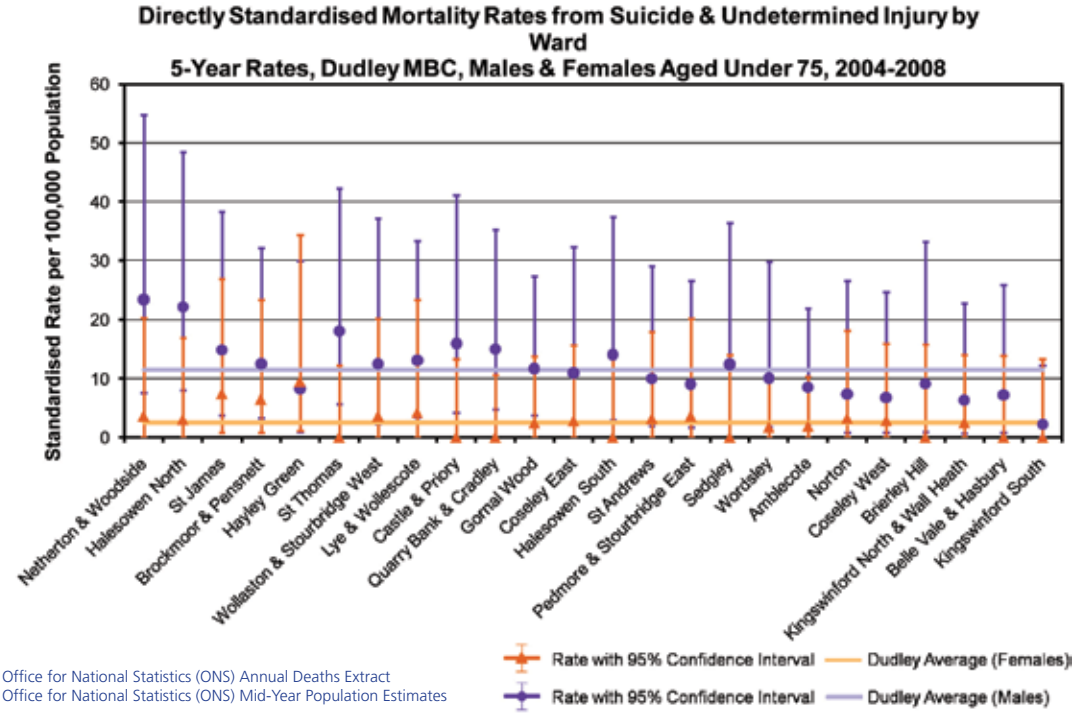
For premature mortality from suicide and undetermined injury, the difference in the rate for Dudley and that for England and Wales is the same as that seen for all ages though the Dudley rates are slightly lower than national. There is no significant internal inequality for premature mortality from suicide and undetermined injury.

Figure 8.42a



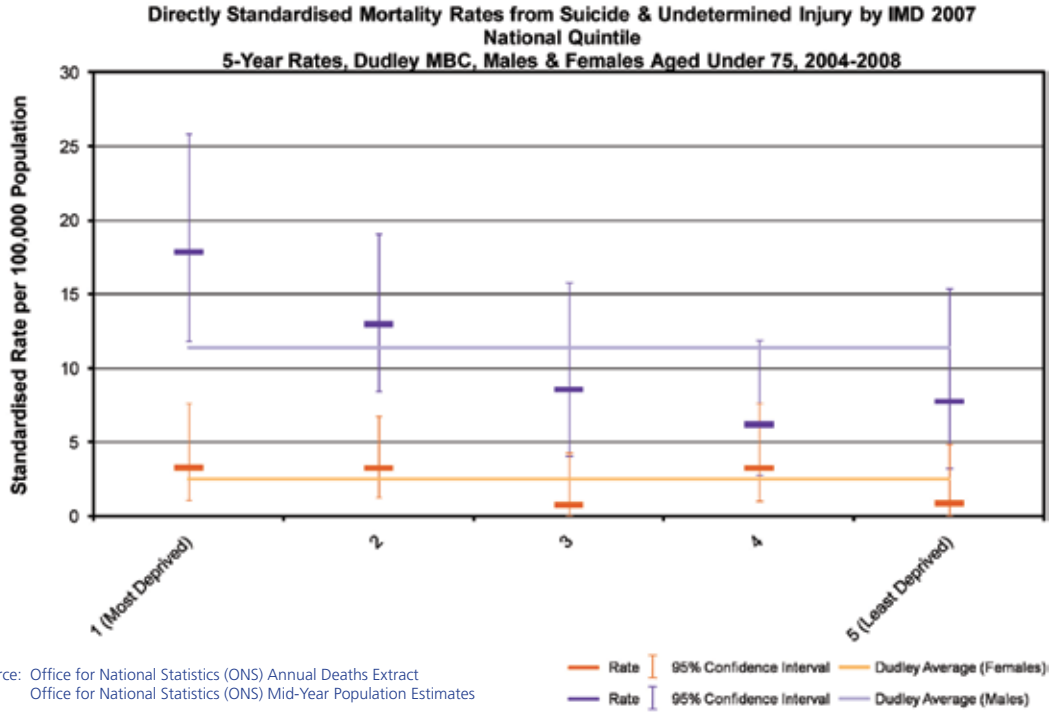
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.42b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.42c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from suicide and undetermined injury across Dudley

Table 8.40

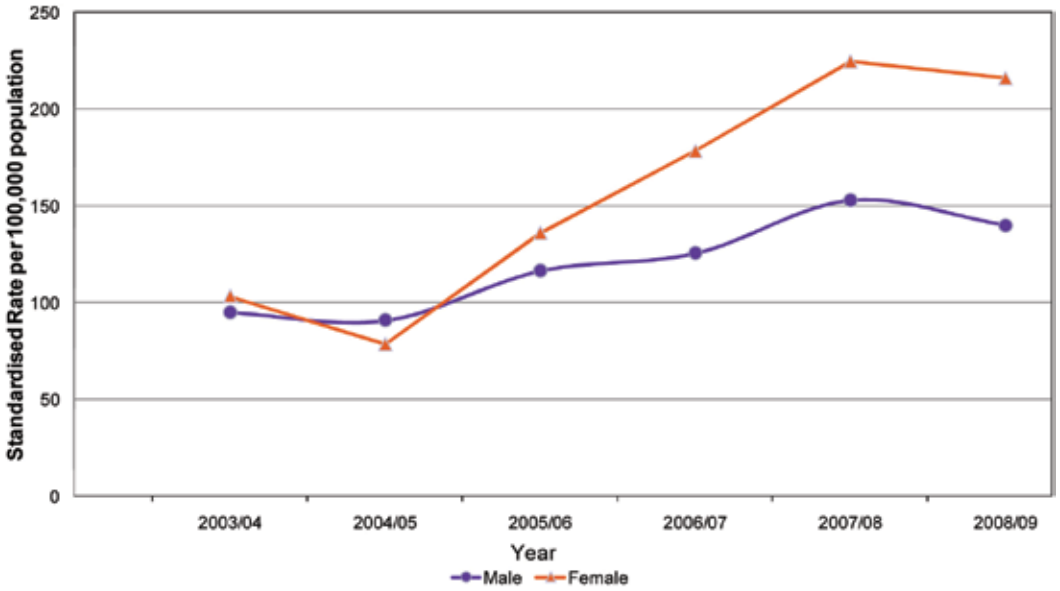
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from suicide and undetermined injury males (DSR per 100,000 population)	11.4	12.3	7.7	17.9	0.93	-0.9	2.32*	10.2
Premature mortality from suicide and undetermined injury females (DSR per 100,000 population)	2.5	3.9	0.9	3.3	0.64	-1.4	3.67*	2.4
Premature mortality from suicide and undetermined injury persons (DSR per 100,000 population)	6.9	8.1	4.4	10.5	0.85	-1.2	2.39*	6.1

Hospital admissions from suicide and undetermined injury

Directly standardised emergency hospital admission rates for suicides and undetermined injury have increased over the last 6 years and this has been at a faster rate for females, hence admission rates are higher for females than males (Figure 8.43a). There is a strong gradient of deprivation for emergency hospital admissions from suicide and undetermined injuries for both sexes (Figure 8.43b).

Figure 8.43a

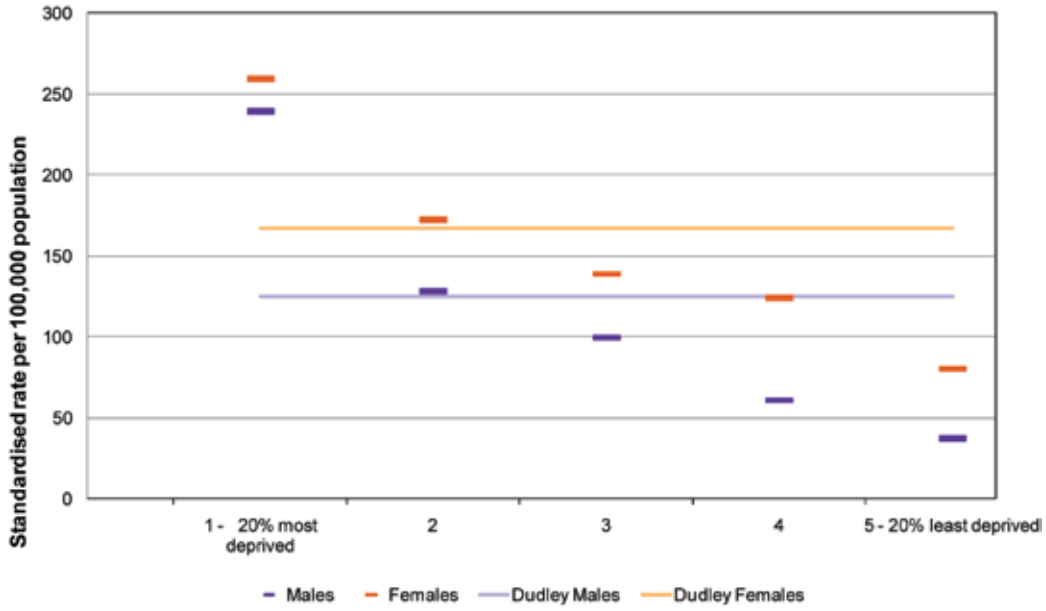
Directly standardised emergency hospital admissions from suicides and undetermined injuries by year single year rates, males and females, 2003 to 2008, Dudley



Source: Secondary Users Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.43b

Directly Standardised Emergency Hospital Admission Rates from Suicide and undetermined injury by IMD 2007 National Quintile, 5 year rates, Dudley MBC, Males and Females 2004-2008



Source: Secondary Users Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates
Department of Communities & Local Government Indicies of Deprivation 2007

Inequality in hospital admissions from suicide and undetermined injury across Dudley

Table 8.41

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Hospital admissions from suicide and undetermined injury males (DSR per 100,000 population)	125	NA	37	239	NA	NA	6.46*	202
Hospital admissions from suicide and undetermined injury females (DSR per 100,000 population)	167	NA	80	260	NA	NA	3.25*	180
Hospital admissions from suicide and undetermined injury persons (DSR per 100,000 population)	145	NA	58	248	NA	NA	4.28*	190

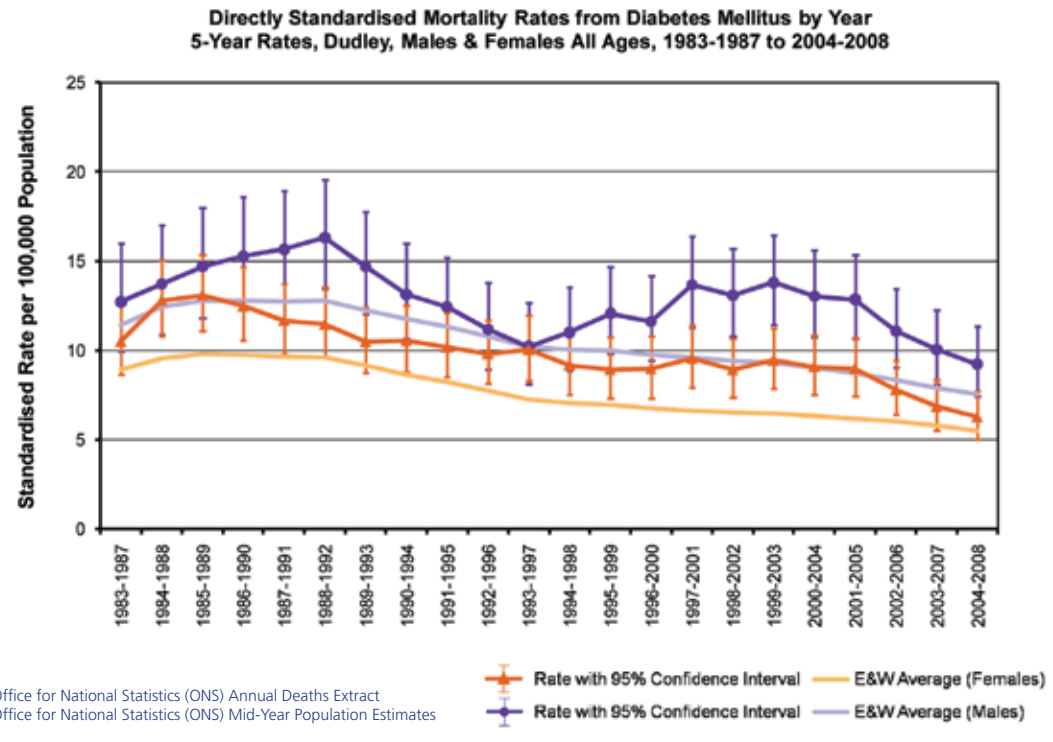
Diabetes

Diabetes mellitus is related to lifestyle but additional risk factors are inherent in the population.

All Ages

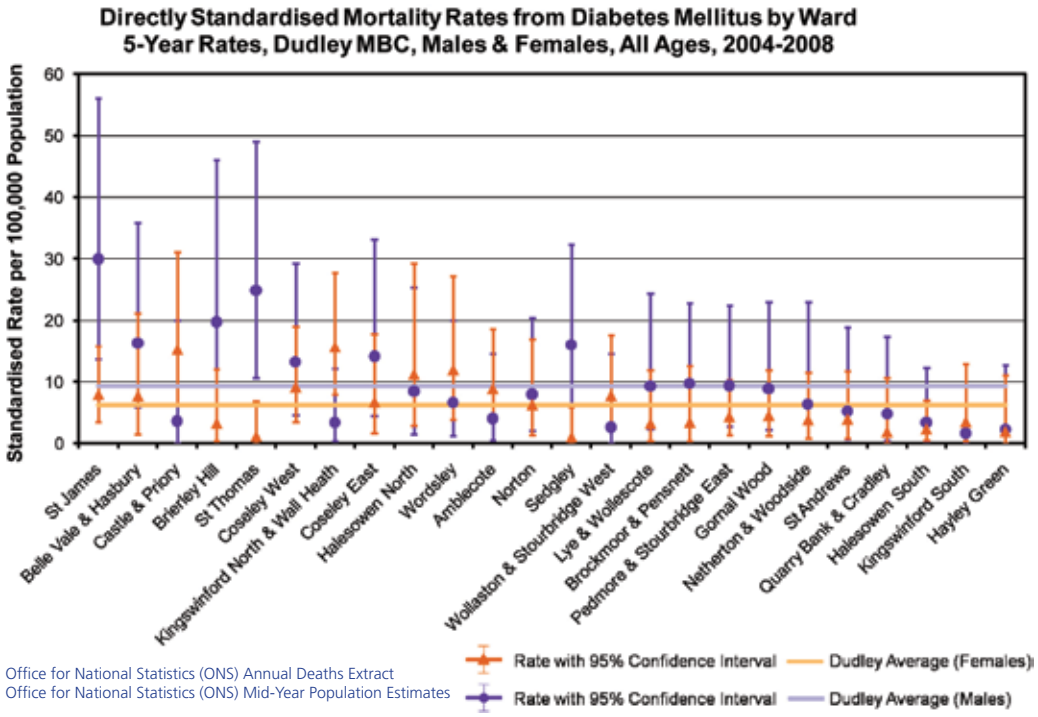
Death rates from diabetes are higher than the national rates for men and the same for women (Figure 8.44a). This has been true for the last ten years for men and the gap with national has only closed for women in the last couple of years. There is no social deprivation gradient for diabetes (Figure 8.44c).

Figure 8.44a



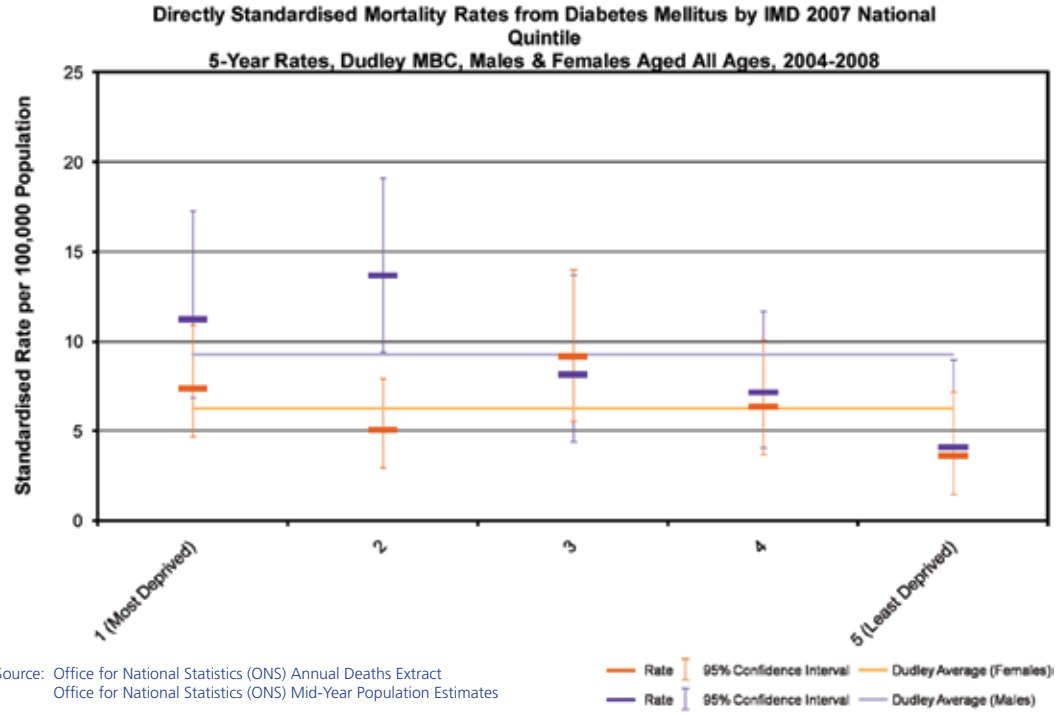
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.44b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.44c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from diabetes across Dudley

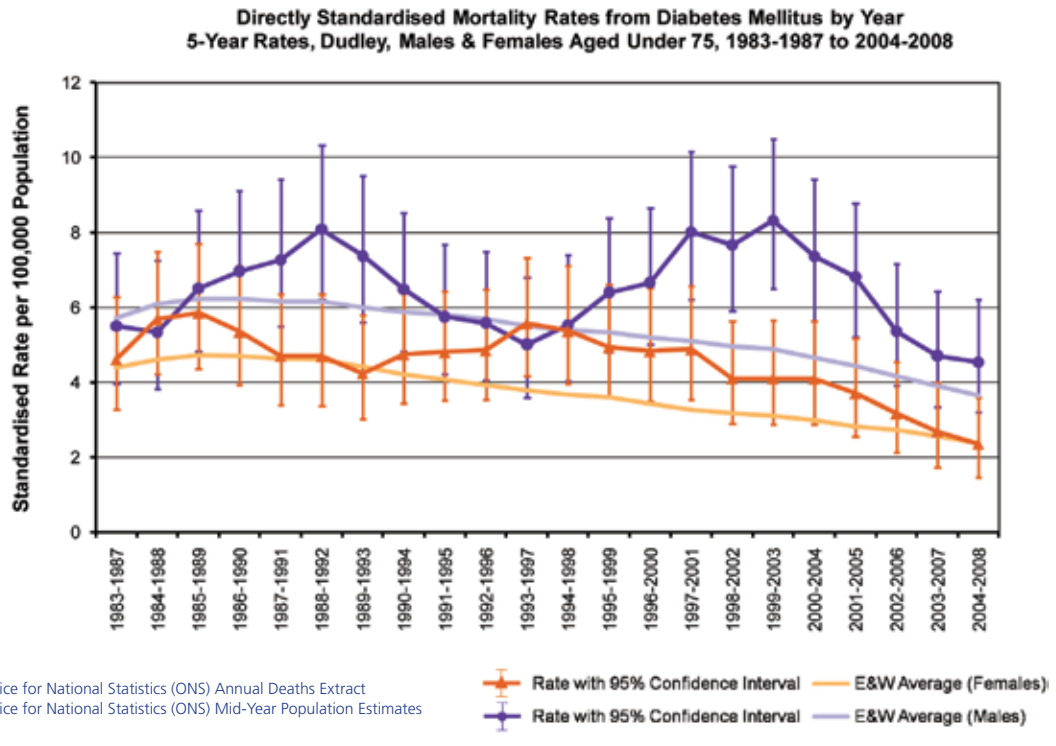
Table 8.42

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from diabetes males (DSR per 100,000 population)	9.2	7.5	4.1	11.2	1.23*	1.7	2.73*	7.1
Mortality from diabetes females (DSR per 100,000 population)	6.3	5.5	3.6	7.4	1.15*	0.8	2.06*	3.8
Mortality from diabetes persons (DSR per 100,000 population)	7.7	6.4	3.8	9.7	1.20*	1.3	2.55*	5.9

Aged under 75

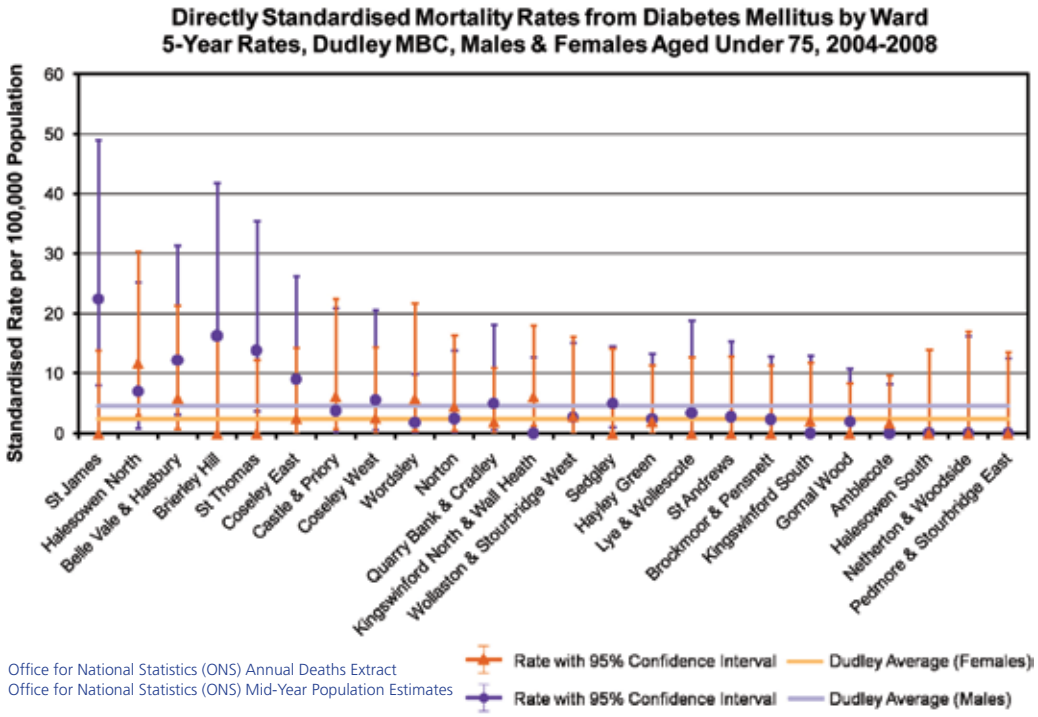
For premature mortality from diabetes the difference in the rate for Dudley and that for England and Wales is lower than that seen for all ages as the majority of deaths from diabetes occur in the over 75 age band. An internal inequality still exists for premature mortality from diabetes. Males in the most deprived quintile are more than seven times more likely to suffer premature death due to diabetes than males in the least deprived quintile. There was no social deprivation gradient for premature death due to diabetes in females.

Figure 8.45a



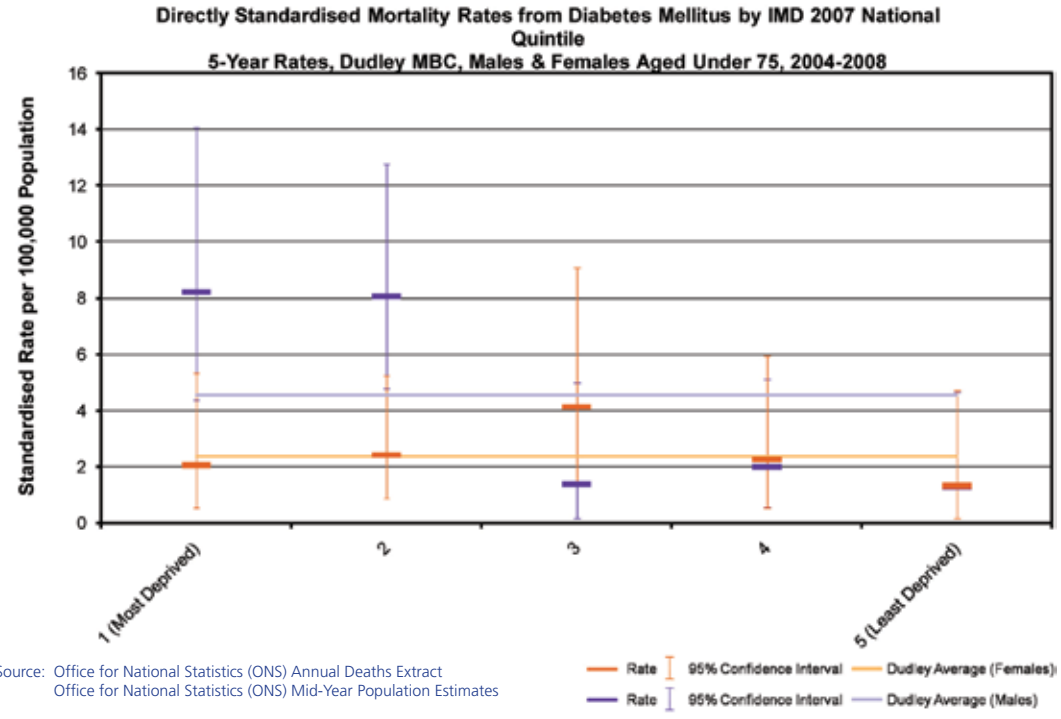
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.45b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.45c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from diabetes across Dudley

Table 8.43

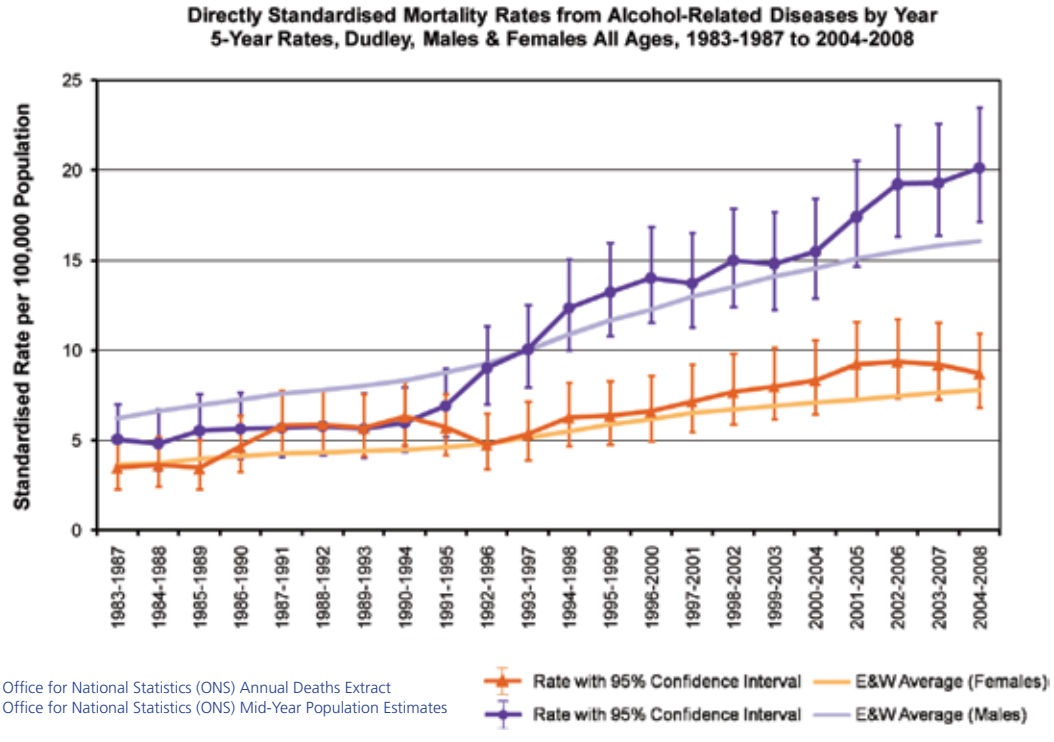
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from diabetes males (DSR per 100,000 population)	4.5	3.6	1.3	8.2	1.25*	0.9	7.08*	6.9
Premature mortality from diabetes females (DSR per 100,000 population)	2.4	2.4	1.3	2.1	1.00	0.0	1.62	0.8
Premature mortality from diabetes persons (DSR per 100,000 population)	3.4	3.0	1.3	5.1	1.13*	0.4	3.92*	3.8

Alcohol related harm

All Ages

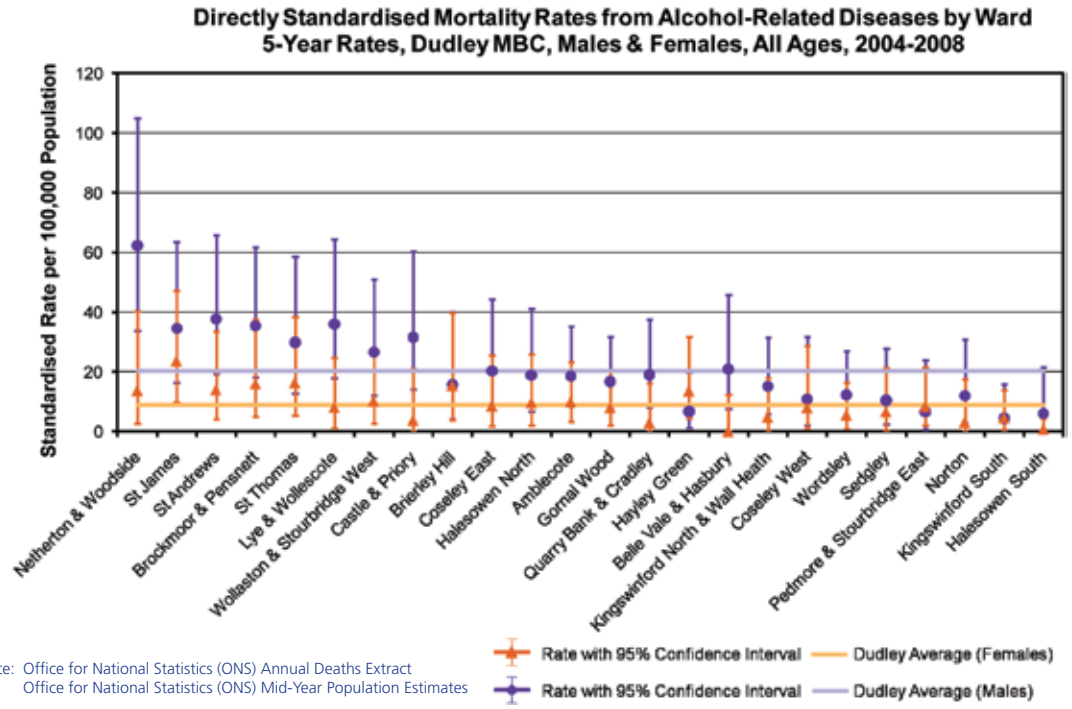
Death rates from alcohol related harm (ICD 10 codes F10, I42.6, K70, K73, K74 and X45) are higher than the national rates for men and the same for women (Figure 8.46a). The gap with national has only widened for men in the last few years. There is a social gradient for alcohol related harm with people in the most deprived areas over four and a half times more likely as those in the least deprived areas to die from alcohol related harm, the gradient is steeper for males than females (Figure 8.46c).

Figure 8.46a



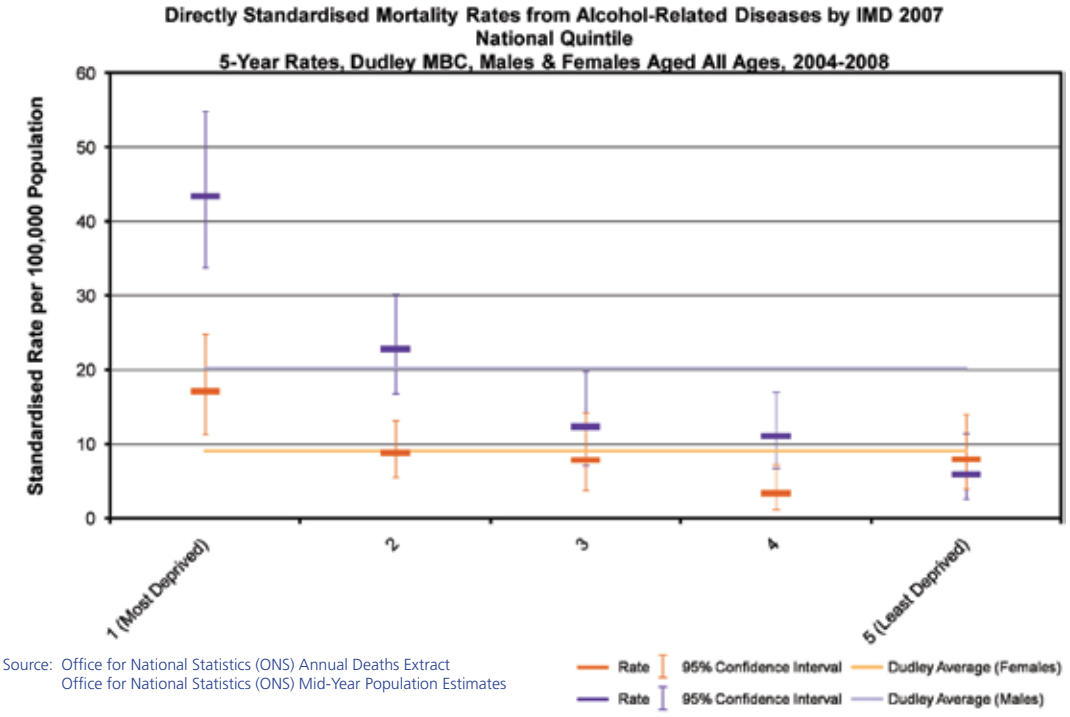
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.46b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.46c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in mortality from alcohol related harm across Dudley

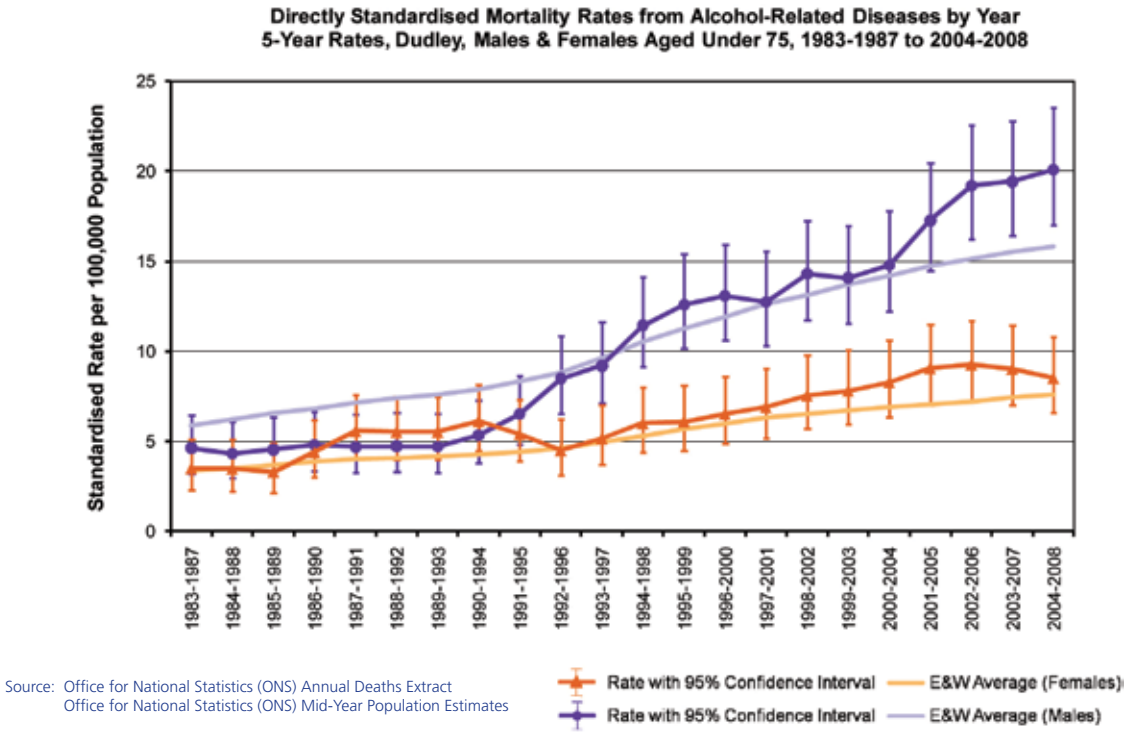
Table 8.44

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from alcohol related harm males (DSR per 100,000 population)	20.1	16.1	5.9	43.4	1.25*	4.0	7.48*	37.5
Mortality from alcohol related harm females (DSR per 100,000 population)	8.7	7.8	8.0	17.1	1.12*	0.9	2.14*	9.1
Mortality from alcohol related harm persons (DSR per 100,000 population)	14.4	11.8	6.9	30.5	1.22*	2.6	4.42*	23.6

Aged under 75

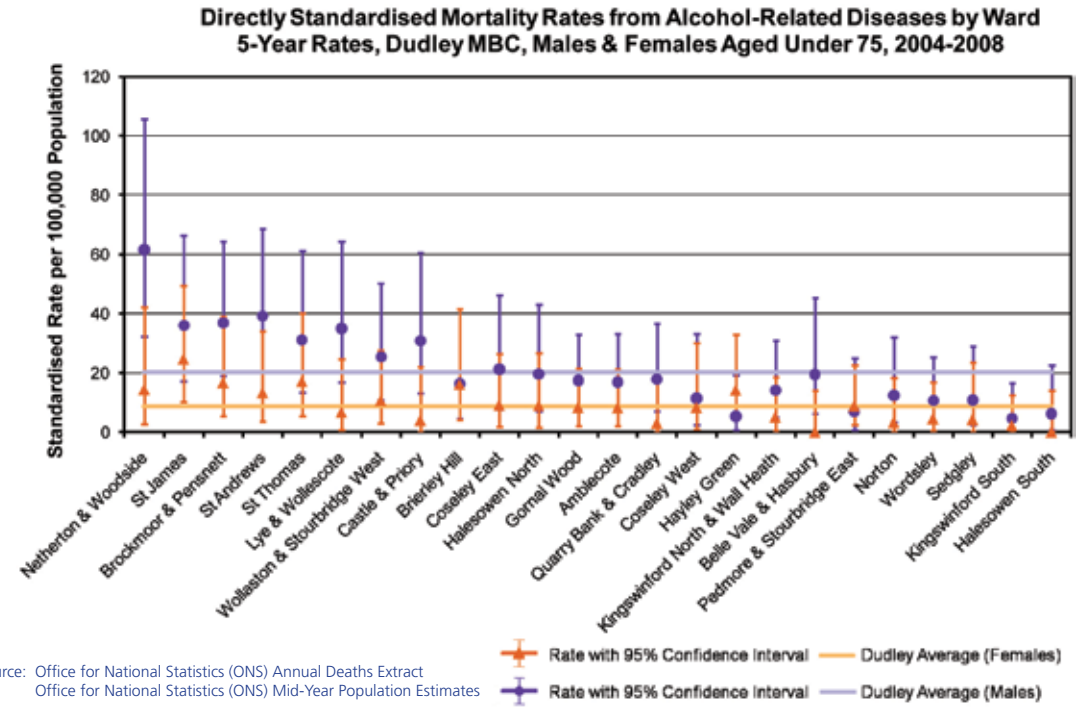
For premature mortality from alcohol related harm the difference in the rate for Dudley and that for England and Wales is similar to that seen for all ages as the majority of deaths from alcohol related harm occur in the under 75 age band. An internal inequality still exists for premature mortality from alcohol related harm. Those in the most deprived quintile are more than four and a half times more likely to suffer premature death due to alcohol related harm than in the least deprived quintile and this goes up to over eight times more likely for males.

Figure 8.47a



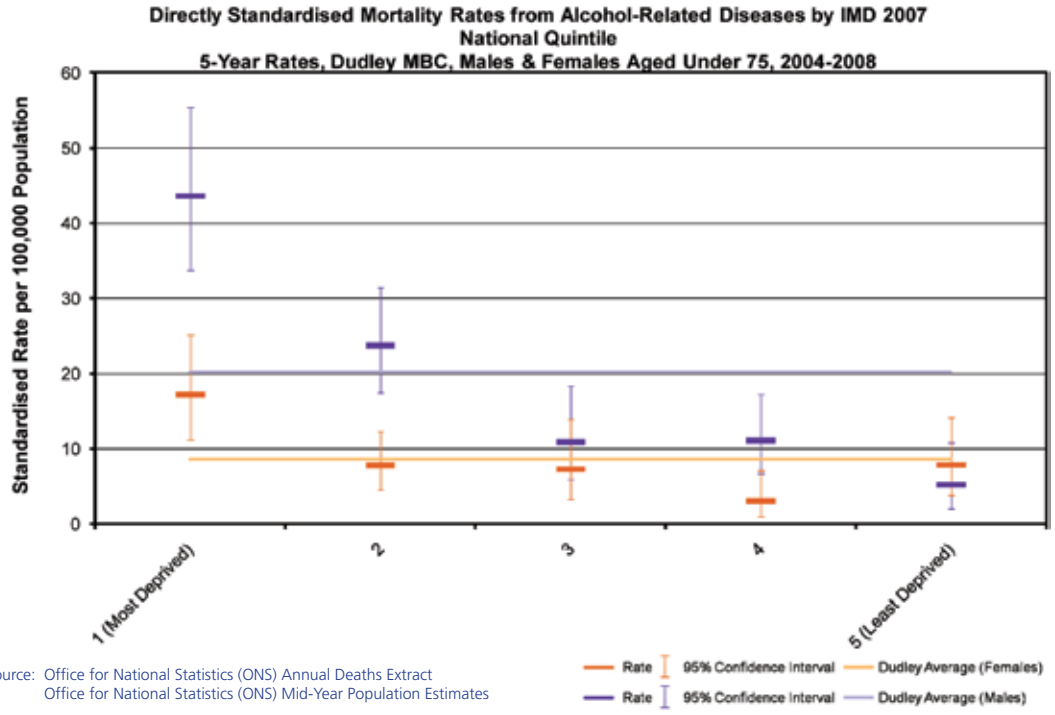
Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.47b



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.47c



Source: Office for National Statistics (ONS) Annual Deaths Extract
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in premature mortality from alcohol related harm across Dudley

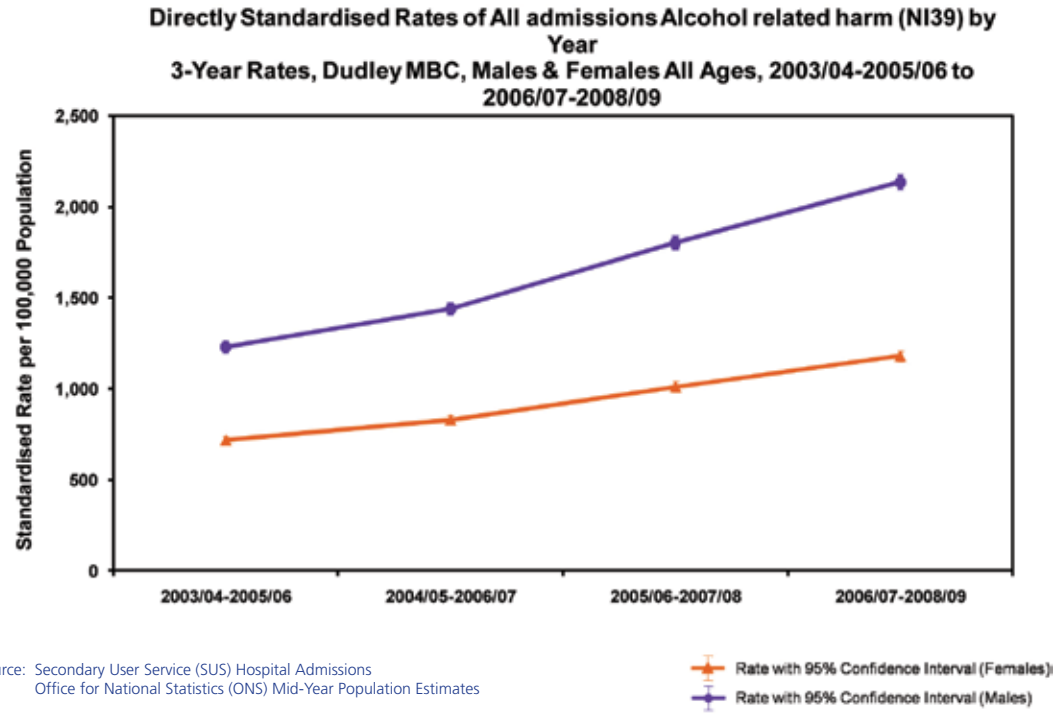
Table 8.45

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from alcohol related harm males (DSR per 100,000 population)	20.1	15.8	5.2	43.6	1.27*	4.3	8.38*	38.4
Premature mortality from alcohol related harm females (DSR per 100,000 population)	8.5	7.6	7.9	17.2	1.12*	0.9	2.18*	9.3
Premature mortality from alcohol related harm persons (DSR per 100,000 population)	14.3	11.6	6.6	30.7	1.23*	2.7	4.65*	24.1

Hospital admissions from alcohol related harm

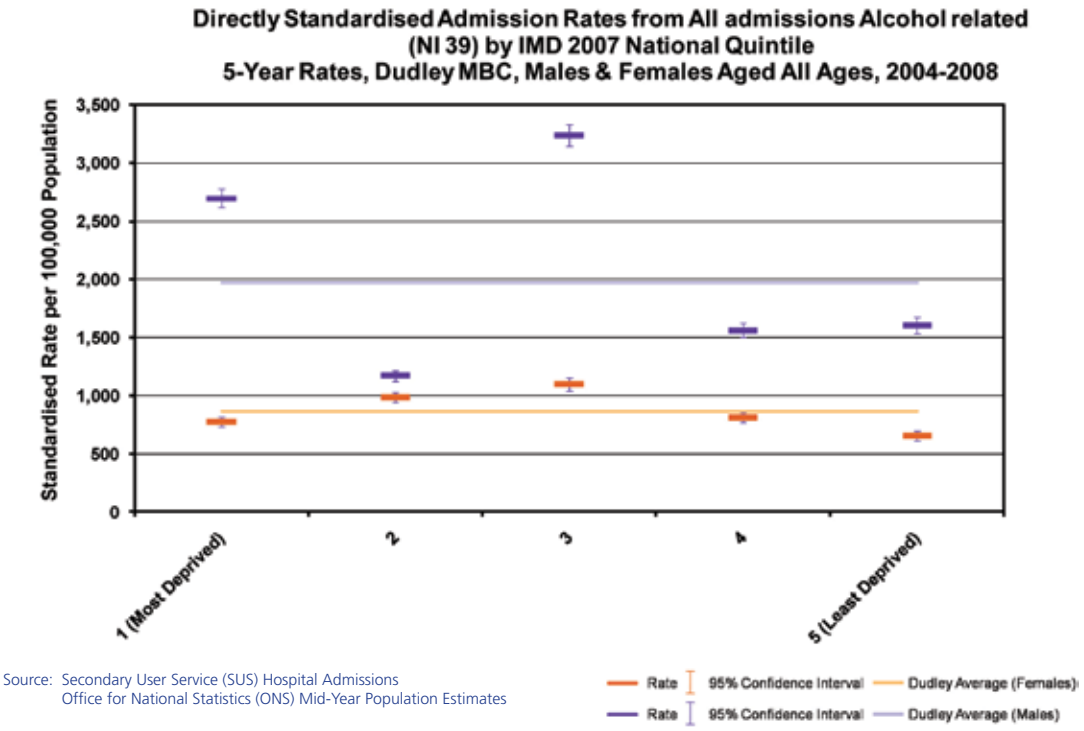
Directly standardised emergency hospital admission rates for alcohol related harm have increased over the last 6 years and this has been at a faster rate for males and hence admission rates are higher for males than females (Figure 8.48a). There is no social deprivation gradient for emergency hospital admissions from alcohol related harm for either sexes, though admissions for alcohol related conditions in males shows considerable variability across the deprivation quintiles (Figure 8.48b).

Figure 8.48a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 8.48b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in hospital admissions from alcohol related harm across Dudley

Table 8.46

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Hospital admissions from alcohol related harm males (DSR per 100,000 population)	2135	NA	1605	2696	NA	NA	1.68*	1091
Hospital admissions from alcohol related harm females (DSR per 100,000 population)	1181	NA	654	776	NA	NA	1.19*	122
Hospital admissions from alcohol related harm persons (DSR per 100,000 population)	1631	NA	1107	1707	NA	NA	1.54*	600

Excess winter deaths

Excess winter deaths (EWD) are widely attributed to the effects of cold. They occur mainly in the elderly and more particularly in the over 85 year age group. The majority of deaths are linked to circulatory and respiratory diseases and there is a smaller, but relevant, number linked to falls. There are also increased numbers of deaths linked to seasonal influenza, which can increase greatly in a flu pandemic.

Excess winter deaths are defined as:

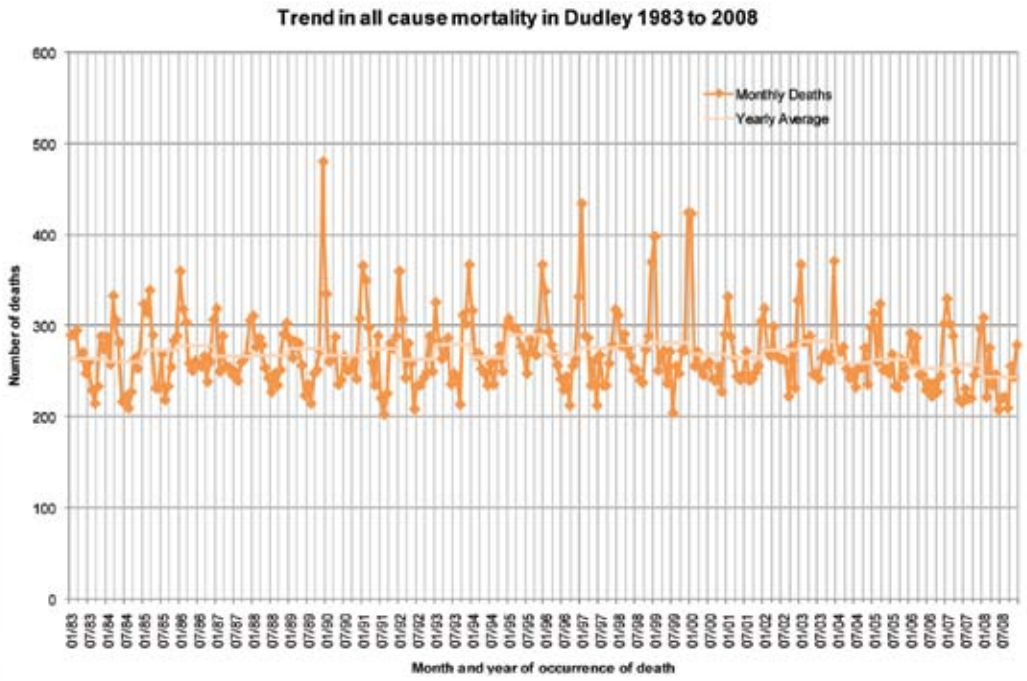
The number of deaths in the four winter months (December to March) minus the average number of deaths in the preceding four months (August to November) and the subsequent four months (April to July). This means the year used for calculations runs from August to July, compared with other data which is usually based on a calendar year (January to December) or a financial year (April to March). The calculation of EWD is expressed as a percentage of the average number of deaths in the preceding four months and this provides the excess winter deaths index (EWDI).

Seasonal mortality patterns

Figure 8.49 shows the seasonal variation in deaths from all causes from 1983 to 2008 with winter spikes in January 1990, 1996, 1997 and 1999. Since 2000 the increase in numbers of winter deaths has fallen slightly in line with regional and national trends.

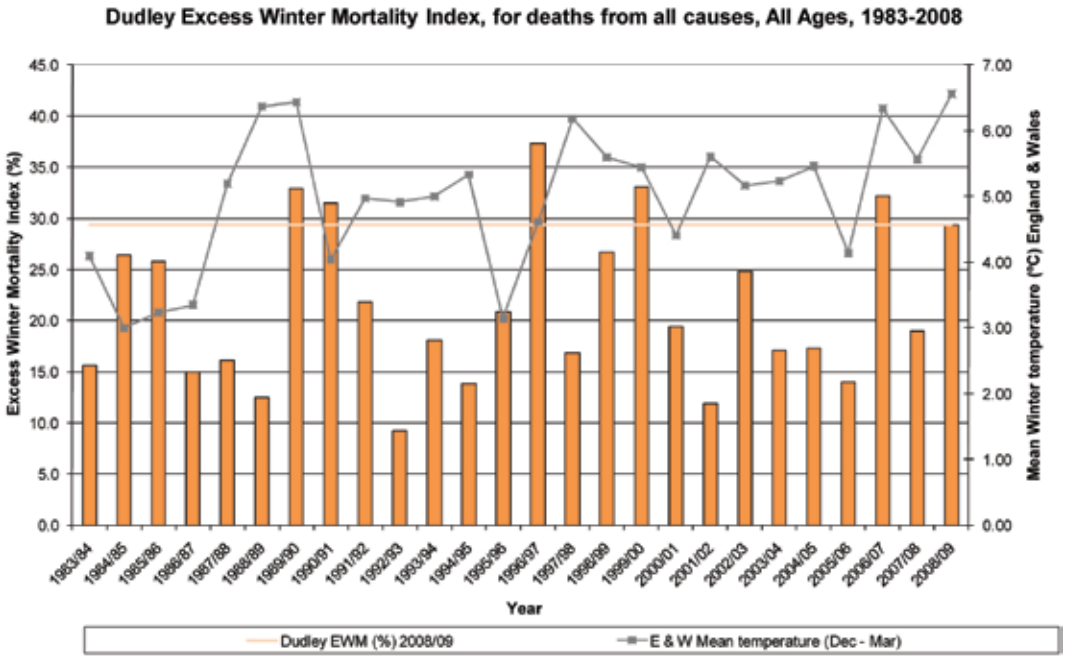
The excess winter mortality index does not show a close correlation with low mean winter temperatures. A mean temperature for the winter months does not take into account the range in temperatures across the winter, the extent of the periods where the daily temperatures are below the threshold for increased mortality and other factors such as air quality and influenza epidemics.

Figure 8.49



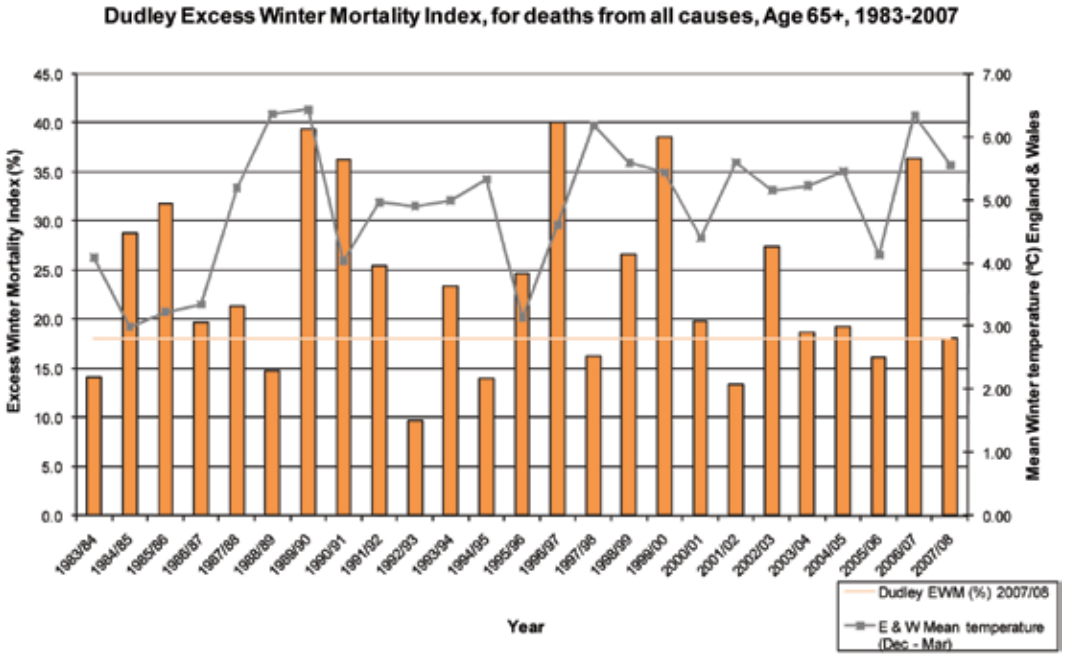
Source: ONS Public Health Annual Mortality Files, 1983-2008

Figure 8.50



Source: ONS Public Health Annual Mortality Files, 1983-2008

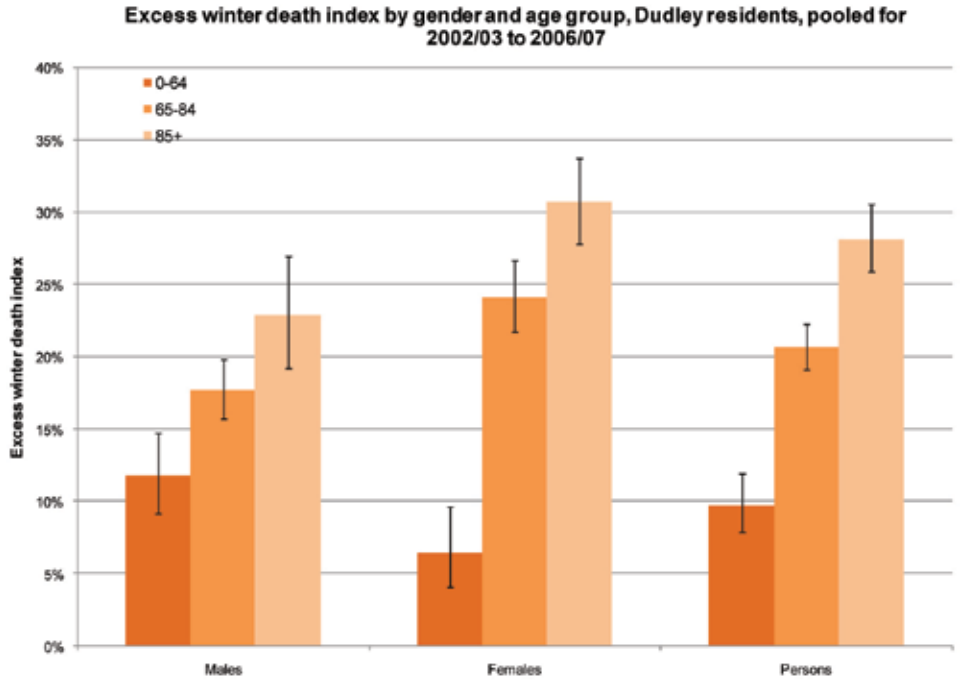
Figure 8.51



Source: ONS Public Health Annual Mortality Files, 1983-2008

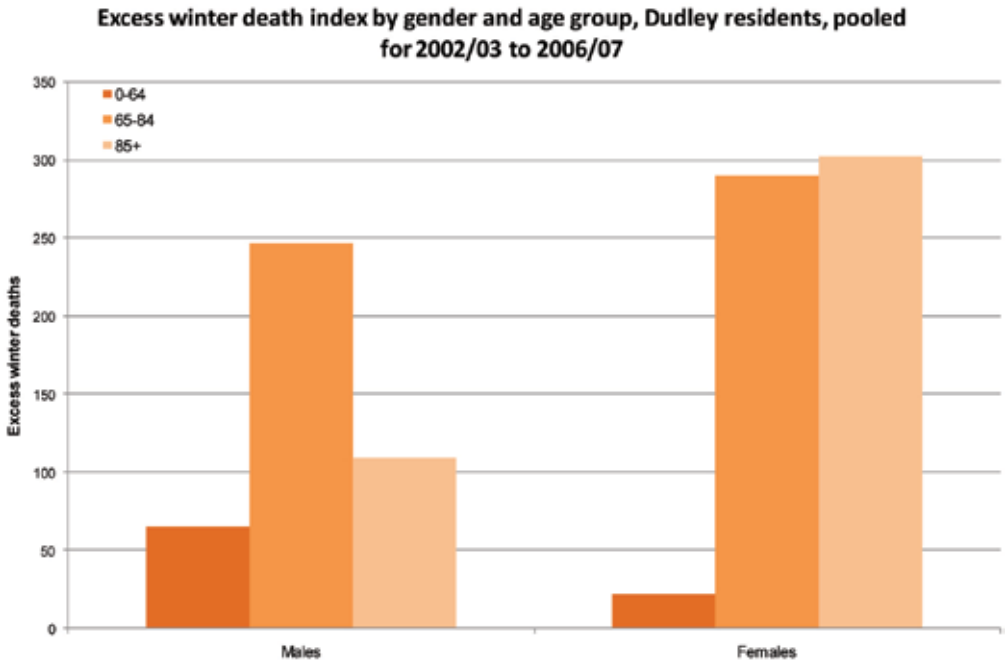
Excess winter deaths can affect all age groups but the 65+ group has the biggest susceptibility. Figure 8.51 shows that the profile for 65+ is similar to that for all ages. The increase in mortality for the 85+ age group is more pronounced, but the correlation between increased mortality and mean winter temperatures is not strong, suggesting that factors other than external temperature also play a part in this older age group.

Figure 8.52



Source: ONS Public Health Annual Mortality Files 2002-2007

Figure 8.53

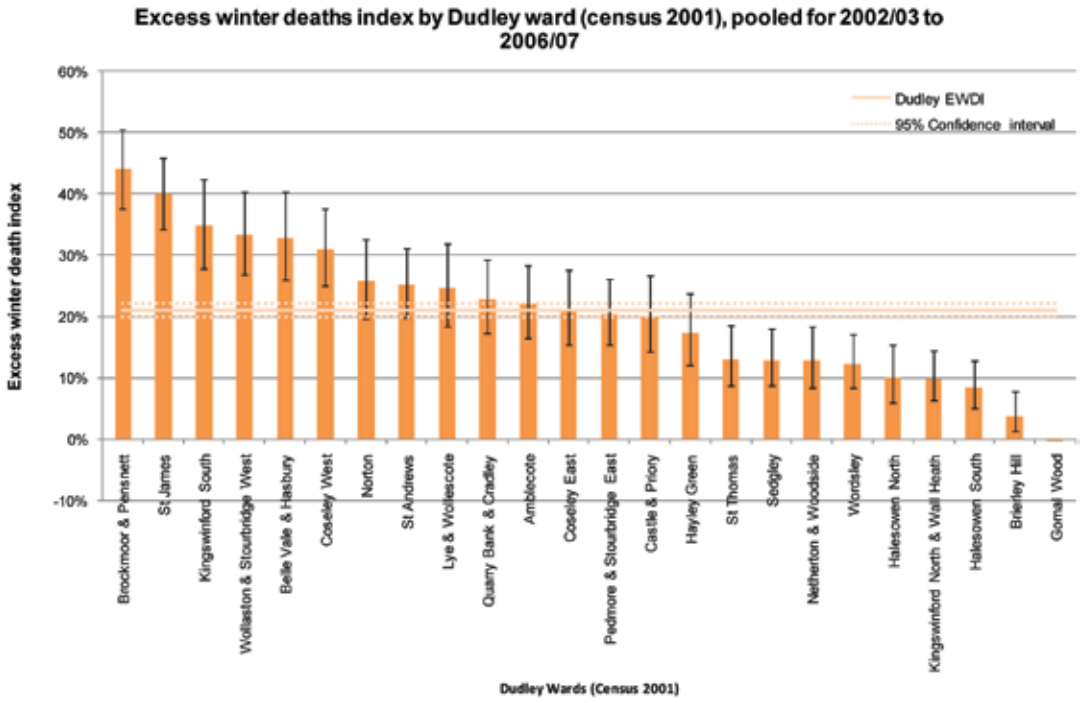


Source: ONS Public Health Annual Mortality Files 2002-2007

When gender inequalities are compared, it can be seen that more men than women die before the age of 64, but for both the 65-84 year age group and the 85+, it is females that have the higher level of mortality. The biggest cause of deaths for females aged 65+ is for respiratory diseases and these medical conditions are worsened by cold and damp.

Local variations across Dudley

Figure 8.54a

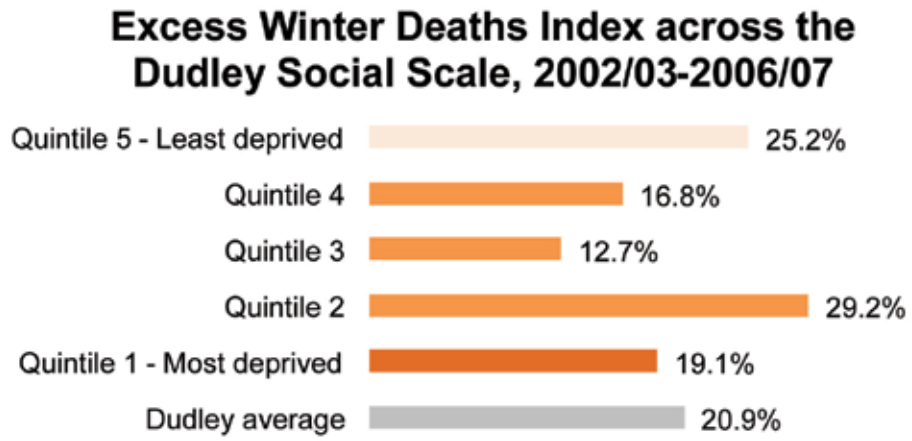


Source: ONS Public Health Annual Mortality Files 2002-2007

Inequalities in excess winter deaths are also evident across the wards in Dudley (Figure 8.54a), although they do not follow the usual patterns for other health inequalities. Brockmoor and Pensnett and St James' ward have the highest numbers of winter deaths whereas Gornal Wood, Brierley Hill and Halesowen South have very small numbers.

There is no clear link with deprivation (Figure 8.54b). Excess winter deaths were found to be high in the 2nd most deprived quintile and the least deprived quintile. Excess winter deaths are linked to fuel poverty, but this can be experienced at all levels of the social gradient – in the least deprived areas it may be due to the fact that the houses are very large and too expensive or too difficult to heat and in the more deprived areas it may be due to a lack of money for fuel.

Figure 8.54b



Source: ONS Public Health Annual Mortality Files 2002-2007

Inequality in excess winter deaths index across Dudley

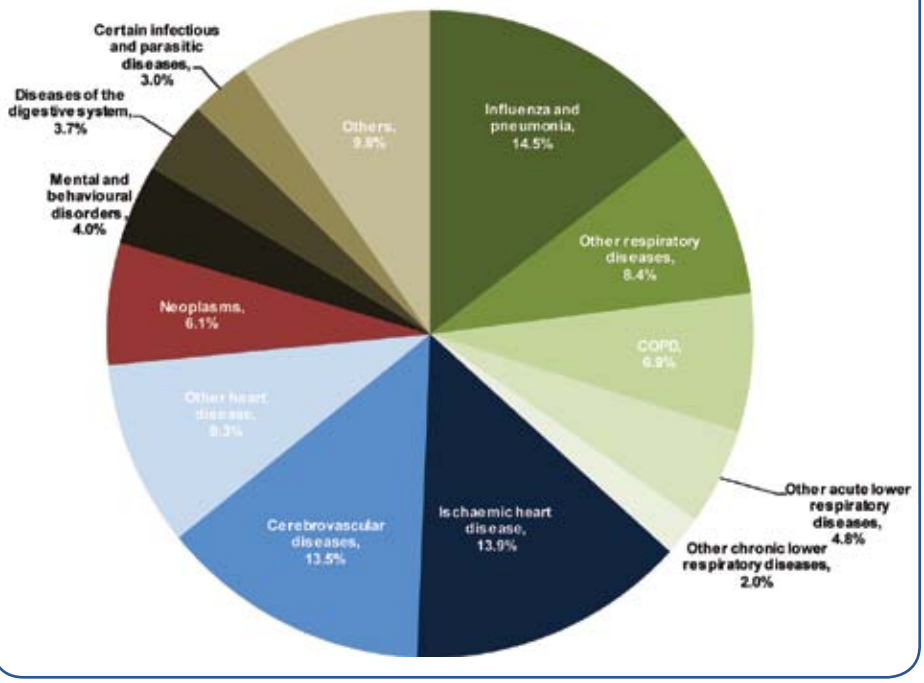
Table 8.46

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Excess winter deaths index (2002/03-2006/07)	20.9%	NA	25.2%	19.1%	NA	NA	0.76	-6.1%

Causes contributing to total excess winter deaths in Dudley residents

Figure 8.55

Proportion of selected diseases contributing to total excess winter deaths in Dudley residents over the period 2002/03 to 2006/07

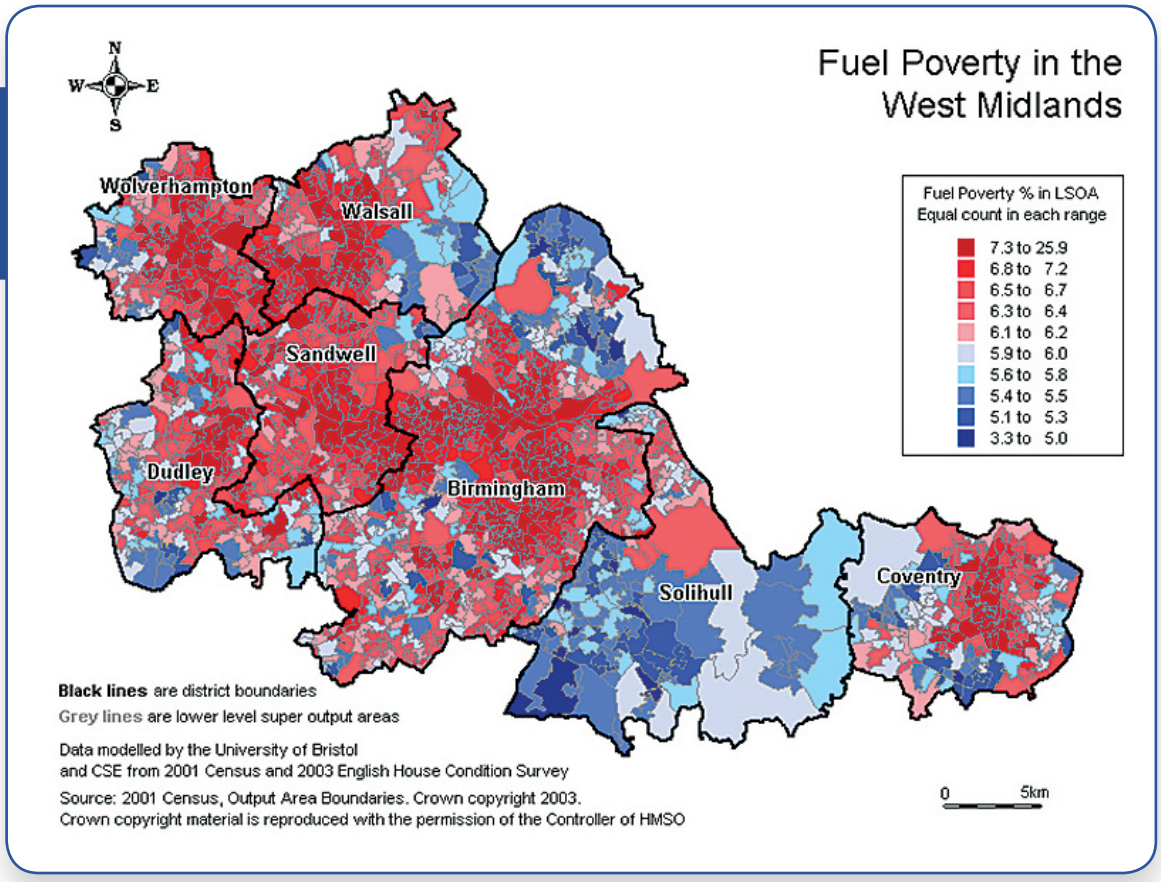


If Dudley PCT is compared with other PCTs in the West Midlands region there were 989 excess winter deaths between 2002/03 and 2006/07, giving Dudley the 5th highest percentage of the regional total of winter deaths in the region. Almost all the major causes of death can contribute to winter mortality, but the most common causes are respiratory and circulatory diseases which account for 70.3% of all deaths (Figure 8.55).

Fuel Poverty

There is an established link between poor housing and health. Typically it is older people who are living in older properties that are poorly insulated and difficult to heat. Fuel poverty affects rural and urban areas alike, but modeling suggests that Dudley has small pockets of fuel poverty where anything between 7.3% and 25.9% of the population are spending more than 10% of their income on energy (Figure 8.56). In general these pockets are to be found in the parts of the borough where there are old properties. The 'Decent Homes' standard was introduces to ensure that all homes are insulated and have central heating; Dudley is set to meet the 'Decent Homes' standard by 2011.

Figure 8.56



> Dudley has small pockets of fuel poverty where anything between 7.3% and 25.9% of the population are spending more than 10% of their income on energy

9. Accessible, equitable and effective support services

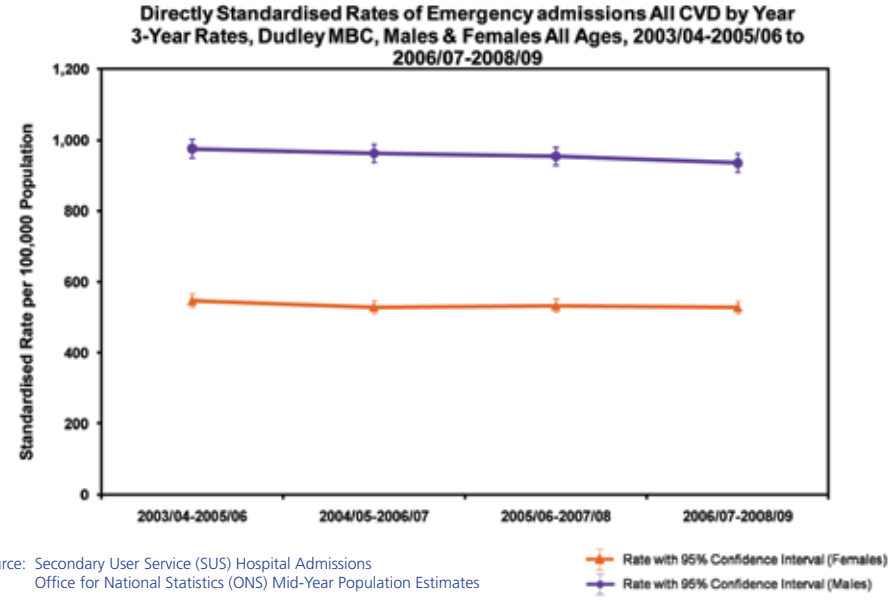
One aspect to reducing health inequalities is to ensure that the services provided are available, accessible and effective to all of those who need them irrespective of socio-economic status, ethnicity, etc.

Emergency hospital admissions by condition

Cardiovascular disease

Emergency hospital admission rate for cardiovascular disease have reduced slightly, though not significantly over the six year period (Figure 9.1a).

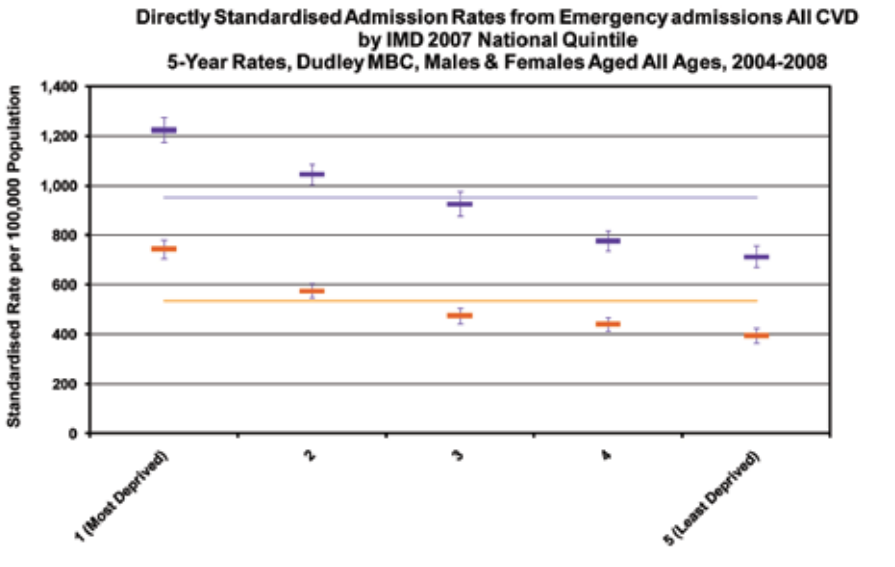
Figure 9.1a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a social deprivation gradient for emergency admission rate for CVD for both males and females (Figure 9.1b).

Figure 9.1b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in CVD related emergency admissions (DSR) across Dudley

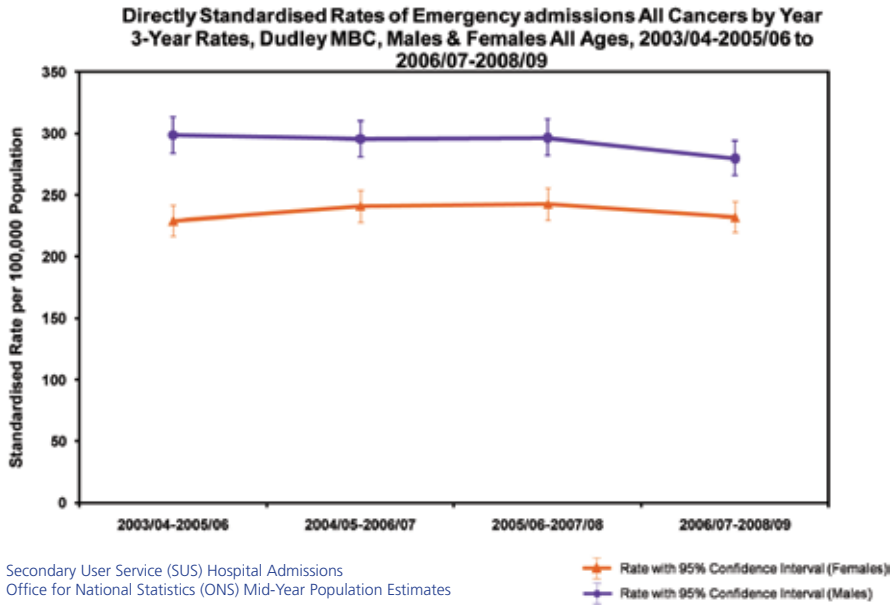
Table 9.1

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from CVD males (DSR per 100,000 population)	952	NA	712	1224	NA	NA	1.72*	512
Emergency hospital admissions from CVD females (DSR per 100,000 population)	535	NA	394	744	NA	NA	1.89*	350
Emergency hospital admissions from CVD persons (DSR per 100,000 population)	732	NA	546	969	NA	NA	1.77*	423

Cancer

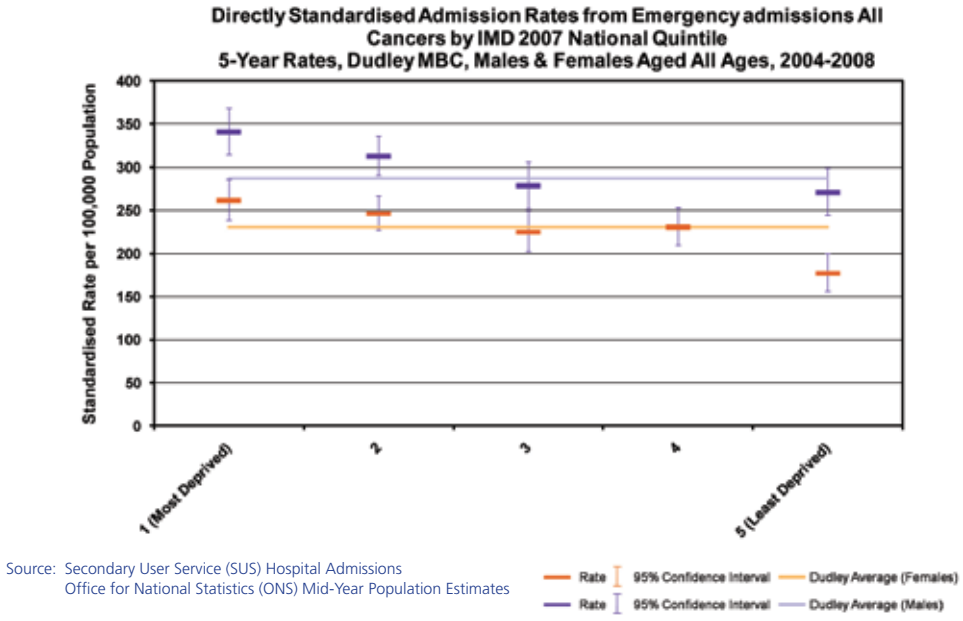
Emergency hospital admissions for cancer have reduced slightly, though not significantly over the six year period (Figure 9.2a).

Figure 9.2a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 9.2b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a social deprivation gradient for emergency admission rate for Cancer for both males and females (Figure 9.2b).

Inequality in Cancer related emergency admissions (DSR) across Dudley

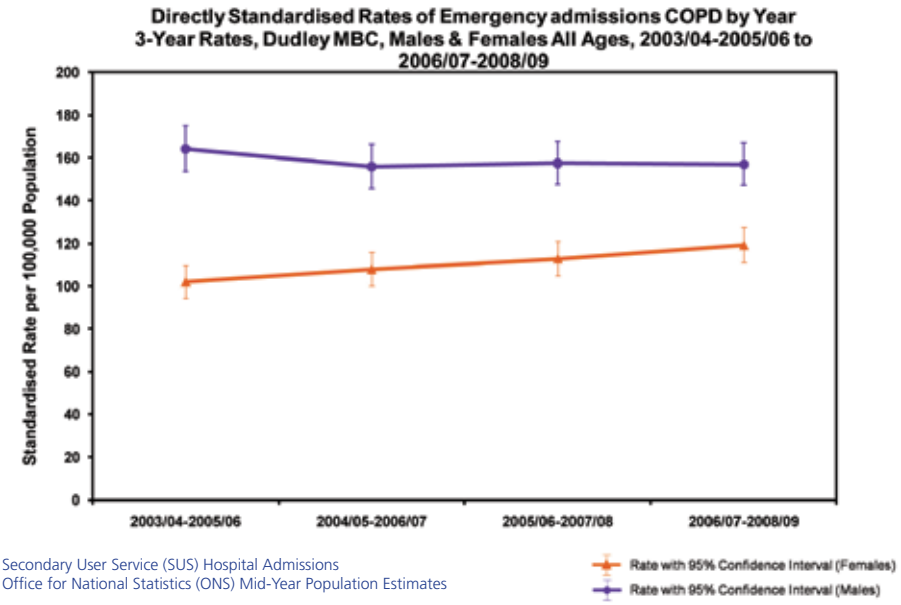
Table 9.2

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Cancer males (DSR per 100,000 population)	287	NA	271	341	NA	NA	1.26*	70
Emergency hospital admissions from Cancer females (DSR per 100,000 population)	231	NA	177	261	NA	NA	1.47*	84
Emergency hospital admissions from Cancer persons (DSR per 100,000 population)	255	NA	220	295	NA	NA	1.34*	75

COPD

Emergency hospital admission rate for COPD have reduced slightly for males, though not significantly over the six year period, and there has been a slight increase in rate for females (Figure 9.3a).

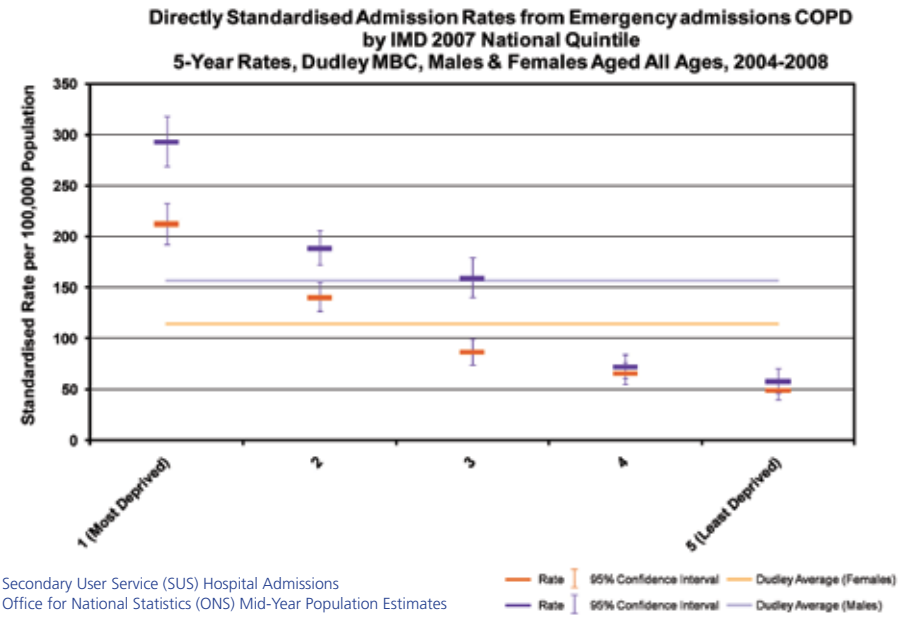
Figure 9.3a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a steep social deprivation gradient for emergency admission rate for COPD for both males and females.

Figure 9.3b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Inequality in COPD related emergency admissions (DSR) across Dudley

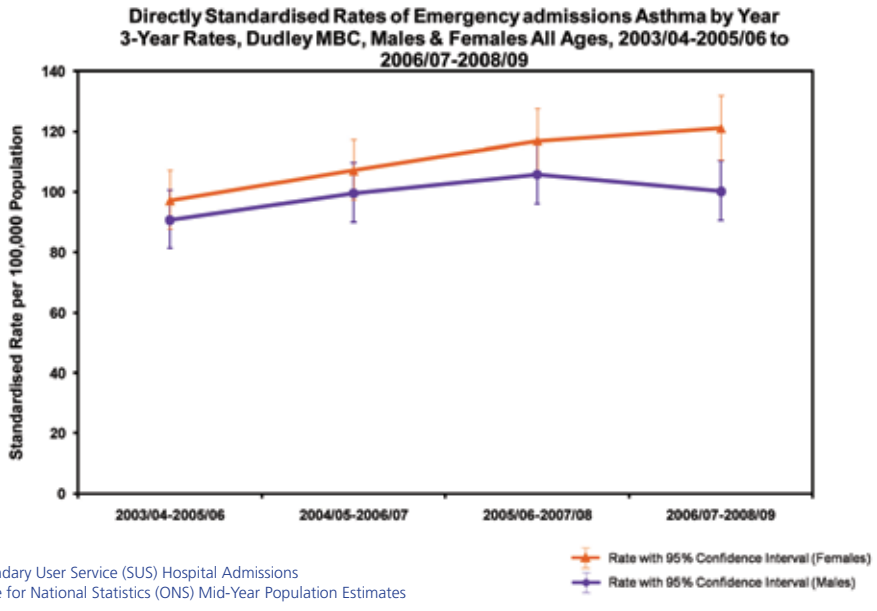
Table 9.3

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from COPD males (DSR per 100,000 population)	157	NA	57.5	293.1	NA	NA	5.10*	235.6
Emergency hospital admissions from COPD females (DSR per 100,000 population)	114	NA	48.6	212.4	NA	NA	4.37*	163.8
Emergency hospital admissions from COPD persons (DSR per 100,000 population)	131	NA	52.3	243.7	NA	NA	4.66*	191.4

Asthma

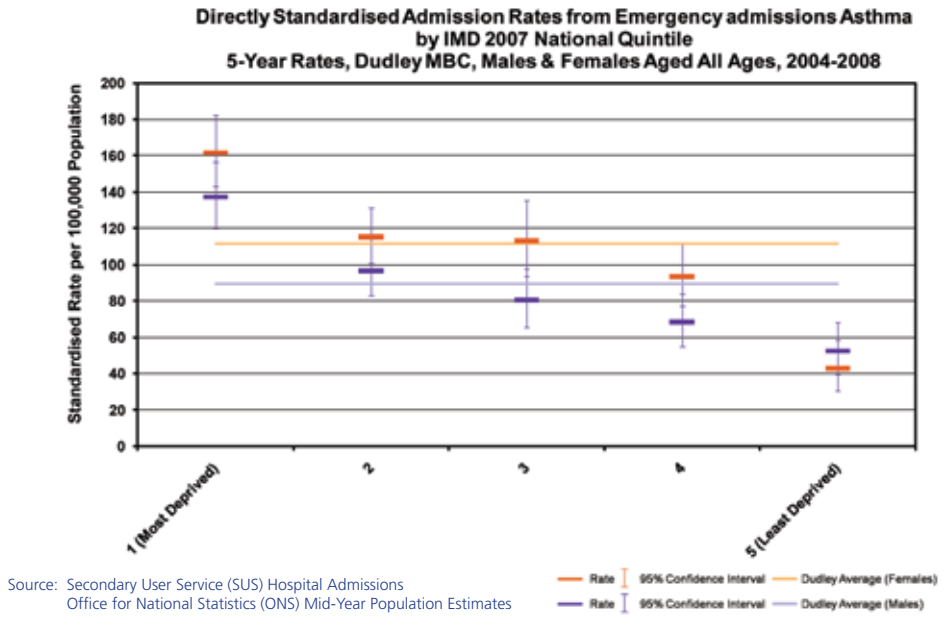
Emergency hospital admission rate for Asthma have increased slightly, though not significantly over the six year period (Figure 9.4a).

Figure 9.4a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 9.4b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a steep social deprivation gradient for emergency admission rate for asthma for both males and females (Figure 9.4b).

Inequality in Asthma related emergency admissions (DSR) across Dudley

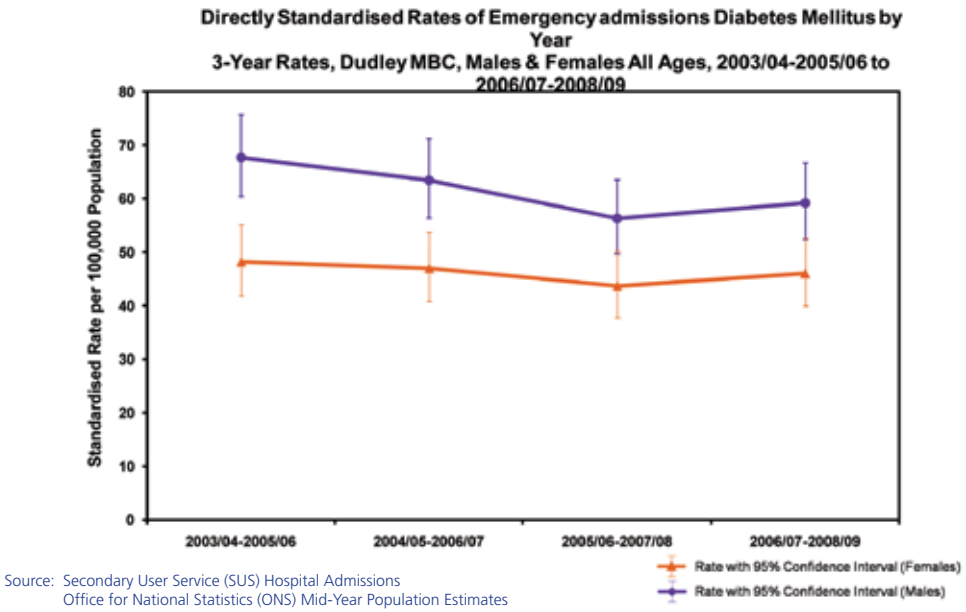
Table 9.4

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Asthma males (DSR per 100,000 population)	89.4	NA	52.3	137.3	NA	NA	2.63*	85.0
Emergency hospital admissions from Asthma females (DSR per 100,000 population)	111.7	NA	42.8	161.7	NA	NA	3.78*	118.9
Emergency hospital admissions from Asthma persons (DSR per 100,000 population)	101.5	NA	47.2	150.0	NA	NA	3.18*	102.8

Diabetes mellitus

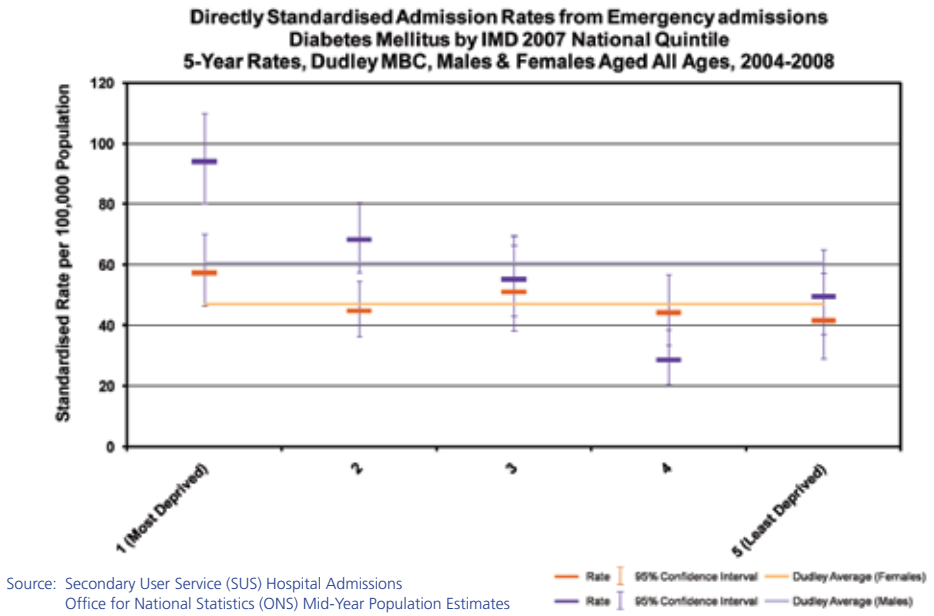
Emergency hospital admission rate for Diabetes mellitus have reduced slightly, though not significantly over the six year period (Figure 9.5a).

Figure 9.5a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 9.5b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a social deprivation gradient for emergency admission rate for diabetes for males, but not for females (Figure 9.5b).

Inequality in Diabetes mellitus related emergency admissions (DSR) across Dudley

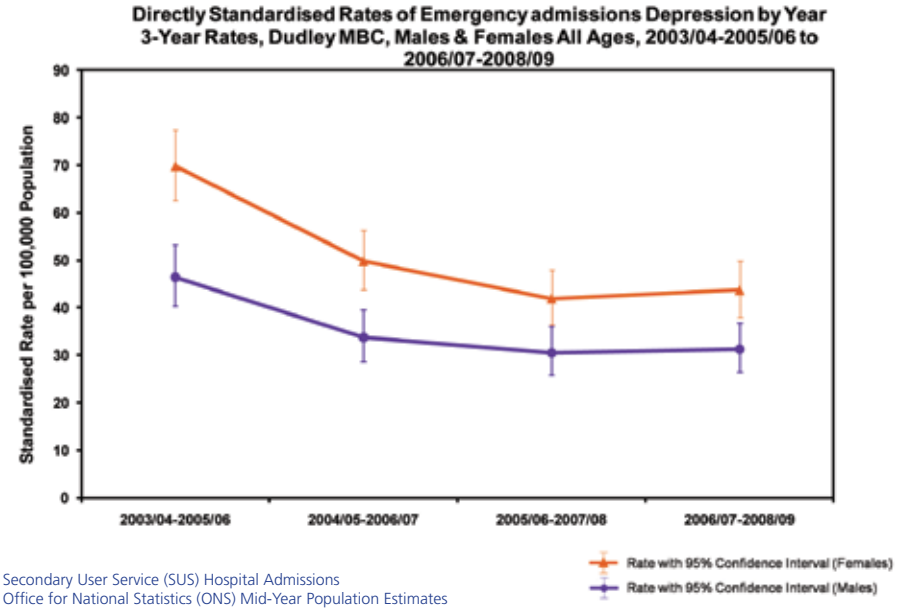
Table 9.5

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Diabetes mellitus males (DSR per 100,000 population)	60.5	NA	49.6	94.1	NA	NA	1.90*	44.5
Emergency hospital admissions from Diabetes mellitus females (DSR per 100,000 population)	47.0	NA	41.6	57.5	NA	NA	1.38	15.9
Emergency hospital admissions from Diabetes mellitus persons (DSR per 100,000 population)	53.1	NA	44.3	75.6	NA	NA	1.71*	31.3

Depression

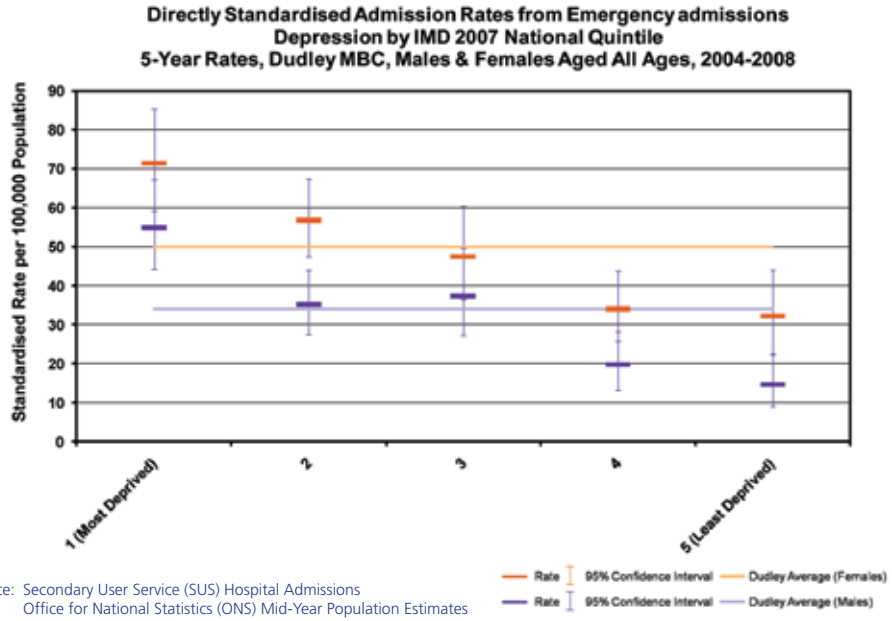
Emergency hospital admission rate for Depression has reduced slightly, though not significantly over the six year period. The decline in admission rate has been greater for males than females (Figure 9.6a).

Figure 9.6a



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

Figure 9.6b



Source: Secondary User Service (SUS) Hospital Admissions
Office for National Statistics (ONS) Mid-Year Population Estimates

There is a social deprivation gradient for emergency admission rate for depression for both males and females (Figure 9.6b).

Inequality in Depression related emergency admissions (DSR) across Dudley

Table 9.6

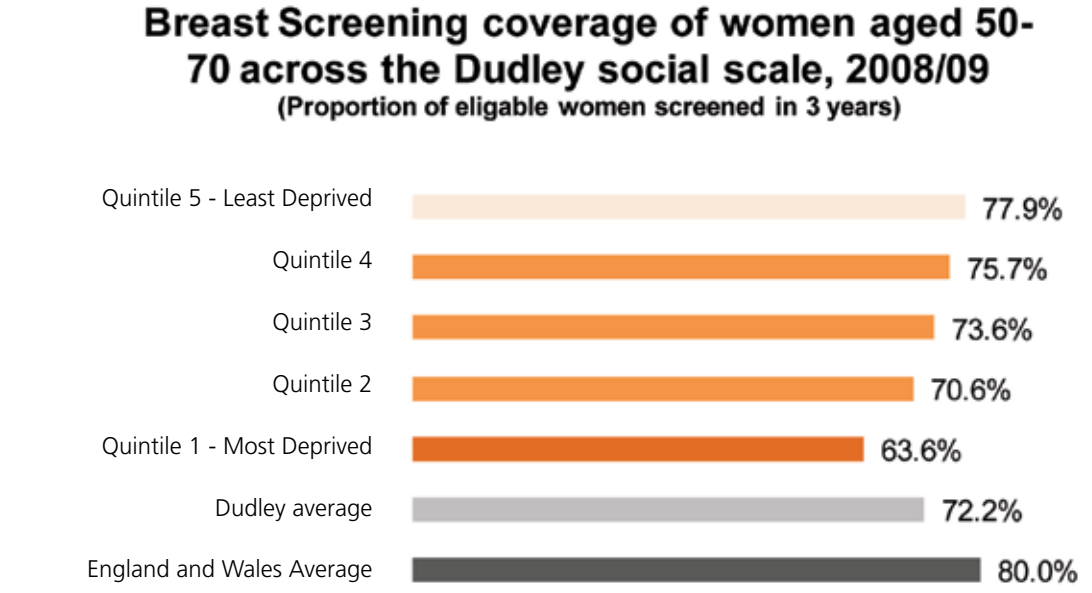
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Depression males (DSR per 100,000 population)	34.0	NA	14.7	54.9	NA	NA	3.73*	40.2
Emergency hospital admissions from Depression females (DSR per 100,000 population)	49.9	NA	32.2	71.5	NA	NA	2.22*	39.3
Emergency hospital admissions from Depression persons (DSR per 100,000 population)	42.2	NA	23.8	63.2	NA	NA	2.66*	39.4

Uptake of Services

Breast Screening

Breast screening coverage displays a social gradient with a negative relationship to deprivation. Nationally there is a minimum standard of 70% screening but a target of 80% is recommended. In Dudley the standard is met across the deprivation quintiles, but the 80% target is not achieved. Less than two thirds of eligible women are screened in the most deprived areas (Figure 9.7).

Figure 9.7



Source: FHS 2009

Inequality in uptake of breast screening across Dudley

Table 9.7

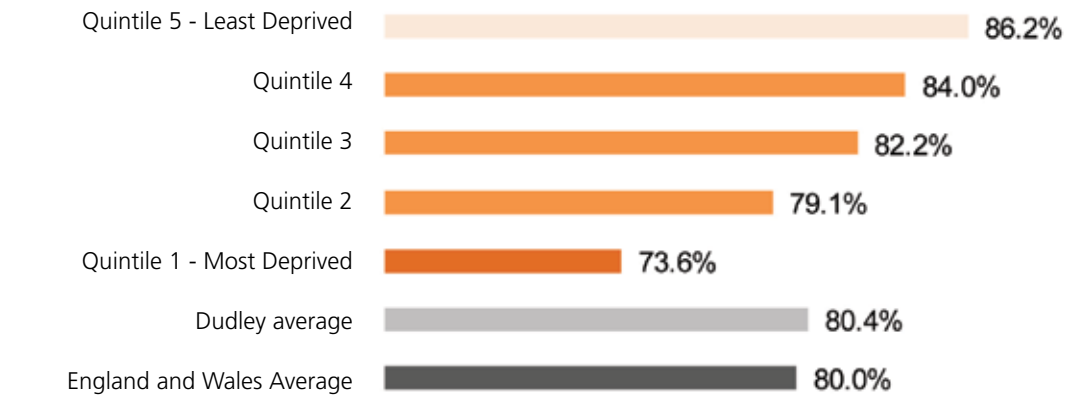
Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Breast screening uptake (FHS, 2009)	72.2%	80.0%	77.9%	63.6%	1.11	-7.8%	1.22*	-14.3%

Cervical Screening

The national cervical screening programme target is 80% coverage and Dudley does just meet this. There is a strong social gradient with women in the most deprived areas least likely to be screened for cervical cancer (Figure 9.8).

Figure 9.8

Cervical Screening coverage of women aged 25-64 across the Dudley social scale, 2008/09
(Proportion of eligable women screened in 5 years)



Source: FHS 2009

Inequality in uptake of cervical screening across Dudley

Table 9.8

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Cervical screening uptake (FHS, 2009)	80.4%	80.0%	86.2%	73.6%	1.00	0.4%	1.17*	-12.6%

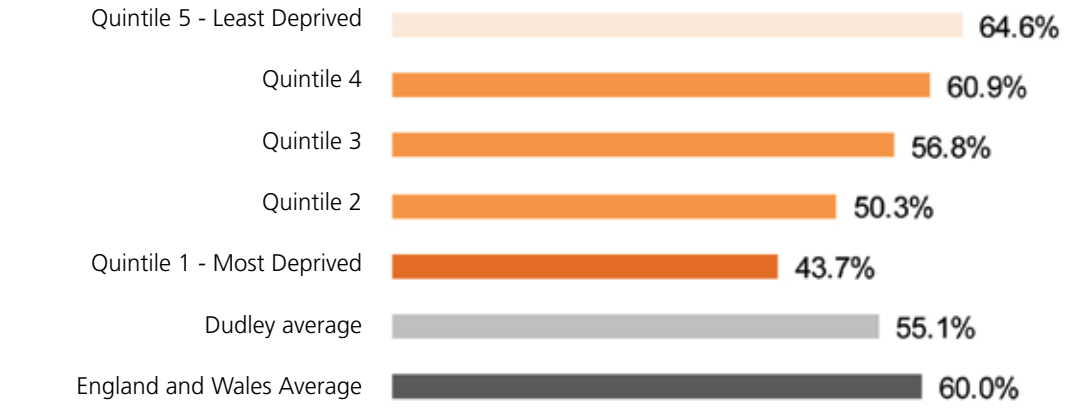
> There is a strong social gradient with women in the most deprived areas least likely to be screened for cervical cancer

Bowel Screening

The national bowel screening programme was introduced in Dudley in October 2006 in people aged 60-69. The National Screening programme set a national target of 60% coverage. Dudley failed to meet the national target and there is a strong social gradient with people in the most deprived quintile least likely to take up the screening for bowel cancer (Figure 9.9).

Figure 9.9

Bowel Screening coverage of persons aged 60-69 across the Dudley social scale, 30/09/2009
(Proportion of eligable people screened in 2 years)



Source: FHS 2009

Inequality in uptake of bowel screening across Dudley

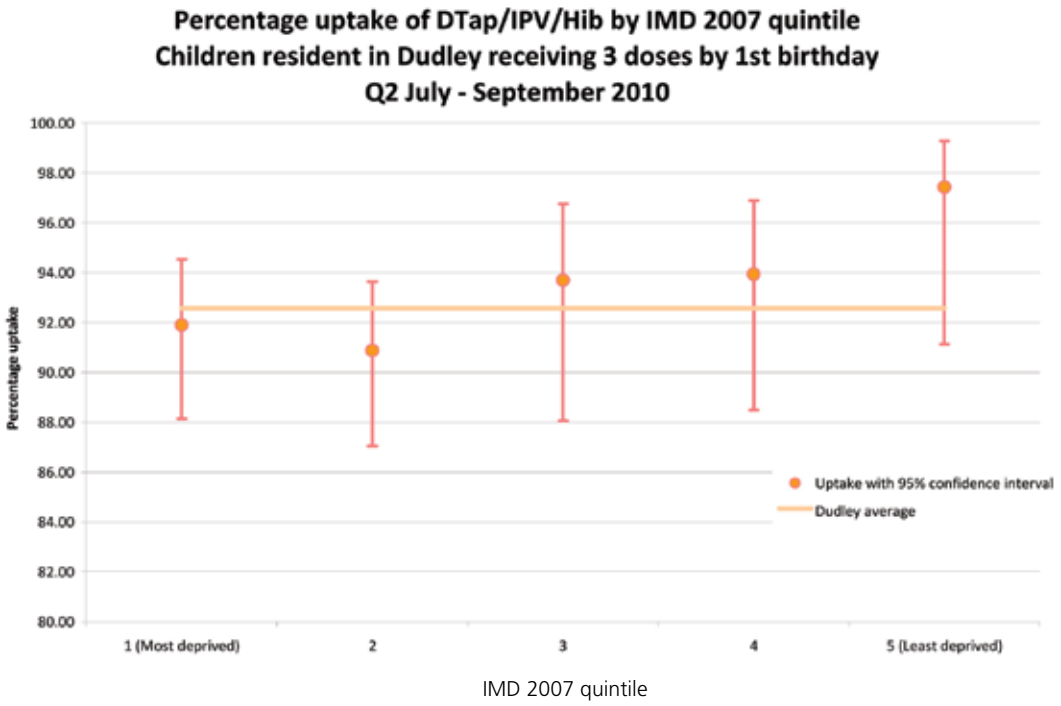
Table 9.9

Indicator	Dudley	England & Wales Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Bowel screening uptake (FHS, 2009)	55.1%	60.0%	64.6%	43.7%	1.09	-4.9%	1.48*	-20.9%

Childhood immunisations

In Quarter 2 (July-September) 2010 Dudley fell short of the national recommended target of 95% for immunizations before the 1st birthday. Figure 9.10 shows that there was a social gradient, with uptake rates for immunisations up to the first birthday being lowest in the most deprived quintile. If a child is not receiving their vaccinations and immunisations it is likely that they are missing other services which could be important for their on-going well being. The children in the most deprived areas are likely to be the most vulnerable. Dudley Public Health has set up a domiciliary vaccination service to address this issue.

Figure 9.10



Source: Dudley Child Health Information System, 2010

Inequality in uptake of childhood vaccinations across Dudley

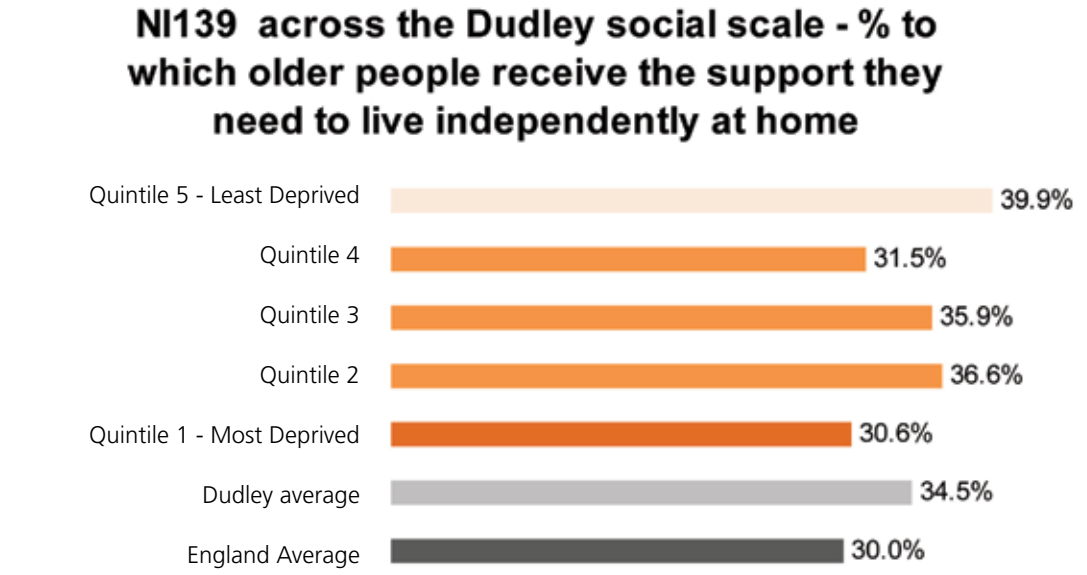
Table 9.10

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Childhood vaccinations uptake (Dudley CHIS)	92.6%	95.0%	97.4%	91.9%	1.03	-2.4%	1.06	-5.5%

Perceptions of services

The 2008 Place survey asked residents whether they felt older people received the support they need to remain independent and also whether they felt services treat people fairly. Such questions are important as perceptions of services and how they treat people can be a barrier to access. Dudley performs better than England, but there is a social gradient with the perception that older people receive the support they need to live independently being poorer in the most deprived quintile (Figure 9.11).

Figure 9.11



Source: Place Survey, 2008

Table 9.11

Inequality in which older people receive the support they need across Dudley

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Agree older people receive the support required to live independently (Place Survey 2008)	34.5%	30.0%	39.9%	30.6%	0.87	4.5%	1.30*	-9.3%

There is a social gradient in the perception of being given fair treatment by local public services. Those in the most deprived areas were much less likely to feel that they were dealt with fairly, than those in the least deprived areas (Figure 9.12).

Figure 9.12

Source: Place Survey 2008

Inequality of fair treatment by local services across Dudley

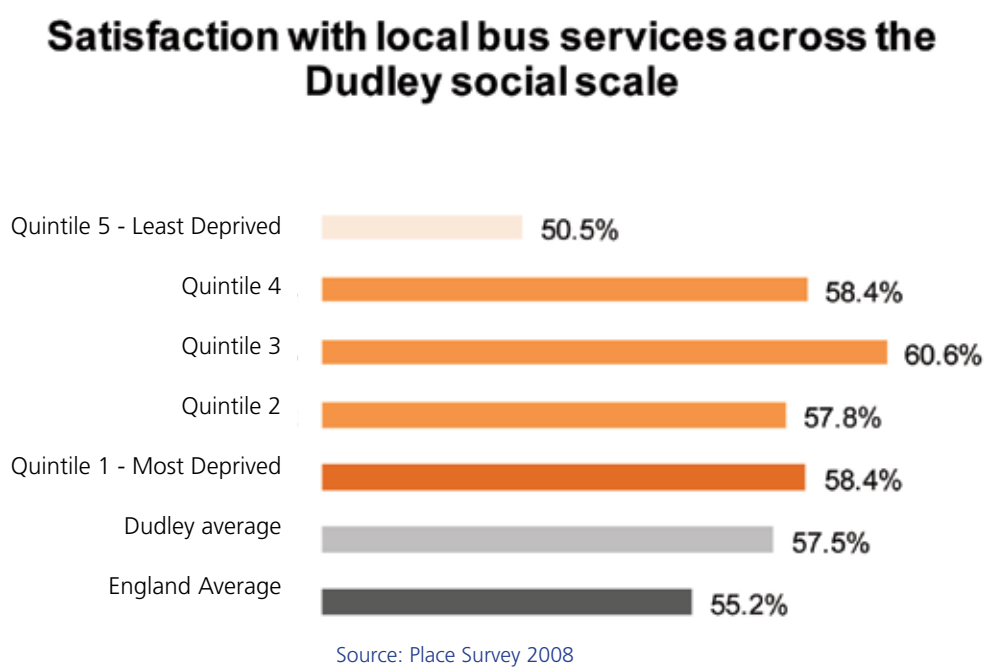
Table 9.12

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Agree given fair treatment by local services (% of population) (Place Survey 2008)	71.2%	72.4%	85.4%	59.7%	1.02	-1.2%	1.43*	-25.7%

Public Transport

Dudley slightly out performs the national average in terms of resident's satisfaction with local bus services. The highest levels of dissatisfaction are reported at the upper end of the social scale (Figure 9.13). This is likely to reflect the urban location of the most deprived areas where bus services are more frequent than in the more affluent periphery areas of Dudley borough. Despite satisfaction with bus services being higher and consistent across the other quintiles of deprivation, approximately 40% of these people were still dissatisfied with the service.

Figure 9.13



Source: Place Survey 2008

Inequality satisfaction with local bus services across Dudley

Table 9.13

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Satisfied with bus services (% of population) (Place Survey 2008)	57.5%	55.2%	50.5%	58.4%	0.96	2.3%	0.86	7.9%

Table of indicators for health inequalities (internally and externally) in health outcomes and the social determinants for Dudley (* Significant at P<0.05)

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Housing								
Fuel Poverty 2007 (% of households) (www.fuelpovertyindicator.org.uk)	6.3%	6.1%	5.7%	6.8%	1.03*	0.2%	1.19*	1.1%
Local Economy and Employment								
Income Support claimant rate (total claimants as percent of age 16 – 59/64 (female/male)) (ONS Claimant Count NOMIS, May 2009)	5.3%	4.0%	0.92%	10.92%	1.33*	1.3%	11.9*	10.0%
Job seekers allowance (% of working age population) (ONS Claimant Count NOMIS, May 2009)	5.6%	3.1% (GB Avg.)	2.5%	9.1%	1.8*	2.5%	3.6*	6.6%
Population in employment (Dudley Health Survey 2009)	47.2%	NA	52.0%	37.9%	NA	NA	1.37	-14.1%
Population in employment (Census 2001)	54.8%	52.6%	66.6%	51.0%	0.96*	2.2%	1.31	-15.6%
Social Capital								
Lived in area less than 12 months (Dudley Health Survey 2004)	2.5%	NA	1.7%	4.3%	NA	NA	2.5	2.6%
Lived in area less than 2 years (Dudley Health Survey 2004)	5.1%	NA	3.9%	8.2%	NA	NA	2.1	4.3%
People who feel they belong (Place Survey, 2008)	77.3%	58.7%	86.9%	61.4%	0.76*	18.6%	2.5	-15.5%
Primary Pupils who often have to find new friends (Dudley Health Behaviour Survey, 2010)	62.7%	NA	67.0%	60.3%	NA	NA	0.90	-6.7%
Secondary Pupils who often have to find new friends (Dudley Health Behaviour Survey, 2010)	11.5%	NA	12.6%	11.5%	NA	NA	0.91	-1.1%
People who feel they contributed to decision making groups (Place Survey, 2008)	8.6%	14.0%	6.5%	6.9%	1.63*	-5.4%	0.94	0.4%
People who feel they can influence decisions (Place Survey, 2008)	26.9%	28.9%	26.8%	31.3%	1.07	-2.0%	0.86	4.5%
Primary Pupils who often don't believe they are listened to (Dudley Health Behaviour Survey, 2010)	10.4%	NA	9.6%	11.6%	NA	NA	1.21	2.0%
Secondary Pupils who don't believe they are listened to (Dudley Health Behaviour Survey, 2010)	34.6%	NA	33.5%	33.6%	NA	NA	1.00	0.1%

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Participation in volunteering (Place Survey, 2008)	16.7%	23.2%	20.4%	10.9%	1.39*	-6.5%	1.87	-9.5%
Community Cohesion								
% of people that agree that people from different backgrounds get on (Place Survey, 2008)	72.5%	76.4%	81.7%	66.2%	1.05*	-3.9%	1.26*	-15.5%
Primary Pupils who feel they are bullied due to colour, race or religion (Dudley Health Behaviour Survey, 2010)	7.7%	NA	4.2%	12.6%	NA	NA	3.00*	8.4%
Secondary Pupils who feel they are bullied due to colour, race or religion (Dudley Health Behaviour Survey, 2010)	5.9%	NA	4.6%	7.0%	NA	NA	1.52	3.4%
% of people that agree that people do not treat each other with respect (Place Survey, 2008)	35.4%	31.2%	18.6%	52.8%	1.13*	4.2%	2.84*	34.2%
% of people that agree that parents take responsibility for their children (Place Survey, 2008)	24.9%	29.6%	33.9%	22.8%	1.19*	-4.7%	1.49*	-11.1%
Personal Wellbeing								
% of people that had low SF-12 mental wellbeing score (Dudley Health Survey, 2009)	25.6%	NA	20.5%	33.8%	NA	NA	1.65*	13.3%
% of people that had low SF-12 physical wellbeing score (Dudley Health Survey, 2009)	22.3%	NA	14.5%	32.1%	NA	NA	2.21*	17.6%
Child wellbeing - % of LSOAs ranked in the bottom 20% nationally (Child wellbeing index 2009)	15.8%	20.0%	0.0%	90.6%	0.79*	-4.2%	9.64+*	90.6%
Primary Pupils who often feel afraid of going to school because they may be bullied (Dudley Health Behaviour Survey, 2010)	6.1%	NA	3.8%	7.0%	NA	NA	1.84*	3.2%
Secondary Pupils who often feel afraid of going to school because they may be bullied (Dudley Health Behaviour Survey, 2010)	3.4%	NA	2.5%	3.3%	NA	NA	1.32	0.8%
Environment								
% of people generally satisfied with the local area (Place Survey, 2008)	77.3%	79.7%	86.9%	61.4%	1.03	-2.4%	1.42*	-25.5%
% of people satisfied with the LA keeping public land clear (Place Survey, 2008)	47.0%	56.9%	54.1%	48.0%	1.21*	-9.9%	1.13	-6.1%

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Community Safety								
BCS Comparator crimes per 1,000 population (Dudley Community Safety Partnership, 2010)	34.3	NA	16.5	55.6	NA	NA	3.4*	39.1
Violence against the person offences per 1,000 population (Dudley Community Safety Partnership, 2010)	6.0	NA	1.9	11.3	NA	NA	5.9*	9.4
% of Secondary Pupils rating their safety travelling to school as poor (Dudley Schools Health Behaviour Survey, 2010)	9.1%	NA	8.2%	11.0%	NA	NA	1.34	2.8%
% of people considering anti-social behavior in the area a problem (Place Survey, 2008)	29.6%	20.0%	11.6%	47.5%	1.48*	9.6%	4.09*	35.9%
% of people agreeing LA and police deal with local concerns (Place Survey, 2008)	24.0%	26.3%	18.5%	26.1%	1.10	-2.3%	1.41	7.6%
% of people agreeing LA and police deal with local concerns (Place Survey, 2008)	24.3%	24.8%	28.0%	23.5%	1.02	-0.5%	1.19	-4.5%
% of people agreeing that drunk/rowdy behavior is a problem (Place Survey, 2008)	28.4%	29.0%	12.4%	41.1%	1.02	-0.6%	3.31*	28.7%
% of people agreeing that drug use/dealing is a problem (Place Survey, 2008)	39.5%	30.5%	15.3%	58.0%	1.30*	9.0%	3.79*	42.7%
% of pupils stating that they have been offered drugs (Dudley Health Behaviour Survey, 2010)	17.8%	NA	17.1%	17.9%	NA	NA	1.05	0.8%
Skills								
% achieving 5 GCSEs graded A* to C (2008/09) (www.neighbourhood.statistics.gov.uk)	67.1%	69.8%	100.0%	52.6%	1.04	-2.7%	1.90*	-47.4%
% secondary pupils absent from school due to caring for family members (Dudley Health Behaviour Survey, 2010)	11.5%	NA	10.1%	12.7%	NA	NA	1.26	2.6%
Smoking								
Smoking prevalence – current smoker (Dudley Health Survey, 2009)	18.5%	NA	12.5%	26.2%	NA	NA	2.10*	13.7%
Secondary school Smoking prevalence – current smoker (Dudley Health Behaviour Survey, 2010)	12.5%	NA	9.1%	12.3%	NA	NA	1.35	3.3%

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Diet and Nutrition								
Breastfeeding rates at initiation (Dudley Child Health System, 2009/10)	47.2%	72.7%	60.1%	38.4%	1.54*	-25.5%	1.57*	-21.7%
Breastfeeding rates at 6-8 weeks (Dudley Child Health System, 2009/10)	26.2%	45.2%	40.2%	20.6%	1.73*	-19.0%	1.95*	-19.6%
% eating five portions fruit and vegetables per day (Dudley Health Survey, 2009)	25.6%	28.7%	32.0%	20.3%	1.12*	-3.1%	1.58*	-11.7%
% Primary pupils eating five portions fruit and vegetables per day (Dudley Health Behaviour Survey, 2010)	24.5%	NA	27.2%	22.9%	NA	NA	1.19	-4.3%
% secondary pupils eating five portions fruit and vegetables per day (Dudley Health Behaviour Survey, 2010)	15.3%	NA	19.1%	14.1%	NA	NA	1.35*	-5.0%
Physical Activity								
% completing five times 30 minutes physical activity in the last week (Dudley Health Survey, 2009)	49.2%	NA	49.2%	48.2%	NA	NA	1.02	-1.0%
% not participating in any physical activity in the last week (Dudley Health Survey, 2009)	17.1%	NA	13.4%	22.5%	NA	NA	1.68*	9.1%
% satisfied with sports and leisure services (Place Survey, 2008)	41.3%	46.2%	32.3%	43.2%	1.12*	-4.9%	0.75*	10.9%
% satisfied with parks and open spaces (Place Survey, 2008)	59.0%	68.5%	69.2%	52.5%	1.16*	-9.5%	1.32*	-16.7%
% access to green space (Land Use Statistics (Generalised Land Use Database), 2005))	36.4%	87.5%	48.3%	34.9%	2.40*	-51.1%	1.38	-13.4%
Obesity								
% Reception children very overweight (NCMP, 2008/09)	9.0%	9.6%	3.6%	12.2%	0.94	-0.6%	3.39*	8.6%
% Year 6 children very overweight (NCMP, 2008/09)	20.8%	18.3%	14.8%	23.5%	1.14*	2.5%	1.59*	8.7%
% Adults obese (Dudley Health Survey 2009))	21.3%	NA	16.7%	27.6%	NA	NA	1.65*	10.9%
Alcohol								
% Adults who binge drink (Dudley Health Survey 2009))	16.8%	NA	15.8%	17.0%	NA	NA	1.08*	1.2%
% Adults who do not drink alcohol (Dudley Health Survey 2009))	30.5%	NA	22.9%	42.9%	NA	NA	1.87*	20.0%

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
% Adults who are hazardous drinkers (Dudley Health Survey 2009))	8.7%	NA	8.9%	7.9%	NA	NA	0.89*	-1.0%
% Adults who are harmful drinkers (Dudley Health Survey 2009))	1.2%	NA	0.7%	1.3%	NA	NA	1.86*	0.6%
Alcohol related hospital admissions (standardized rate per 100,000 population) 2004-2008 (SUS))	1390	NA	1107	1707	NA	NA	1.54*	600
Indicators of General Population Health and Wellbeing								
Self reported good general health (Place Survey, 2008)	71.2%	75.8%	78.4%	66.0%	1.06*	-4.6%	1.19	-12.4%
Self reported good general health (Dudley Health Survey, 2009)	69.2%	NA	80.5%	57.7%	NA	NA	1.40*	-22.8%
Life Expectancy and Mortality								
Male Life Expectancy 2005-2009 (Years)	77.4	77.7	81.4	72.3	1.00	-0.3	1.13*	-9.1
Female Life Expectancy 2005-2009 (Years)	81.9	81.8	85.0	79.0	1.00	0.1	1.08*	-6.0
Mortality from all causes males (DSR per 100,000 population) (2004-2008)	757	714	549	940	1.06	43	1.71*	391
Mortality from all causes females (DSR per 100,000 population) (2004-2008)	513	504	369	603	1.02	9	1.63*	234
Mortality from all causes persons (DSR per 100,000 population) (2004-2008)	622	598	450	755	1.04	24	1.68*	305
Premature mortality from all causes males (DSR per 100,000 population) (2004-2008)	393	374	242	569	1.05	19	2.35*	327
Premature mortality from all causes females (DSR per 100,000 population) (2004-2008)	235	236	141	325	0.99	-1	2.30*	184
Premature mortality from all causes persons (DSR per 100,000 population) (2004-2008)	312	303	190	444	1.03	9	2.34*	254
Child (<15 years) mortality from all causes males (DSR per 100,000 population) (2004-2008)	63.3	54.4	29.1	90.5	1.16*	8.9	3.11*	61.4
Child (<15 years) mortality from all causes females (DSR per 100,000 population) (2004-2008)	41.7	44.2	8.6	49.3	0.94	-2.5	5.73*	40.7
Child (<15 years) mortality from all causes persons (DSR per 100,000 population) (2004-2008)	52.7	49.4	19.1	70.4	1.07	3.3	3.69*	51.3
Circulatory Disease								
Mortality from all circulatory diseases males (DSR per 100,000 population) (2004-2008)	255	244	190	313	1.05	11	1.65*	123

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from all circulatory diseases females (DSR per 100,000 population) (2004-2008)	153	155	112	177	0.99	-2	1.58*	65
Mortality from all circulatory diseases persons (DSR per 100,000 population) (2004-2008)	199	196	147	238	1.02	3	1.62*	91
Premature mortality from all circulatory diseases males (DSR per 100,000 population) (2004-2008)	115	112	70	167	1.03	3	2.39*	97
Premature mortality from all circulatory diseases females (DSR per 100,000 population) (2004-2008)	47	50	23	69	0.94	-3	3.00*	46
Premature mortality from all circulatory diseases persons (DSR per 100,000 population) (2004-2008)	80	80	46	117	1.00	0	2.54*	71
Mortality from coronary heart disease males (DSR per 100,000 population) (2004-2008)	130	136	102	158	0.96	-6	1.55*	56
Mortality from coronary heart disease females (DSR per 100,000 population) (2004-2008)	58	64	39	69	0.91	-6	1.77*	30
Mortality from coronary heart disease persons (DSR per 100,000 population) (2004-2008)	90	96	67	109	0.94	-6	1.63*	42
Premature mortality from coronary heart disease males (DSR per 100,000 population) (2004-2008)	68	70	46	98	0.97	-2	2.13*	52
Premature mortality from coronary heart disease females (DSR per 100,000 population) (2004-2008)	21	22	11	28	0.95	-1	2.55*	17
Premature mortality from coronary heart disease persons (DSR per 100,000 population) (2004-2008)	44	46	28	62	0.96	-2	2.21*	34
Mortality from stroke males (DSR per 100,000 population) (2004-2008)	61	52	41	71	1.17	9	1.73*	30
Mortality from stroke females (DSR per 100,000 population) (2004-2008)	50	49	38	50	1.02	1	1.32*	12
Mortality from stroke persons (DSR per 100,000 population) (2004-2008)	55	51	40	59	1.08	4	1.48*	19
Premature mortality from stroke males (DSR per 100,000 population) (2004-2008)	19.0	17.1	10.7	28.2	1.11	1.9	2.64*	17.5
Premature mortality from stroke females (DSR per 100,000 population) (2004-2008)	12.4	12.9	7.5	18.6	0.96	-0.5	2.48*	11.1
Premature mortality from stroke persons (DSR per 100,000 population) (2004-2008)	15.7	14.9	9.1	23.3	1.05	0.8	2.56*	14.2

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from hypertensive disease males (DSR per 100,000 population) (2004-2008)	8.2	4.8	5.7	10.8	1.71	3.4	1.89*	5.1
Mortality from hypertensive disease females (DSR per 100,000 population) (2004-2008)	7.7	4.0	6.6	9.8	1.93*	3.7	1.48*	3.2
Mortality from hypertensive disease persons (DSR per 100,000 population) (2004-2008)	8.3	4.4	6.5	10.8	1.89*	3.9	1.69*	4.3
Premature mortality from hypertensive disease males (DSR per 100,000 population) (2004-2008)	4.4	2.4	2.0	6.9	1.83*	2.0	3.45*	4.9
Premature mortality from hypertensive disease females (DSR per 100,000 population) (2004-2008)	2.2	1.3	1.1	3.9	1.69*	0.9	3.55*	2.8
Premature mortality from hypertensive disease persons (DSR per 100,000 population) (2004-2008)	3.3	1.8	1.6	5.4	1.83*	1.5	3.38*	3.8
Cancers								
Incidence of all cancers males (DSR per 100,000 population) (2004-2008)	435	417	404	499	1.04	18	1.24*	95
Incidence of all cancers females (DSR per 100,000 population) (2004-2008)	352	361	323	373	0.98	-9	1.15*	50
Incidence of all cancers persons (DSR per 100,000 population) (2004-2008)	394	389	363	436	1.01	5	1.20*	73
Mortality from all cancers males (DSR per 100,000 population) (2004-2008)	216	211	187	258	1.02	5	1.38*	71
Mortality from all cancers females (DSR per 100,000 population) (2004-2008)	152	152	115	181	1.00	0	1.57*	66
Mortality from all cancers persons (DSR per 100,000 population) (2004-2008)	178	176	147	212	1.01	2	1.44*	65
Premature mortality from all cancers males (DSR per 100,000 population) (2004-2008)	131	128	106	167	1.02	3	1.58*	61
Premature mortality from all cancers females (DSR per 100,000 population) (2004-2008)	103	104	72	136	0.99	-1	1.89*	64
Premature mortality from all cancers persons (DSR per 100,000 population) (2004-2008)	116	116	88	151	1.00	0	1.72*	63
Incidence of breast cancer females (DSR per 100,000 population) (2004-2008)	126	124	124	130	1.02	2	1.05	6
Mortality from breast cancer females (DSR per 100,000 population) (2004-2008)	30.7	27.4	28.3	27.9	1.12	3.3	0.99	-0.4

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from breast cancer females (DSR per 100,000 population) (2004-2008)	22.3	21.0	18.4	21.4	1.06	1.3	1.16*	3.0
Incidence of Lung cancer males (DSR per 100,000 population) (2004-2008)	59	60	37	93	0.98	-1	2.51*	56
Incidence of Lung cancer females (DSR per 100,000 population) (2004-2008)	25	36	17	37	0.69	-11	2.18*	20
Incidence of Lung cancer persons (DSR per 100,000 population) (2004-2008)	42	48	27	65	0.88	-6	2.41*	38
Mortality from Lung cancer males (DSR per 100,000 population) (2004-2008)	49.7	50.5	32.1	76.1	0.98	-0.8	2.37*	44.0
Mortality from Lung cancer females (DSR per 100,000 population) (2004-2008)	21.0	29.5	13.5	39.1	0.71	-8.5	2.90*	25.6
Mortality from Lung cancer persons (DSR per 100,000 population) (2004-2008)	33.5	38.6	21.6	55.6	0.87	-5.1	2.57*	34.0
Premature mortality from Lung cancer males (DSR per 100,000 population) (2004-2008)	30.3	32.6	15.9	53.3	0.93	-2.3	3.35*	37.4
Premature mortality from Lung cancer females (DSR per 100,000 population) (2004-2008)	13.6	20.9	9.8	30.4	0.65	-7.3	3.10*	20.6
Premature mortality from Lung cancer persons (DSR per 100,000 population) (2004-2008)	21.7	26.5	12.7	41.6	0.82	-4.8	3.28*	28.7
Incidence prostate cancer males (DSR per 100,000 population) (2004-2008)	113	101	134	104	1.12	12	0.78	-30.0
Mortality from prostate cancer males (DSR per 100,000 population) (2004-2008)	27.2	25.1	26.2	27.3	1.08	2.2	1.04	1.1
Premature mortality from prostate cancer males (DSR per 100,000 population) (2004-2008)	10.0	8.8	11.5	8.9	1.14	1.2	0.77	-2.6
Incidence of Colorectal cancer males (DSR per 100,000 population) (2004-2008)	65	55	55	80	1.18	10	1.45*	25
Incidence of Colorectal cancer females (DSR per 100,000 population) (2004-2008)	36	35	31	35	1.03	1	1.13*	4
Incidence of Colorectal cancer persons (DSR per 100,000 population) (2004-2008)	50	45	43	57	1.11	5	1.33*	14
Mortality from Colorectal cancer males (DSR per 100,000 population) (2004-2008)	23.2	22.0	18.5	29.6	1.05	1.2	1.60*	11.1

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Mortality from Colorectal cancer females (DSR per 100,000 population) (2004-2008)	14.3	13.6	14.0	15.0	1.05	0.7	1.07*	1.0
Mortality from Colorectal cancer persons (DSR per 100,000 population) (2004-2008)	18.2	17.3	16.2	21.3	1.05	0.9	1.31*	5.1
Premature mortality from Colorectal cancer males (DSR per 100,000 population) (2004-2008)	13.6	13.3	12.8	18.7	1.02	0.3	1.46*	5.9
Premature mortality from Colorectal cancer females (DSR per 100,000 population) (2004-2008)	8.4	8.0	9.8	9.7	1.05	0.4	1.01	-0.1
Premature mortality from Colorectal cancer persons (DSR per 100,000 population) (2004-2008)	10.9	10.6	11.2	14.1	1.03	0.3	1.26*	2.9
Respiratory Disease								
Mortality from all respiratory diseases males (DSR per 100,000 population) (2004-2008)	110.9	89.5	62.8	145.1	1.24*	21.4	2.31*	82.3
Mortality from all respiratory diseases females (DSR per 100,000 population) (2004-2008)	72.3	64.5	47.0	91.1	1.12*	7.8	1.94*	44.1
Mortality from all respiratory diseases persons (DSR per 100,000 population) (2004-2008)	88.4	74.6	53.8	113.4	1.18*	13.8	2.11*	59.6
Premature mortality from all respiratory diseases males (DSR per 100,000 population) (2004-2008)	42.2	30.5	16.1	70.2	1.38*	11.7	4.36*	54.1
Premature mortality from all respiratory diseases females (DSR per 100,000 population) (2004-2008)	21.9	21.1	8.7	39.6	1.04	0.8	4.55*	30.9
Premature mortality from all respiratory diseases persons (DSR per 100,000 population) (2004-2008)	31.8	25.6	12.3	54.4	1.24*	6.2	4.42*	42.1
Mortality from COPD males (DSR per 100,000 population) (2004-2008)	42.3	35.1	13.8	73.4	1.21*	7.2	5.32*	59.6
Mortality from COPD females (DSR per 100,000 population) (2004-2008)	22.0	21.9	10.8	36.2	1.00	0.1	3.35*	25.4
Mortality from COPD persons (DSR per 100,000 population) (2004-2008)	30.5	27.0	11.8	52.7	1.13*	3.5	4.47*	40.9
Premature mortality from COPD males (DSR per 100,000 population) (2004-2008)	20.1	14.3	2.4	44.8	1.41*	5.8	18.67*	42.4
Premature mortality from COPD females (DSR per 100,000 population) (2004-2008)	8.9	10.4	2.7	17.1	0.86	-1.5	6.33*	14.4

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from COPD persons (DSR per 100,000 population) (2004-2008)	14.4	12.3	2.5	30.7	1.17*	2.1	12.28*	28.2
Chronic Liver Disease								
Mortality from chronic liver disease males (DSR per 100,000 population) (2004-2008)	18.3	13.8	5.9	41.8	1.33*	4.5	7.08*	35.9
Mortality from chronic liver disease females (DSR per 100,000 population) (2004-2008)	8.2	7.2	8.0	14.0	1.14*	1.0	1.75*	6.0
Mortality from chronic liver disease persons (DSR per 100,000 population) (2004-2008)	13.2	10.4	6.9	28.2	1.27*	2.8	4.09*	14.3
Premature mortality from chronic liver disease males (DSR per 100,000 population) (2004-2008)	18.3	13.5	5.2	42.3	1.36*	4.8	8.13*	37.1
Premature mortality from chronic liver disease females (DSR per 100,000 population) (2004-2008)	7.7	6.9	7.9	14.0	1.11	0.8	1.77*	6.1
Premature mortality from chronic liver disease persons (DSR per 100,000 population) (2004-2008)	13.0	10.1	6.6	28.5	1.29*	2.9	4.32*	21.9
Accidental Injury								
Mortality from accidents males (DSR per 100,000 population) (2004-2008)	21.3	21.6	16.5	23.8	0.99	-0.3	1.44*	7.3
Mortality from accidents females (DSR per 100,000 population) (2004-2008)	9.8	10.5	11.7	7.9	0.93	-0.7	0.68	-3.8
Mortality from accidents persons (DSR per 100,000 population) (2004-2008)	15.5	16.0	14.3	15.8	0.97	-0.5	1.10*	1.5
Premature mortality from accidents males (DSR per 100,000 population) (2004-2008)	15.1	16.9	9.5	17.6	0.89	-1.8	1.85*	8.1
Premature mortality from accidents females (DSR per 100,000 population) (2004-2008)	3.7	5.8	3.8	2.2	0.64	-2.1	0.58	-1.6
Premature mortality from accidents persons (DSR per 100,000 population) (2004-2008)	9.4	11.4	6.6	9.9	0.82	-2.0	1.50*	3.3
Hospital admissions from accidents males (DSR per 100,000 population) (2004-2008)	935	NA	678	1206	NA	NA	1.78*	528
Hospital admissions from accidents females (DSR per 100,000 population) (2004-2008)	663	NA	527	805	NA	NA	1.53*	278
Hospital admissions from accidents persons (DSR per 100,000 population) (2004-2008)	808	NA	615	1011	NA	NA	1.64*	396

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Suicide								
Mortality from suicide and undetermined injury males (DSR per 100,000 population) (2004-2008)	11.7	12.5	7.9	17.1	0.94	-0.8	2.16*	9.2
Mortality from suicide and undetermined injury females (DSR per 100,000 population) (2004-2008)	2.6	3.9	1.6	3.1	0.67	-1.3	1.94*	1.5
Mortality from suicide and undetermined injury persons (DSR per 100,000 population) (2004-2008)	7.1	8.1	4.8	10.1	0.88	-1.0	2.10*	5.3
Premature mortality from suicide and undetermined injury males (DSR per 100,000 population) (2004-2008)	11.4	12.3	7.7	17.9	0.93	-0.9	2.32*	10.2
Premature mortality from suicide and undetermined injury females (DSR per 100,000 population) (2004-2008)	2.5	3.9	0.9	3.3	0.64	-1.4	3.67*	2.4
Premature mortality from suicide and undetermined injury persons (DSR per 100,000 population) (2004-2008)	6.9	8.1	4.4	10.5	0.85	-1.2	2.39*	6.1
Hospital admissions from suicide and undetermined injury males (DSR per 100,000 population) (2004-2008)	125	NA	37	239	NA	NA	6.46*	202
Hospital admissions from suicide and undetermined injury females (DSR per 100,000 population) (2004-2008)	167	NA	80	260	NA	NA	3.25*	180
Hospital admissions from suicide and undetermined injury persons (DSR per 100,000 population) (2004-2008)	145	NA	58	248	NA	NA	4.28*	190
Diabetes								
Mortality from diabetes males (DSR per 100,000 population) (2004-2008)	9.2	7.5	4.1	11.2	1.23*	1.7	2.73*	7.1
Mortality from diabetes females (DSR per 100,000 population) (2004-2008)	6.3	5.5	3.6	7.4	1.15*	0.8	2.06*	3.8
Mortality from diabetes persons (DSR per 100,000 population) (2004-2008)	7.7	6.4	3.8	9.7	1.20*	1.3	2.55*	5.9
Premature mortality from diabetes males (DSR per 100,000 population) (2004-2008)	4.5	3.6	1.3	8.2	1.25*	0.9	7.08*	6.9

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Premature mortality from diabetes females (DSR per 100,000 population) (2004-2008)	2.4	2.4	1.3	2.1	1.00	0.0	1.62	0.8
Premature mortality from diabetes persons (DSR per 100,000 population) (2004-2008)	3.4	3.0	1.3	5.1	1.13*	0.4	3.92*	3.8
Alcohol Related Harm								
Mortality from alcohol related harm males (DSR per 100,000 population) (2004-2008)	20.1	16.1	5.9	43.4	1.25*	4.0	7.48*	37.5
Mortality from alcohol related harm females (DSR per 100,000 population) (2004-2008)	8.7	7.8	8.0	17.1	1.12*	0.9	2.14*	9.1
Mortality from alcohol related harm persons (DSR per 100,000 population) (2004-2008)	14.4	11.8	6.9	30.5	1.22*	2.6	4.42*	23.6
Premature mortality from alcohol related harm males (DSR per 100,000 population) (2004-2008)	20.1	15.8	5.2	43.6	1.27*	4.3	8.38*	38.4
Premature mortality from alcohol related harm females (DSR per 100,000 population) (2004-2008)	8.5	7.6	7.9	17.2	1.12*	0.9	2.18*	9.3
Premature mortality from alcohol related harm persons (DSR per 100,000 population) (2004-2008)	14.3	11.6	6.6	30.7	1.23*	2.7	4.65*	24.1
Hospital admissions from alcohol related harm males (DSR per 100,000 population) (2004-2008)	2135	NA	1605	2696	NA	NA	1.68*	1091
Hospital admissions from alcohol related harm females (DSR per 100,000 population) (2004-2008)	1181	NA	654	776	NA	NA	1.19*	122
Hospital admissions from alcohol related harm persons (DSR per 100,000 population) (2004-2008)	1631	NA	1107	1707	NA	NA	1.54*	600
Excess Winter Deaths								
Excess winter deaths index (2002/03-2006/07)	20.9%	NA	25.2%	19.1%	NA	NA	0.76	-6.1%
Emergency Hospital Admissions								
Emergency hospital admissions from CVD males (DSR per 100,000 population) (2004/05-2008/09)	952	NA	712	1224	NA	NA	1.72*	512
Emergency hospital admissions from CVD females (DSR per 100,000 population) (2004/05-2008/09)	535	NA	394	744	NA	NA	1.89*	350
Emergency hospital admissions from CVD persons (DSR per 100,000 population) (2004/05-2008/09)	732	NA	546	969	NA	NA	1.77*	423

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Cancer males (DSR per 100,000 population) (2004/05-2008/09)	287	NA	271	341	NA	NA	1.26*	70
Emergency hospital admissions from Cancer females (DSR per 100,000 population) (2004/05-2008/09)	231	NA	177	261	NA	NA	1.47*	84
Emergency hospital admissions from Cancer persons (DSR per 100,000 population) (2004/05-2008/09)	255	NA	220	295	NA	NA	1.34*	75
Emergency hospital admissions from COPD males (DSR per 100,000 population) (2004/05-2008/09)	157	NA	57.5	293.1	NA	NA	5.10*	235.6
Emergency hospital admissions from COPD females (DSR per 100,000 population) (2004/05-2008/09)	114	NA	48.6	212.4	NA	NA	4.37*	163.8
Emergency hospital admissions from COPD persons (DSR per 100,000 population) (2004/05-2008/09)	131	NA	52.3	243.7	NA	NA	4.66*	191.4
Emergency hospital admissions from Asthma males (DSR per 100,000 population) (2004/05-2008/09)	89.4	NA	52.3	137.3	NA	NA	2.63*	85.0
Emergency hospital admissions from Asthma females (DSR per 100,000 population) (2004/05-2008/09)	111.7	NA	42.8	161.7	NA	NA	3.78*	118.9
Emergency hospital admissions from Asthma persons (DSR per 100,000 population) (2004/05-2008/09)	101.5	NA	47.2	150.0	NA	NA	3.18*	102.8
Emergency hospital admissions from Diabetes mellitus males (DSR per 100,000 population) (2004/05-2008/09)	60.5	NA	49.6	94.1	NA	NA	1.90*	44.5
Emergency hospital admissions from Diabetes mellitus females (DSR per 100,000 population) (2004/05-2008/09)	47.0	NA	41.6	57.5	NA	NA	1.38	15.9
Emergency hospital admissions from Diabetes mellitus persons (DSR per 100,000 population) (2004/05-2008/09)	53.1	NA	44.3	75.6	NA	NA	1.71*	31.3
Emergency hospital admissions from Depression males (DSR per 100,000 population) (2004/05-2008/09)	34.0	NA	14.7	54.9	NA	NA	3.73*	40.2

Indicator	Dudley	England Average	Least Deprived	Most Deprived	External Inequality		Internal Inequality	
					Gradient	Value	Gradient	Value
Emergency hospital admissions from Depression females (DSR per 100,000 population) (2004/05-2008/09)	49.9	NA	32.2	71.5	NA	NA	2.22*	39.3
Emergency hospital admissions from Depression persons (DSR per 100,000 population) (2004/05-2008/09)	42.2	NA	23.8	63.2	NA	NA	2.66*	39.4
Uptake of Services								
3 Year Breast screening uptake (%) (2008/09)	72.2%	80.0%	77.9%	63.6%	1.11	-7.8%	1.22*	-14.3%
5 Year Cervical screening uptake (%) (2008/09)	80.4%	80.0%	86.2%	73.6%	1.00	0.4%	1.17*	-12.6%
2 Year Bowel screening uptake (%) (2008/09)	55.1%	60.0%	64.6%	43.7%	1.09	-4.9%	1.48*	-20.9%
Childhood vaccinations uptake uptake (%) (Quarter 2 2010/2011)	92.6%	95.0%	97.4%	91.9%	1.03	-2.4%	1.06	-5.5%
Perception of Services								
Agree older people receive the support required to live independently (Place Survey 2008)	34.5%	30.0%	39.9%	30.6%	0.87	4.5%	1.30*	-9.3%
Agree given fair treatment by local services (% of population) (Place Survey 2008)	71.2%	72.4%	85.4%	59.7%	1.02	-1.2%	1.43*	-25.7%
Satisfied with bus services (% of population) (Place Survey 2008)	57.5%	55.2%	50.5%	58.4%	0.96	2.3%	0.86	7.9%

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