Executive Summary

Public Health Annual Report 2011

Healthy Lives, Healthy People in Herefordshire

Herefordshire Council

NHS Herefordshire

Working in partnership for the people of Herefordshire

Introduction: The social gradient in preventable lifestyle-related disease and premature death

Key Points

- Overall, people from deprived socio-economic groups not only have shorter lives, but also spend more of their later years living with a chronic disease or disability compared to more affluent people.

- On average the difference in life expectancy between people who live in the most deprived parts of England compared to those living in the least deprived areas is *seven* years (the difference in years between the lowest and highest parts of the upper curve in Figure A).

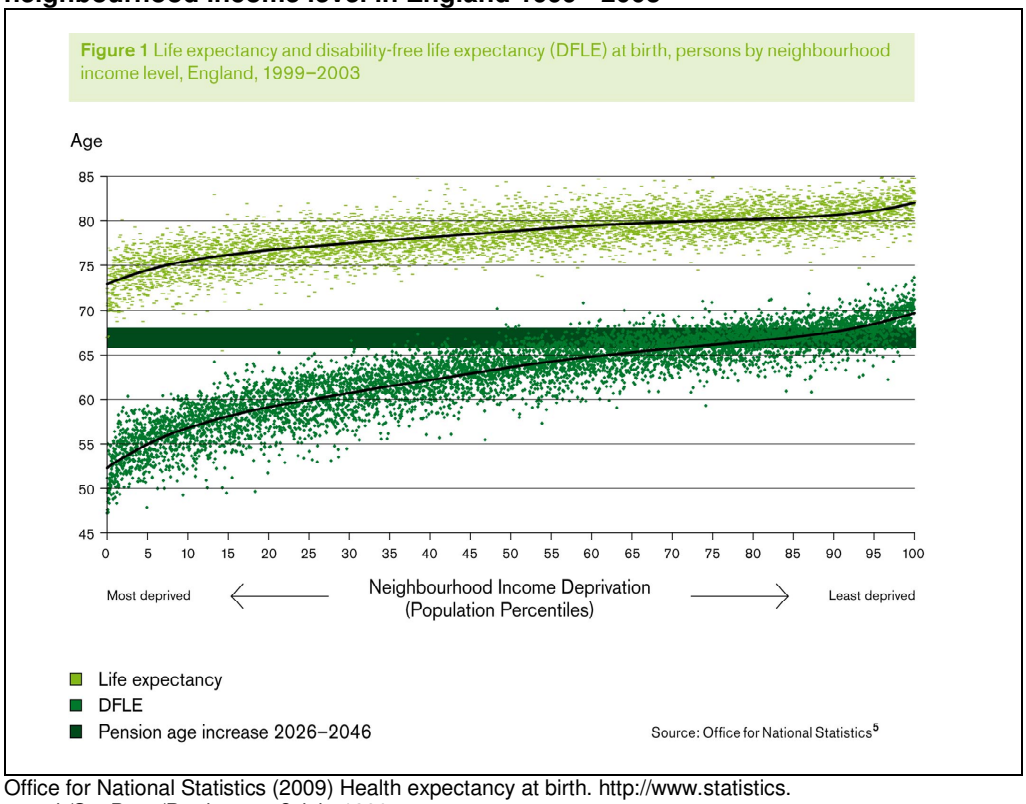
- On average the difference in disability-free life expectancy between people who live in the most deprived parts of England compared to those living in the least deprived areas is *seventeen* years (the difference in years between the lowest and highest parts of the lower curve in Figure A).

- As a result of this social gradient in health, only around a quarter of adults in England presently reach the proposed retirement age of 68 without having developed a chronic health condition or disability (the intersection of the green line and the lower curve in Figure A).

- The same social gradient in health exists in Herefordshire (Figure B) but is disguised by average health in Herefordshire being better than average for England

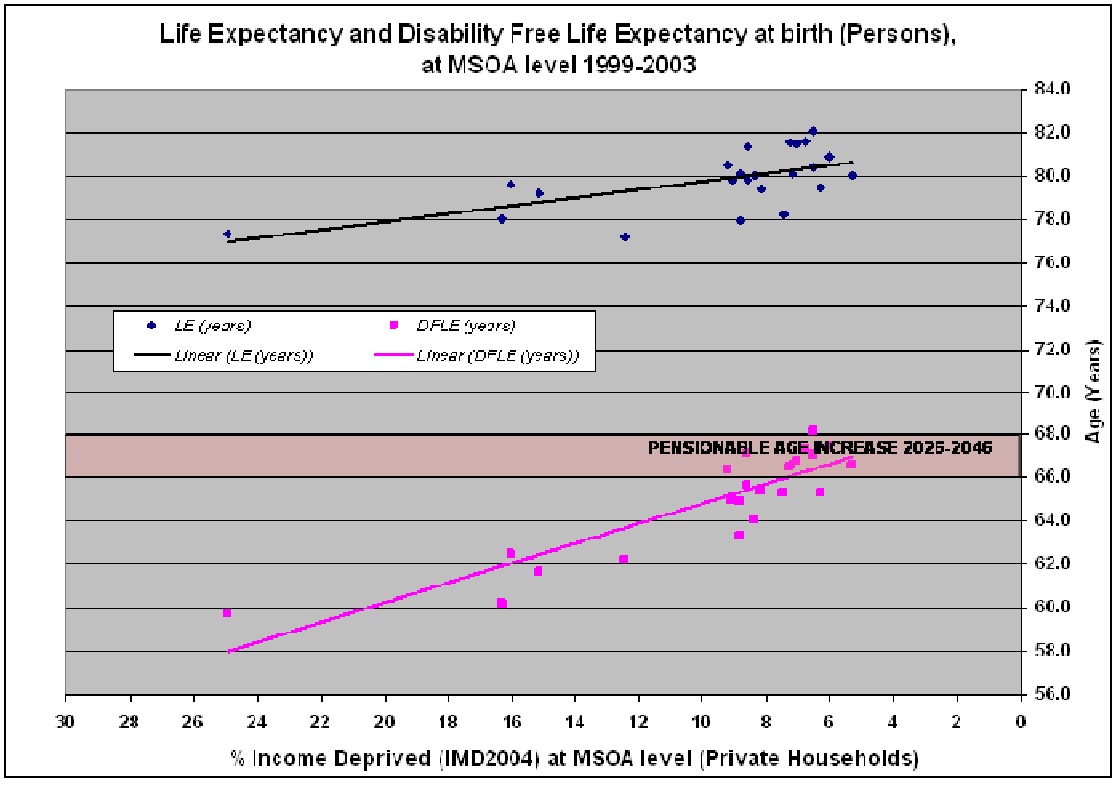
- The social gradient in health starts in the womb and accumulates through life meaning it is necessary to take a life course approach to reducing the social gradient in health, with the most effective interventions being those in the first years of life.

Figure A: Life expectancy and disability-free life expectancy at birth, persons by neighbourhood income level in England 1999 - 2003



Office for National Statistics (2009) Health expectancy at birth. http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=1296

Figure B: Life expectancy and disability-free life expectancy at birth, persons by MSOA level in Herefordshire 1999 - 2003



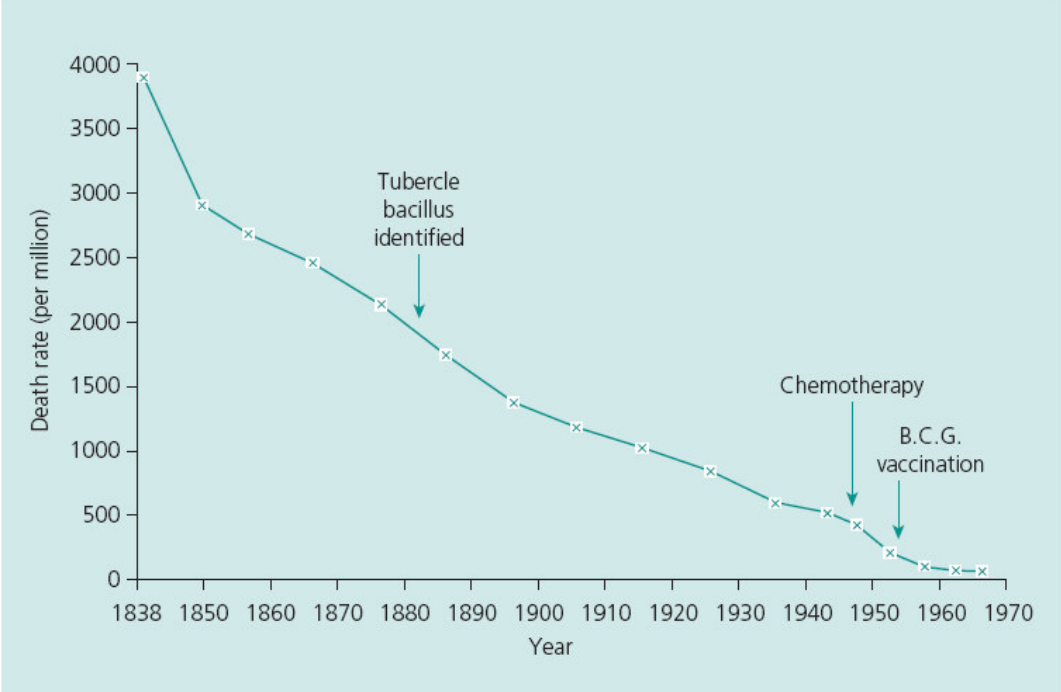
Office for National Statistics (2009) Health expectancy at birth. http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=12964

Chapter 1: Learning from the history of public health in Herefordshire: the importance of environmental and social change

Key Points

- A review of the history of improving population health and wellbeing in Herefordshire reminds us that environmental and social changes in living conditions and the introduction of public health legislation rather than innovations in health care led to a dramatic reduction in the death rate from infectious disease in the nineteenth and early twentieth centuries.
- A good example is the 90% decline in the death rate from tuberculosis before the introduction of chemotherapy and vaccination, as shown in Figure EX1.1. The TB sanatorium in Herefordshire closed in 1952 a year before the introduction of the BCG vaccination in UK secondary schools.

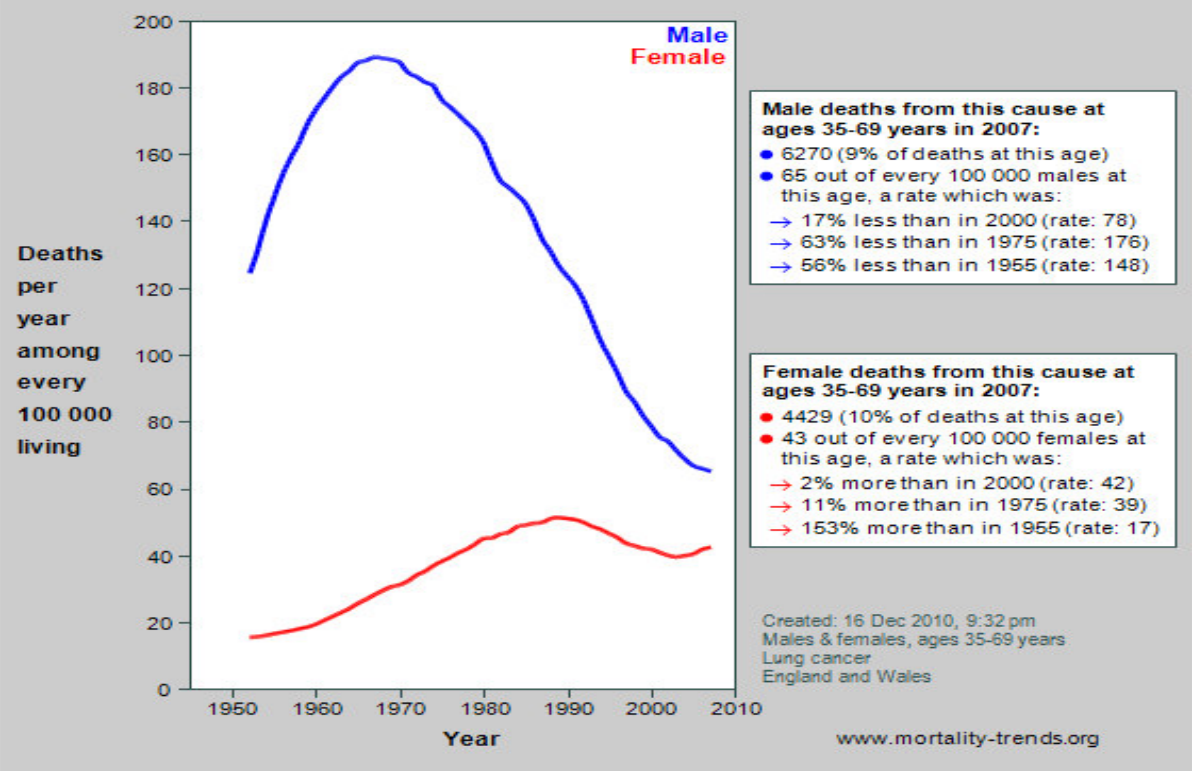
Figure EX1.1: Respiratory tuberculosis death rates in England & Wales 1838-1970



McKeown, T (1976) *The Modern Rise of Population*, Hodder, London

- Lifestyle related diseases have replaced infectious diseases as the main cause of premature deaths in England and Wales, as demonstrated by the rise in the premature death rate from lung cancer during the twentieth century (Figure EX1.2)
- The increase in the lung cancer death rate was first attributed to the increase in smoking rates among men by Sir Richard Doll in 1950, but it was not until 1970 that fewer men smoking started to result in lung cancer death rates falling. Conversely lung cancer death rates in women continued to rise as more women started smoking in response to increasing social freedom for women (Figure EX1.2) demonstrating the importance of the social determinants of health even when a behaviour is known to be harmful.

EX1.2 Mortality trends for lung cancer: 35-69 years of age, England and Wales



www.mortality-trends.org, using data from WHO and the UN Population Division

Milestones in the History of Improving Health and Wellbeing in Herefordshire

- Pre-19th century: philanthropy and folklore. The rise of the almshouses after the reformation; the first voluntary hospital; local folk remedies, and John Kyrle, the Man of Ross.
- 19th century: the dawn of public health legislation. Public Health legislation in a national and local context; sanitation improvements in the towns of Herefordshire, Reverend John Venn, benefactor to the people of Hereford.
- Early 20th century: the need for healthy recruits for the army. The development of the system of Medical Officers of Health and evidence from local records; children's health and medical inspections with examples of the effects of good food in rural areas; army recruitment, and pandemic influenza.
- 1920-1947: a better organised public health system. Further improvements in sanitation in Herefordshire market towns; the Herefordshire TB sanatorium opened, despite large reductions in TB cases due to public health improvements; Philanthropy through the Bulmer family to support housing improvements.
- 1947: the advent of the National Health Service. Reporting on post-war housing requirements; sanitation for rural areas; the rise of deaths from lung cancer in Herefordshire and the impacts of smoking; transfer of public health to the National Health Service.
- Late 20th Century: the age of expanding health inequalities. A report on health inequalities every decade from the 1970s onwards; Legionnaire's disease in Hereford
- 21st century: proposed transfer of public health back to local authorities

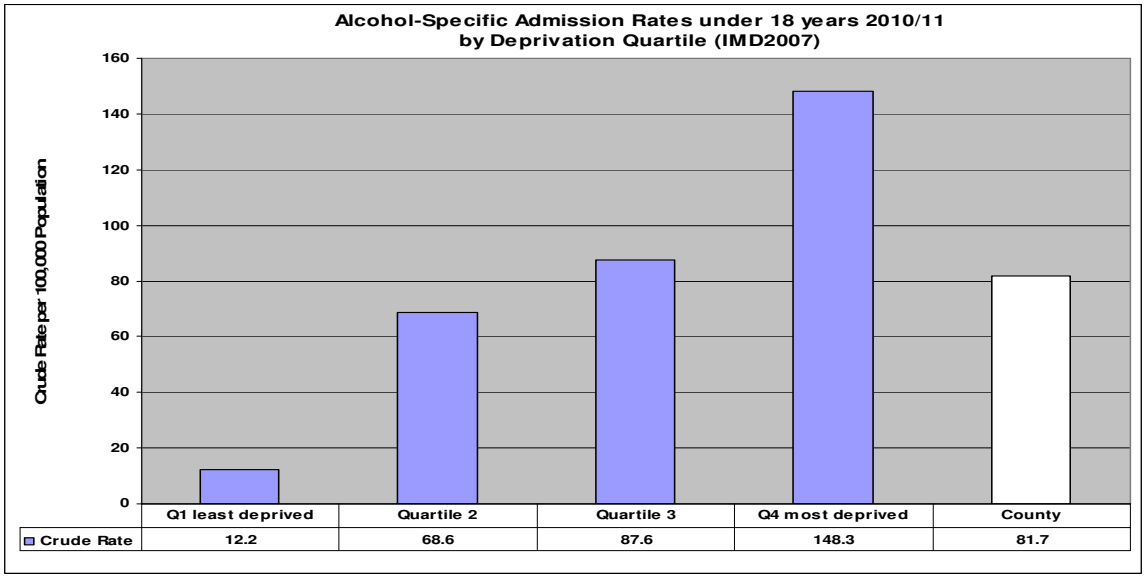
Chapter 2: The ladder of interventions: an integrated approach to improving people's health and wellbeing through alcohol harm reduction in Herefordshire

Key points

- This chapter focuses on employing the ladder of interventions to develop an integrated approach to alcohol harm reduction in Herefordshire.

- In Herefordshire, there has been a 10% increase in alcohol-related hospital admissions every year since 2007-08 with a significant increase in people aged 20-24 years
- It is estimated that the annual cost of alcohol related hospital admissions for Herefordshire residents is in the order of £5.5 million.
- A young person living in the most deprived quartile in Herefordshire is twelve times more likely to be admitted with an alcohol-specific condition than the one living in the least deprived quartile (Fig EX2.1)

Figure EX2.1 Alcohol-specific Hospital Admissions (<18 years) by Deprivation Quartile 2010-11



Data Source: Hospital Episode Statistics (HES), Analysis: Public Health Dept, Herefordshire PCT

- The strong social gradient in alcohol specific admissions evident in Figure EX2.1 suggests a social gradient in young people's attitude to harmful drinking.
- The "Bottletop" project has been an innovative local example of designing a campaign message that is relevant to young people
- Provision of Identification and Brief Advice (IBA) programme is very limited in Herefordshire
- Covert underage test purchases for both off-sales and on-sales of alcohol in Herefordshire, and prosecution of proprietors found guilty of selling illegally has been effective in reducing under age sales of alcohol.
- There is evidence that limiting the number of licensed outlets and licensed opening hours is effective in reducing the cost to society of harmful alcohol consumption.

- Alcohol consumption is directly related to the price. It is estimated that a minimum price for alcohol of 50p per unit would result in 98,000 fewer hospital admission per year in England. A minimum price of 21p per unit of beer and 28p per unit of spirits has been proposed by the coalition government in England.

Recommendations

Monitor the current situation

- Further develop the A&E data base for alcohol-related attendances

Provide information

- Support schools in Herefordshire to provide evidence based drug and alcohol education as an integral part of the school curriculum
- Expand the Bottletop project to promote sensible drinking using social marketing to target young people living in areas of multiple deprivation
- Locally enhance national campaigns to 'Know Your Limits' and to increase awareness of the units of alcohol in standard measures of alcoholic drinks

Enable choice and support people to change their behaviour

- Develop a commissioning strategy for alcohol harm reduction services to provide county wide Identification and Brief Advice services and a pathway to Tier 3 and Tier 4 specialist services

Guide choice through changing the default choice

- Ensure provision of readily available fresh water at all times in the night clubs, to give customers a free alternative to alcohol

Guide choice through incentives

- The effectiveness of any local scheme to provide incentives to reduce harmful alcohol consumption should be robustly evaluated

Guide choice through disincentives

- Consider licensing restrictions on premises selling alcohol at less than 50p per unit

Restrict choice

- Consider restricting opening hours of licensed premises and reducing the density of licensed outlets in Hereford city and the market towns.

Eliminate choice

- Strengthen the use of enforcement measures such as Dispersal Orders, Designated Public Place Orders and multiagency operations to stop underage sales to eliminate opportunities for young people to drink alcohol hazardously.

Chapter Three: The Foundation Years: the social gradient is established before children start school

Key Points

- The government has adopted the term Foundation Years to mean the phase of life from pregnancy to age five and its importance in underpinning later achievement and health
- Social gradient in health starts in the womb and accumulates through life.
- By the time today's 5 year olds reach retirement age they will be expected to work to age 68 years but many will not be healthy enough to do so without urgent action to reduce the social gradient in health
- The cost effectiveness of interventions to reduce the social gradient is highest in the foundation years and reduces as the child becomes older with interventions costing more and having less effect
- Action to reduce child poverty has close synergy with action to improve population health because reducing the social gradient in readiness for school at age 5 is the effective way to achieve both goals.
- Parenting is the biggest determinant of a child's readiness for school at age five, with the social gradient being strongly evident by age three.
- The average 'readiness for school' of 5 year olds in Herefordshire is significantly worse than average for England. (Fig EX3.1)

EXS3.1 London Health Observatory Marmot Indicators for Local Authorities in England

Fair Society, Healthy Lives

London Health Observatory

Marmot Indicators for Local Authorities in England

The chart below shows key indicators of the social determinants of health, health outcomes and social inequality that correspond, as closely as is currently possible, to the indicators proposed in Fair Society, Healthy Lives. Results for each indicator for this local authority are shown below. On the chart, the value for this local authority is shown as a circle, against the range of results for England, shown as a bar.

- Significantly better than England value
- Not significantly different from England value
- Significantly worse than England value

Herefordshire, County of

	Indicator	Local Authority Value	Regional Value	England Value	England Worst	Range	England Best
	Health outcomes						
	Males						
1	Male life expectancy at birth (years)	79.1	77.5	78.3	73.7		84.4
2	Inequality in male life expectancy (years)	3.5	8.7	8.8	16.6		2.7
3	Inequality in male disability-free life expectancy (years)	6.1	11.3	10.9	20.0		1.8
	Females						
4	Female life expectancy at birth (years)	83.3	81.9	82.3	79.1		89.0
5	Inequality in female life expectancy (years)	2.5	5.8	5.9	11.5		1.8
6	Inequality in female disability-free life expectancy (years)	5.0	9.2	9.2	17.1		1.3
	Social determinants						
7	Children achieving a good level of development at age 5 (%)	45.4	56.4	55.7	41.9		69.3
8	Young people not in employment, education or training (NEET) (%)	6.7	7.2	7.0	13.8		2.6
9	People in households in receipt of means-tested benefits (%)	11.6	17.9	15.5	41.1		5.1
10	Inequality in people in receipt of means-tested benefits (% points)	16.8	37.9	30.6	61.3		2.9

http://www.lho.org.uk/LHO_Topics/national_lead_areas/marmot/marmotindicators.aspx

EXS3.2 An overview of the Healthy Child Programme

Universal	**Progressive**	**Higher Risk**
Health and development reviews	Promoting child development including language	Referral for specialist input
Screening and physical examinations	Additional support and monitoring for infants with health or developmental problems	Contribution to care package led by specialist service
Immunisations		
Promotion of health and wellbeing, e.g.: - smoking - diet and physical activity - breast feeding - healthy weaning - keeping safe - prevention of sudden infant death (SIDS) - dental health	Promotion and extra support with breastfeeding. Support with behaviour change (smoking, diet, keeping safe, SIDS, dental health).	
Promotion of warm, sensitive, authorative parenting	Parenting support programmes including assessment and promotion of parent-baby interaction	High-intensity-based intervention
Involvement of fathers		
Mental health needs assessed	Emotional and psychological problems addressed	
Preparation and support with transition to parenthood and family relationships	Topic based groups and learning opportunities	Intensive structured home visiting programmes by skilled practitioners
Signposting to information and services	Help with accessing other services and sources of information and advice Common Assessment Framework completed	Action to safeguard the child

Recommendations

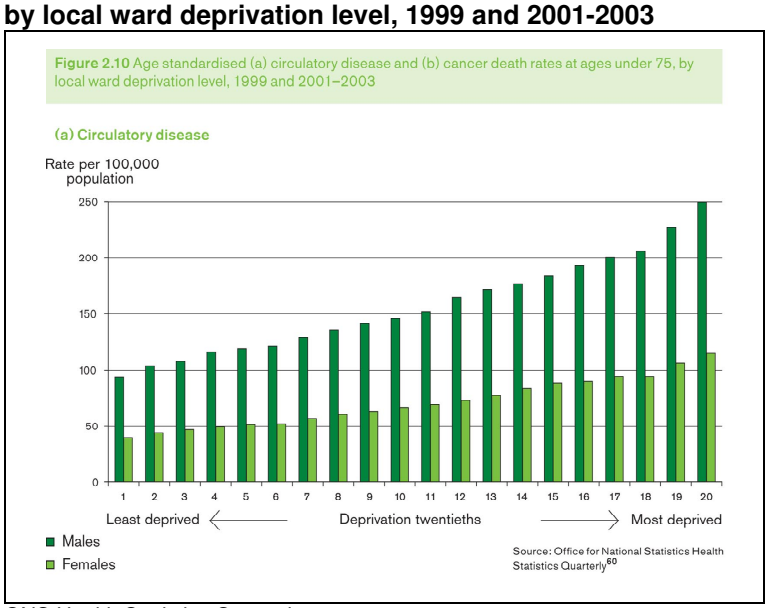
- A high priority should be given to improving the 'readiness for school' of 5 year olds in Herefordshire, with an emphasis on reducing the social gradient
- A commissioning strategy should be developed to increase support to all parents of children in the foundation years, with proportionately more support offered to parents of children with poor language development and/or behaviour problems and/or poor parent-child interaction.
- A commissioning strategy should be developed to achieve full implementation of the Healthy Child Programme, with an emphasis on reducing the social gradient in health through county-wide implementation of the progression from 'universal' services to 'universal plus' and 'universal partnership plus', (Fig EX3.2)
- The expansion of the Health Visiting workforce provides an opportunity to identify children with below average language development and/or poor behaviour and to provide or organise additional support to the child and parents to improve their readiness for school.
- The new offer of 15 hours per week free early education to 2 year olds from disadvantaged backgrounds provides an opportunity to reduce the social gradient in readiness for school.
- A decision as to whether or not to commission a Family Nurse Partnership Programme in Herefordshire should be taken once the results of the current trial are reported in 2013.
- At school entry age, all children should be assessed for their readiness for school and if necessary provided with additional support to bring them up to the average for England, with intensive support provided for those children significantly below the English average.
- The governance for action to reduce the social gradient in health in the Foundation Years should be encompassed by the governance arrangements for the Herefordshire Child Poverty Strategy.

Chapter Four: Adults of working age: the social gradient in preventable lifestyle-related disease and premature death

Key Points

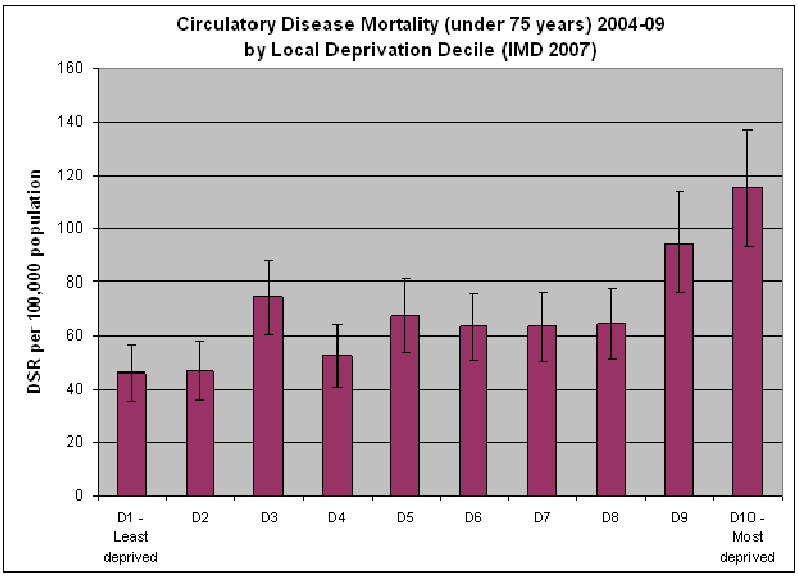
- Circulatory disease makes a major contribution to the burden of avoidable chronic disease and premature death. It is the single largest cause of long-term ill health and disability in Herefordshire and the second leading cause of premature death.
- A social gradient in circulatory disease is seen both at a national level (figure EX 4.1) and within Herefordshire (figure EX 4.2).

Figure EX 4.1[1] Age standardised circulatory disease and cancer death rates at ages under 75 by local ward deprivation level, 1999 and 2001-2003



ONS Health Statistics Quarterly

Figure EX 4.2 Circulatory disease mortality



[1] Marmot Review

Source: Dr Foster

- Nationally, health inequalities have been estimated to cost £31-33 billion per year in lost productivity, £20-32 billion per year in lost taxes and higher welfare payments and over £5.5 billion per year in the provision of additional NHS health care.
- Chronic disease impacts on people's ability to work and to be economically active. Unless efforts are made to improve the social gradient in the health of adults, many people will not be fit enough to work until the proposed new retirement age of 68 years with wide economic impact.
- Lifestyle behavioural factors such as smoking, diet, physical inactivity and alcohol consumption make a major contribution to the development of circulatory disease.
- These factors are all potentially modifiable through behaviour change interventions aimed at supporting people to quit smoking, to become more physically active, to eat healthily and to drink alcohol within recommended limits.
- The NHS Health Checks programme invites people aged 40-74, who haven't already been diagnosed with a chronic disease, to have an assessment of their risk of developing circulatory disease. This programme has the potential to make a major contribution to improving population health and to reducing future health and social care costs associated with the management of long-term conditions.

Recommendations

- Greater priority should be given to identifying people at high risk of circulatory and other chronic disease due to their unhealthy lifestyle behaviours and supporting them to change their behaviour to reduce their risk.
- The NHS Health Checks programme should be fully implemented in Herefordshire as soon as possible, ensuring that a range of services are available to support people found to be at high risk of circulatory disease to change their lifestyles.
- A high priority should be given to ensuring that healthy lifestyle services reduce the social gradient in health and are accessible to those at highest risk, particularly those from deprived communities where levels of unhealthy lifestyle behaviours are higher.
- High priority must continue be given to ensuring that smokers are identified and supported to quit smoking through the continued expansion of structured brief intervention by frontline NHS staff, the continued expansion of the network of providers of smoking cessation support, and the development of new smoking cessation support services delivered in workplaces employing unskilled and semi-skilled workers.
- New healthy lifestyle services should be developed within an integrated 'ladder of intervention' approach to reducing the social gradient in adult health with increasing physical activity levels and reducing harmful alcohol consumption being the priorities for new service development.
- Brief intervention training should become more generic so that frontline NHS staff are able to provide brief intervention in relation to a range of lifestyle risk factors

Chapter Five: Older people's health and wellbeing: focus on falls prevention

Key Points

- Older people are the main users of health and social care services. At a national level over 65 year olds make up 16% of the population but account for 43% (£16.47bn) of total NHS spend and 58% of the total social services budget (£6.38bn).
- Falls in older people are a major public health issue and can have a serious impact on older people's health and wellbeing.
- Falls are the commonest cause of accident-related hospital admission and the third most common cause of accidental death in Herefordshire. Over recent years there has been an increasing overall trend in the number of hospital admissions due to falls in the county.
- In Herefordshire there were around 760 falls-related hospital admissions in older people in 2010/11 and there are typically around 200 hip fractures per year. This figure can be expected to increase as the local population ages.
- Over half of all serious falls occur at home and slips, trips and stumbles (32%), steps and stairs (11%) and falls from beds and chairs (7%) are the top three contributory factors. Over 60% of the falls that lead to hospital admission in Herefordshire occur in people over the age of 65.
- The serious consequences of falls include physical injury such as fractures of the hip, lost confidence, increased social isolation and reduced independence. Fear of falling in itself can severely limit an older person's daily activities and thereby have a dramatically detrimental effect on their physical and mental wellbeing.
- Estimates of the average cost of each hip fracture range from £11,700 to the NHS and over £3,800 over 2 years for social care to over £28,000 for combined health and social care costs.
- In 2010/11 the costs associated with hospital admissions for falls-related injuries in older people in Herefordshire stood at over £2.48m – this does not include any social care costs.
- Falls prevention measures can reduce the incidence of falls by up to 30%, but "falls prevention services" typically focus only on people who have already had a fall (secondary prevention).
- There are cost-effective and evidence-based interventions which can be used to reduce the incidence of falls. The interventions which are known to be effective are simple and inexpensive and have the potential to save many thousands of pounds in health and social care costs. These include a combination of strength and balance training, assessment of hazards in the home, assessment of vision and medication review.
- Falls are not an inevitable part of growing older and, as discussed in Chapter 4, many of the lifestyle-related chronic diseases affecting people in their later life are preventable.
- Taking part in social activities and maintaining an active lifestyle throughout adulthood and into older age is good for the physical health and mental wellbeing of older people. Staying fit and healthy into older age is an achievable goal.

Photo: Bandemonium performing outside Hereford Cathedral

Recommendations

- A new Herefordshire falls prevention strategy should be developed with an emphasis on the primary prevention of falls in older people.
- A review of the existing falls prevention services in Herefordshire should be undertaken. Services which are ineffective or not based on sound evidence of effectiveness should be discontinued so that the funding can be invested in effective interventions.
- A local system needs to be developed for identifying those older people in the community who may be at risk of a first fall and ensuring that they receive appropriate sources of support.
- Front-line staff who are routinely in contact with older people (such as sheltered housing and care home staff, GP practice staff, environmental health and trading standards staff, community transport and library staff) have an important role in identifying people who are at risk of falling and should receive training in referring or signposting them to sources of help.
- A range of exercise programmes for older people which are designed to build strength and improve balance should be available across the county. This should include programmes in different settings (eg care homes, sheltered housing, community settings), of different types (eg chair-based exercises, “over 60s” exercise classes in the community, tailored home-based programmes) and in different geographical locations across the county.
- Despite the financial pressures on public services an affordable and trusted home improvement service should be available to vulnerable older people as a measure to prevent the much higher health and social care costs of falls-related hospital admissions.
- The Health and Wellbeing Board should develop and agree an integrated falls prevention strategy that incorporates strength and balance training, assessment of hazards in the home, assessment of vision and medication review.

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To prevent waste and save costs, only a small number of copies of the full report are being printed. The full Public Health Annual Report 2011 can be downloaded from www.herefordshire.nhs.uk/156.aspx. If you require a paper copy of the full report, please contact Louise Harper, email louise.harper@herefordpct.nhs.uk. The executive summary is also available as either a paper copy or a download from the same website.

The Joint Strategic Needs Assessment (JSNA) can be downloaded from http://www.herefordshire.gov.uk/factsandfigures/jsna.aspx