

LEICESTERSHIRE  
*together*

# LEICESTERSHIRE JOINT STRATEGIC NEEDS ASSESSMENT



## CANCER

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## 1 Introduction

### 1.1 Purpose of Health Equity Audit

More than one in three people in England will develop cancer at some point in their life. One in four people will die from cancer, making it the second most common cause of death after circulatory diseases.<sup>1</sup>

- In 2007/08 there were 8,045 people in LCR on GP registers with a diagnosis of cancer, a rate of 1.21% of the total population
- Between 2005 and 2007, 4,728 people in LCR died from cancer, 2,306 deaths were in the under 75 year olds
- The PCT is the 12<sup>th</sup> best performing PCT in England for premature mortality rates for cancer

### 1.2 Key findings of the profile

#### 1.2.1 Targeting Services and Marketing<sup>2</sup>

##### Lung Cancer

- Target the areas with the highest number of smokers/smoking prevalence

##### Cervical Cancer

- Target the areas with lowest uptake of HPV vaccination. Women who have past HPV infections, or who smoke, or have large number of children, or take the contraceptive pill. Areas that have low uptake of cervical screening

##### Skin Cancer

- Target people who have had renal transplant and young people who regularly have sun bed treatment

##### Prostate Cancer

- Target older men, especially black Caribbean and black African

##### Breast Cancer

- Target older women and women who have previously had breast cancer

#### 1.2.2 Incidence and Mortality, All Ages

- Cancer incidence for males remains below the national rate and below the East Midlands rate between 1993 and 2006
- Between 2002 and 2006 an average of 1,515 cancers per year were diagnosed for men in NHS LCR

<sup>1</sup> Tackling Cancer in England: Saving More Lives. National Audit Office. March 2004

<sup>2</sup> <http://info.cancerresearchuk.org/cancerstats>

- Prostate (26%), lung (14%) and colorectal (14%) cancer were the most common sites of new cases diagnosed in men
- Cancer incidence for females in 2005 (365.4) was above the national rate (353.4), in 2006 LCR (340.7) was below the national rate (350.7) and below the East Midlands rate (367.0)
- Between 2002 and 2006 an average of 1,575 cancers per year were diagnosed for women in NHS LCR
- Breast (35%), colorectal (11%) and lung (9%) cancer were the most common sites of new cases diagnosed in women
- Between 2005 and 2007 4,728 people in Leicestershire County and Rutland died from cancer. This is 27% of all deaths in Leicestershire County and Rutland
- One in four deaths in LCR are due to cancer

### 1.2.3 Incidence and Mortality, Under 75

- NHS LCR's directly age standardised mortality rate from cancer for 1995-97 (baseline) was 126 per 100,000 population. The current mortality rate for 2006-08 is 99.09 per 100,000 population
- One in three premature deaths in LCR are due to cancer
- Between 2005 and 2007 2,306 people in Leicestershire County and Rutland died prematurely from cancer. This is nearly 50% of all the deaths in LCR
- Incidence rates for persons in NHS LCR (281.9) for all cancers are below the East Midlands (298.2) and England rates (293.3)

### 1.2.4 Lifestyle Factors

#### **Tobacco and Cancer**

Smoking remains the single largest preventable cause of death from cancer.<sup>3</sup> Although some people who have never smoked get lung cancer, smoking causes 9 out of 10 cases.<sup>4</sup> Smoking causes round 90% of male and 83% of female deaths from lung cancer in the UK.<sup>5</sup> It is the primary reason for the gap in healthy life expectancy between rich and poor.<sup>3</sup>

#### **Obesity, Diet and Physical Activity**

Obesity has links with certain cancers, particularly endometrial, breast and colon. 10% of all cancer deaths among non-smokers are related to obesity (30% of endometrial).<sup>3</sup>

Physical activity is associated with a reduction in overall risk of dying from cancer, such as protective effect to colon cancer, with an average risk reduction of 40-50%.<sup>3</sup>

<sup>3</sup> Cancer Reform Strategy. Maintaining Momentum, Building for the Future. December 2008

<sup>4</sup> <http://www.cancerhelp.org.uk/type/lung-cancer>

<sup>5</sup> <http://www.cancerresearchuk.org/cancerstats/causes/lifestyles>

## **Alcohol**

Regular drinking above recommended daily limits (2-3 units for women, 3-4 units for men) increases the risk of a number of cancers, such as cancer of the mouth and throat, the digestive system, the liver and breast.<sup>3</sup>

### **1.2.5 Most Common Cancers**

- Lung cancer incidence for NHS LCR is 52.3 (per 100,000) for males and 27.6 (per 100,000) for females
- North West Leicestershire and Charnwood have higher incidence of lung cancer in males and females, compared to NHS LCR
- Breast cancer incidence for NHS LCR is 129.3 (per 100,000)
- Melton, Blaby, Rutland, Hinckley & Bosworth and Harborough have higher incidence of breast cancer, compared to NHS LCR
- Colorectal cancer incidence for NHS LCR is 51.6 (per 100,000) for males and 33.1 (per 100,000) for females
- Melton, Oadby & Wigston, Hinckley & Bosworth and North West Leicestershire have higher incidence of colorectal cancer for males in comparison to NHS LCR
- Blaby, Harborough, Charnwood and North West Leicestershire have higher incidence of colorectal cancer for females
- Prostate cancer incidence for NHS LCR is 94.7 (per 100,000)
- Harborough, Rutland, Hinckley & Bosworth, Blaby and Oadby & Wigston have higher incidence of prostate cancer for males

### **1.3 Recommendations**

## **2 National Policies**

### **2.1 NHS Cancer Plan 2000**

The Cancer Plan sets out the first comprehensive national cancer programme for England. It has four aims:<sup>6</sup>

- To save more lives
- To ensure people with cancer get the right professional support and care as well as the best treatments

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<sup>6</sup> The NHS Cancer Plan. September 2000

- To tackle the inequalities in health that mean unskilled workers are twice as likely to die from cancer as professionals
- To build for the future through investment in the cancer workforce, through strong research and through preparation for the generics revolution

## **2.2 National Audit Office Report – Tackling Cancer: Savings Lives in England 2004**

Tackling cancer examines whether cancer services are saving more lives across England and in relation to other countries. It focuses on the four cancers that cause the most deaths: breast, lung, bowel and prostate.<sup>1</sup>

The Department of Health (through the NHS Cancer Plan) identified a number of key challenges in relation to saving lives from cancer. These are:<sup>1</sup>

- To change lifestyles which increase levels of cancer, including smoking and diet
- To expand cancer screening programmes where it is clear that they will save lives
- To detect cancer earlier and heighten public awareness of symptoms
- To identify people with suspected cancer in general practice and have them assessed promptly by specialists
- To speed up diagnosis
- To ensure the most appropriate treatment is available to all

## 2.3 Cancer Targets

**Figure 1: Mortality rate per 100,000 directly age standardised population from cancer in people aged under 75**

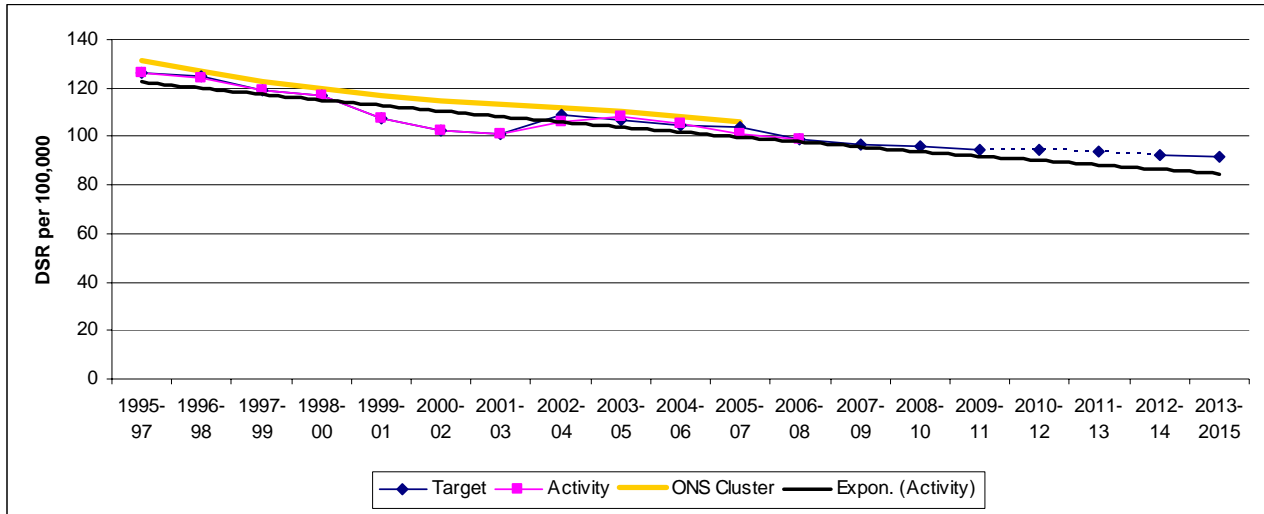


Figure 1 shows the cancer target for NHS LCR. It shows:

- NHS LCRs directly age standardised mortality rate from cancer for 1995-97 (baseline) was 126 per 100,000 population.
- The current mortality rate for 2006-08 is 99.09 per 100,000 population
- This represents a decrease of 21.4% by 2006-08 compared to a reduction of 19.8% by 2005-07 from the baseline, indicating a slight decrease in the number of deaths for the latest 3 year period

## 2.4 Cancer Reform Strategy, DH 2007

The Cancer Reform Strategy builds on the progress made since the publication of the NHS Cancer Plan 2000 and sets a clear direction for cancer services. It shows how by 2012 cancer services can and should become among the best in the world.<sup>3</sup>

The six areas where action is needed to improve cancer outcomes are:<sup>3</sup>

- Prevention
- Earlier diagnosis and treatment
- Ensuring access to cost effective treatments
- Improving patients experience
- Reducing cancer inequalities
- Delivering care in the most appropriate setting

The four areas of action needed to ensure delivery are:<sup>3</sup>

- Better information: on clinical outcomes and public awareness
- Stronger commissioning
- Appropriate funding
- Building for the future: research, data repository and skilled workforce

### 3 Population Profile

#### 3.1 Age Structure

Figure 2 was produced using 2007 mid year estimates from Office of National Statistics (ONS) for 2007. Based on the figures NHS LCR has an estimate population of 640,639. This shows the resident population.

**Figure 2: Population Pyramid NHS LCR, 2007 estimates**

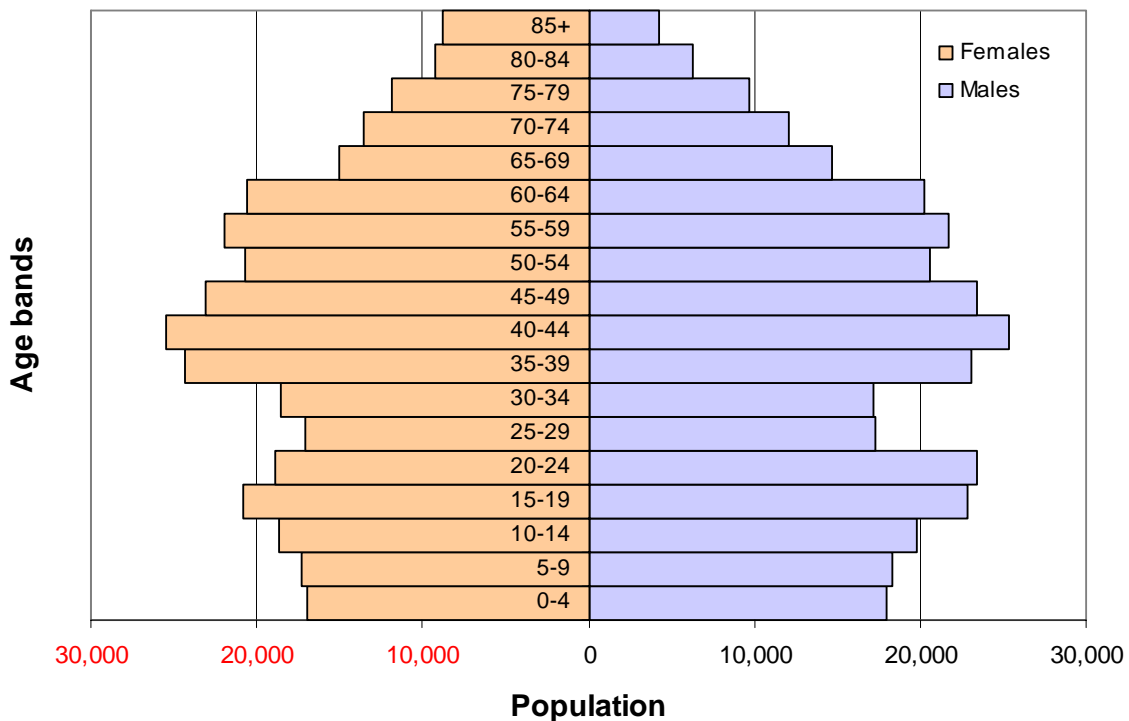


Table 1 shows the GP registered population of NHS LCR is 704,891 this is higher than the resident count at approximately 64,252. The population pyramid illustrates the different population age structure of males and females.

**Table 1: GP Practice population by age-band**

	Males	Females
0-4	18,225	17,297
5-9	18,932	18,058
10-14	21,163	19,755
15-19	25,000	22,654
20-24	25,330	21,681
25-29	20,490	19,579
30-34	19,555	19,389
35-39	24,318	24,065
40-44	27,434	26,965
45-59	27,626	26,516
50-54	23,843	22,819
55-59	22,642	21,865
60-64	23,563	23,536
65-69	18,054	18,153
70-74	14,275	15,163
75-79	10,933	12,732
80-84	7,291	9,941
85+	5,391	10,658
Total	354,065	350,826

### 3.2 Population Projections

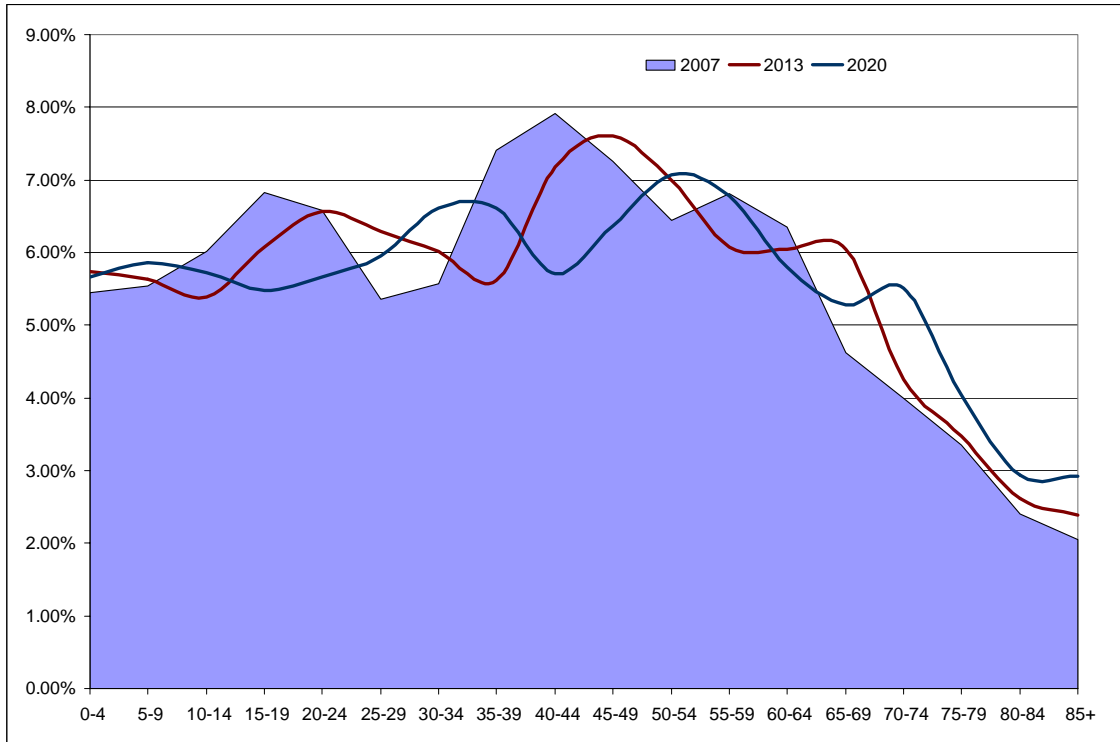
Population projections are based on past trends and assumptions around future change. The effect of future events (e.g. global economic change) and policy changes will not always be incorporated, and therefore the projections are not fully effective as forecasts.<sup>7</sup>

Figure 3 shows that the population structure continues to change with the over 65 age groups. This will result in an increase in the future morbidity and mortality rates, unless positive changes are made in relation to primary and secondary prevention.

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<sup>7</sup> Leicestershire Joint Strategic Needs Assessment. September 2009

**Figure 3: Population Projections, 2007 to 2020**



### 3.3 Mosaic Lifestyle Groups

There are 11 lifestyle groups, the groups are summarised below in Table 2 for the population of Leicestershire County and Rutland.

Nearly a quarter (23%) of LCR’s population fall into the group ‘Suburban Comfort’, families who are successfully established in comfortable, mature homes, children are growing up and finances are easier. Families living in close knit communities on lower incomes ‘Tiers of Community’ make up a further 19%. 18% are families with focus on career and home, mostly younger age groups now raising children ‘Happy Families’.

**Table 2: Mosaic Lifestyle Groups for LCR (population aged 17+)**

Mosaic Group	Characteristic	LCR Pop (17+)	LCR % (17+)
<b>A</b> Symbols of Success	Career professionals living in sought after locations	73,532	13.07%
<b>B</b> Happy Families	Younger families living in newer homes	102,584	18.23%
<b>C</b> Suburban Comfort	Older families living in suburbs	129,319	22.98%
<b>D</b> Tiers of Community	Close knit inner city and manufacturing town communities	108,121	19.21%
<b>E</b> Urban Intelligence	Educated, young, single people living in areas of transient populations	19,723	3.50%
<b>F</b> Welfare Borderline	People living in social housing with uncertain employment in deprived areas	4,165	0.74%

Mosaic Group	Characteristic	LCR Pop (17+)	LCR % (17+)
<b>G</b> Municipal Dependency	Low income families living in estate-based social housing	8,677	1.54%
<b>H</b> Blue Collar Enterprise	Upward mobile families living in homes brought from social landlords	42,475	7.55%
<b>I</b> Twilight Subsistence	Older people living in social housing with high care needs	11,946	2.12%
<b>J</b> Grey Perspectives	Independent older people with relatively active lifestyles	30,413	5.40%
<b>K</b> Rural Isolation	People living in rural areas far from urbanisation	31,815	5.65%

Table 3 identifies the mosaic groups that are more likely to have/develop cancer within NHS LCR. The groups that have an index greater than 100, implies they are more likely than the national average to have/develop cancer (groups C, I, J and K). Group C is the largest group within NHS LCR (23%).

The Cancer groups consist of:

Cancer of digestive organs, this includes colorectal cancer.

Cancers of respiratory or intrathoracic organs, this includes lung cancer.

Cancers of female genital organs, this includes cervical cancer.

Cancers of male genital organs, this includes prostate cancer.

**Table 3: Cancer Index by Mosaic Groups**

Groups	Digestive Organs (C15-C26)	Respiratory/ Intrathoracic (C30-C39)	Breast (C50)	Female Genital (C51-C58)	Male Genital (C60-C63)
<b>A</b> Career professionals living in sought after locations	87	60	104	91	106
<b>B</b> Younger families living in newer homes	51	43	74	60	49
<b>C</b> Older families living in suburbia	120	92	119	117	126
<b>D</b> Close knit, inner city and manufacturing town communities	88	93	93	91	81
<b>E</b> Educated, young, single people living in areas of transient populations	51	59	68	64	60
<b>F</b> People living in social housing with uncertain employment in deprived areas	84	143	76	80	87
<b>G</b> Low income families living in	113	178	95	107	92

<b>Groups</b>	<b>Digestive Organs (C15-C26)</b>	<b>Respiratory/ Intrathoracic (C30-C39)</b>	<b>Breast (C50)</b>	<b>Female Genital (C51-C58)</b>	<b>Male Genital (C60-C63)</b>
estate based social housing					
<b>H</b> Upwardly mobile families living in homes brought from social landlords	117	142	102	110	98
<b>I</b> Older people living in social housing with high care needs	218	287	124	183	202
<b>J</b> Independent older people with relatively active lifestyles	172	145	140	156	187
<b>K</b> People living in rural areas far from urbanisation	123	84	124	125	125

Figure 4 and 5 show mosaic classifications for all cancers. Groups A to D are significantly lower than LCR for under 75s. For all ages Groups F and G are significantly higher than LCR.

**Figure 4: All Cancers under 75 SMR by Mosaic Groups, 2005-2007**

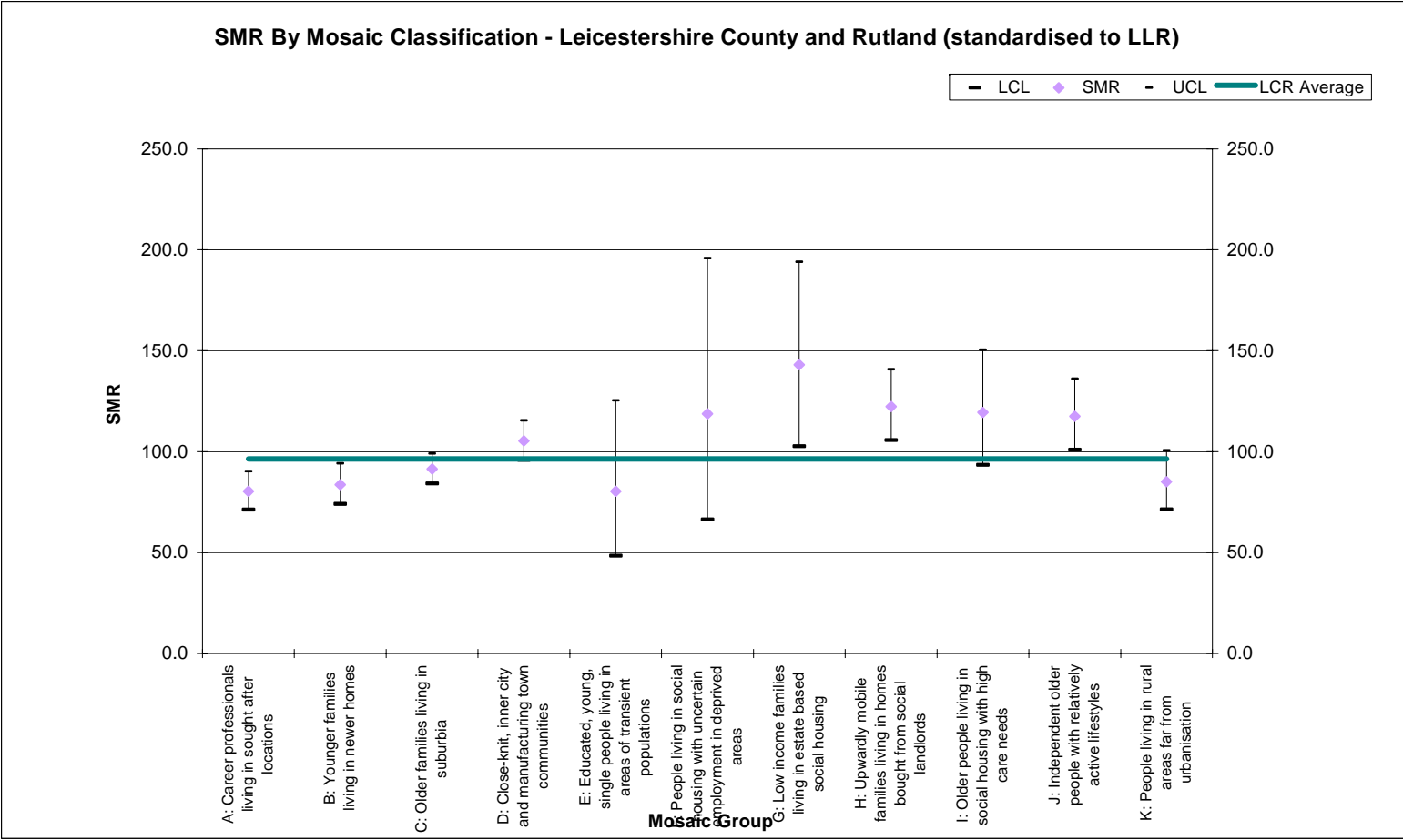
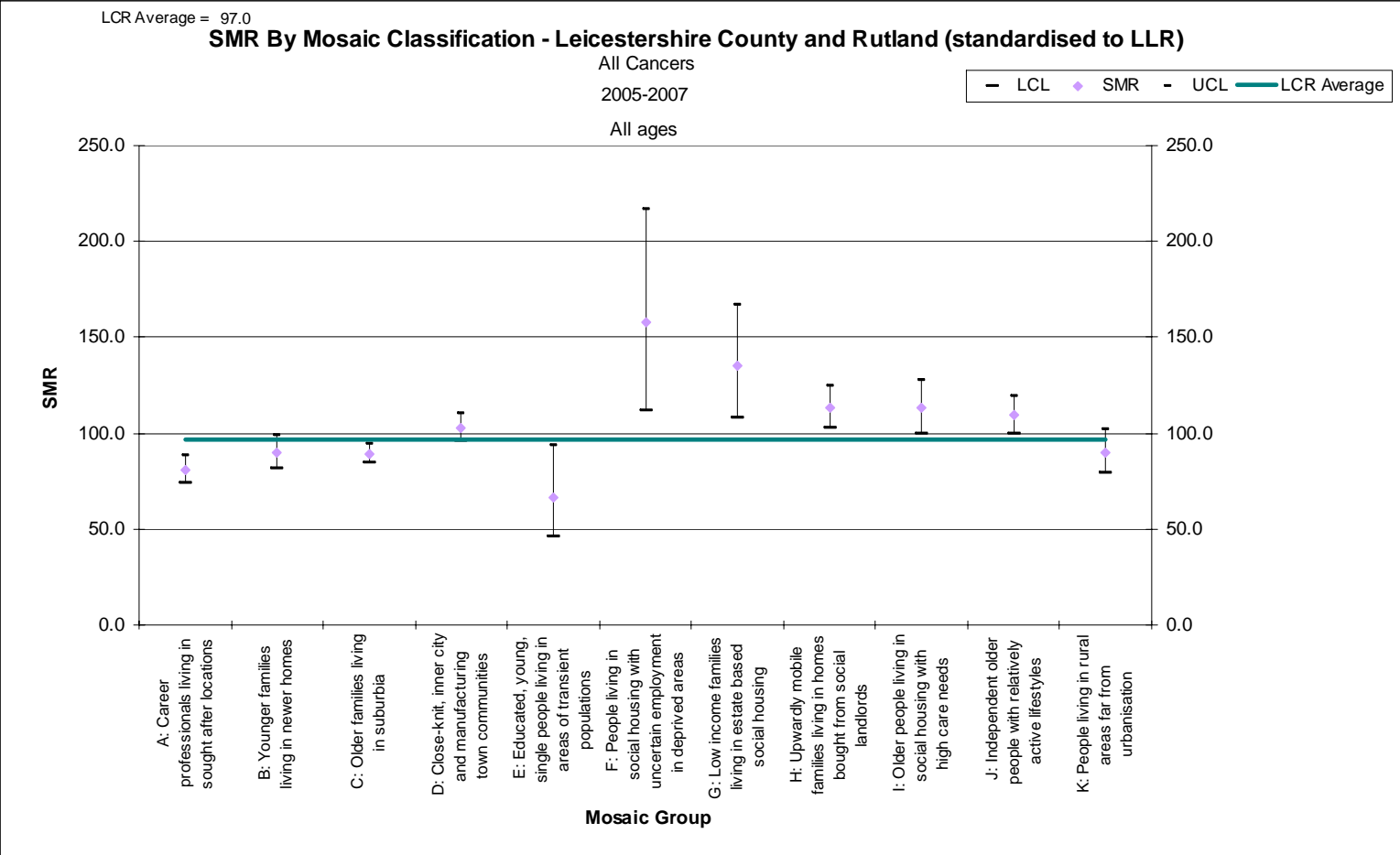


Figure 5: All Cancers All Ages SMR by Mosaic Groups, 2005-2007



## 4 Incidence and Mortality All Cancers, All Ages

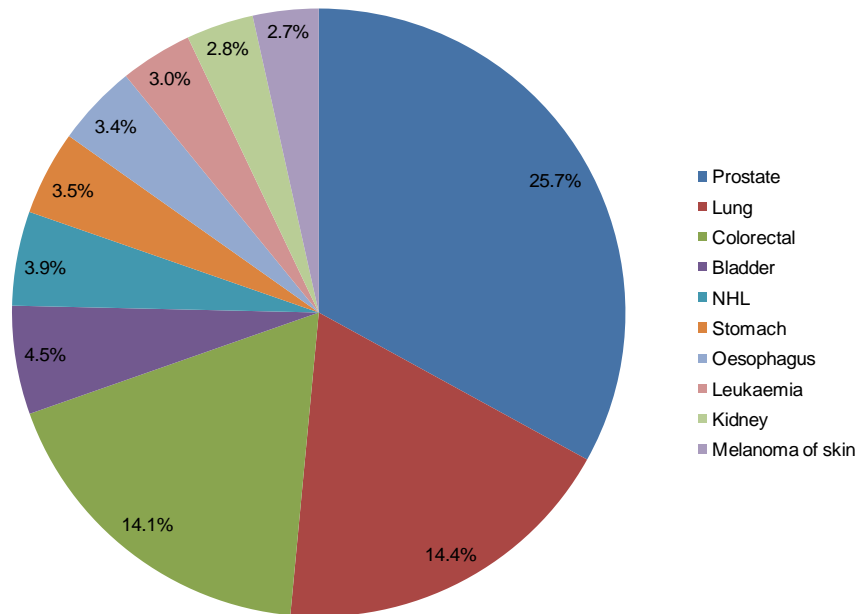
### 4.1 Incidence

#### 4.1.1 Incidence for Males

Figure 6 illustrates the spread of the different types of cancer for men. This data is extracted from the Trent Cancer Registry Cancer Factsheet and refers to cancers diagnosed between 2002 and 2006. Overall, an average of 1,515 cancers per year were diagnosed for men in Leicestershire County and Rutland (average over 5 years).

In Leicestershire County and Rutland, the most common cancer diagnosed in men was prostate cancer, accounting for around 26% of new cases. Prostate (390 cases), lung (218 cases) and colorectal cancer (214 cases) were the most common sites of new cases diagnosed in men.

**Figure 6: Males: Average Annual Number of Cases 2002-06**



Source: Trent Cancer Registry. Cancer factsheet. [Online] 2009.

**Figure 7: Incidence of all cancers, Males, 1993 to 2006**

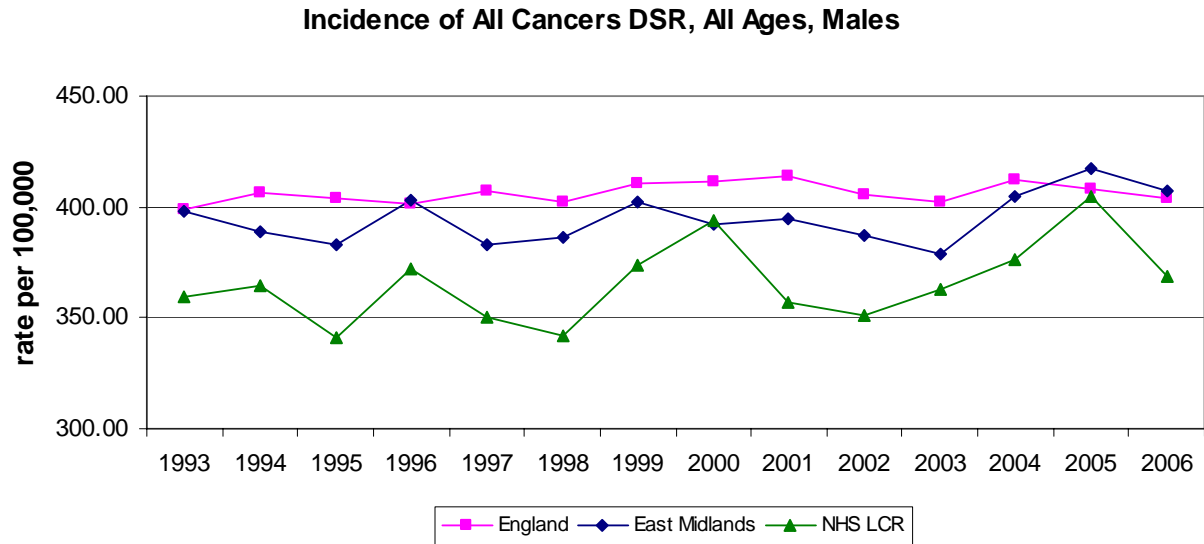


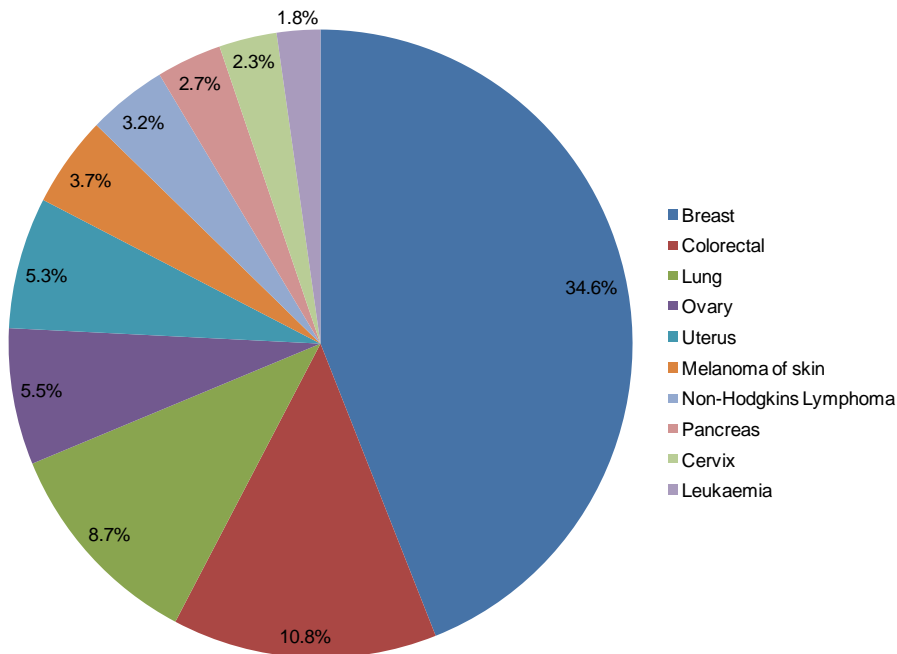
Figure 7 shows the rates of incidence of all cancers in males. The rates for East Midlands since 1993 have remained fairly consistent with England until 2004, with a decline. However this trend has reversed with an upward trend since 2004. NHS LCR has remained below the England and East Midlands rate.

**4.1.2 Incidence for Females**

Figure 8 illustrates the spread of the different types of cancer for women. Overall, an average of 1,575 cancers per year were diagnosed for women in Leicestershire County and Rutland (average over 5 years).

In Leicestershire County and Rutland, the most common cancer diagnosed in women was breast cancer accounting for around one in three new cases of cancer (around 35%). Breast (545 cases), colorectal (170 cases) and lung (137 cases) were the most common sites of new cases diagnosed in women.

**Figure 8: Females: Average Annual Number of Cases 2002-06**



Source: Trent Cancer Registry. Cancer factsheet. [Online] 2009

**Figure 9: Incidence of all cancers, Females, 1993 to 2006**

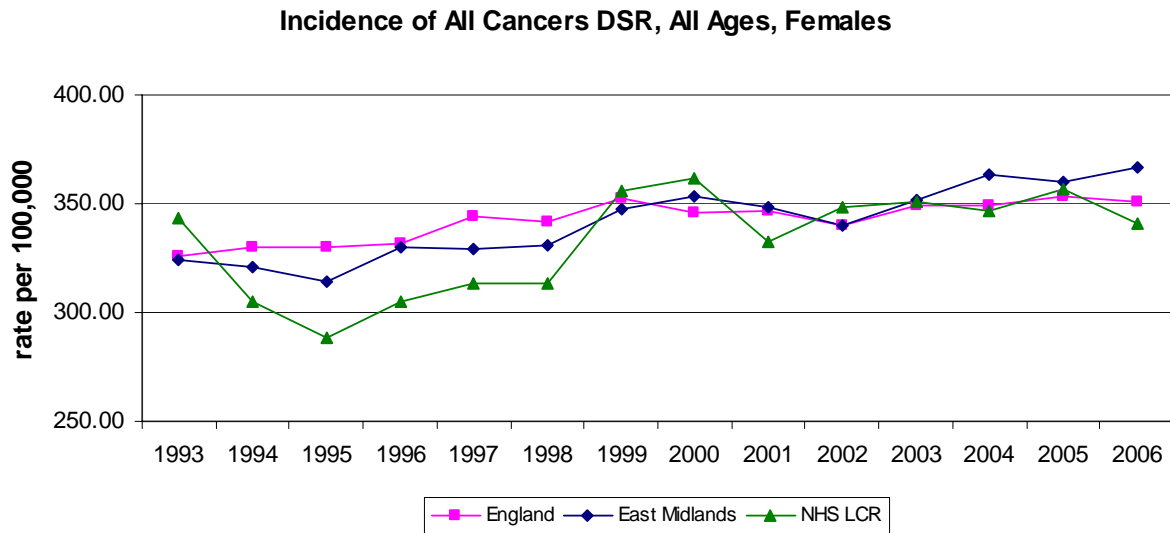


Figure 9 shows the rates of incidence of all cancers in females. NHS LCR has remained fairly consistent with England. From 1998 to 2000 NHS LCR had an upward trend. In 2006 NHS LCR rate is below England and East Midlands rate.

**4.1.3 Incidence Rates 2003-05**

Table 4 demonstrates that the incidence of cancer in Leicestershire County and Rutland is significantly lower than the England average for cancer incidence. In Leicestershire County

and Rutland 9,435 people were registered with cancer through cancer registries between 2003 and 2005.

**Table 4: Incidence of Cancer in LCR** <sup>8</sup>

	Observed	Directly Standardised Rate	95% Confidence Limits	
			Lower	Upper
ENGLAND	715,681	371.42	370.53	372.31
Leicestershire County and Rutland	9,435	360.74	353.24	368.23
Rutland	526	347.05	316.45	377.64
Blaby	1,318	367.98	347.64	388.32
Charnwood	2,002	342.80	327.32	358.27
Harborough	1,174	362.54	341.17	383.91
Hinckley and Bosworth	1,535	368.90	349.96	387.84
Melton	705	349.97	323.17	376.78
North West Leicestershire	1,297	368.48	347.81	389.16
Oadby and Wigston	878	391.50	364.39	418.61

Source: Compendium of Clinical and Health Indicators, The NHS Information Centre

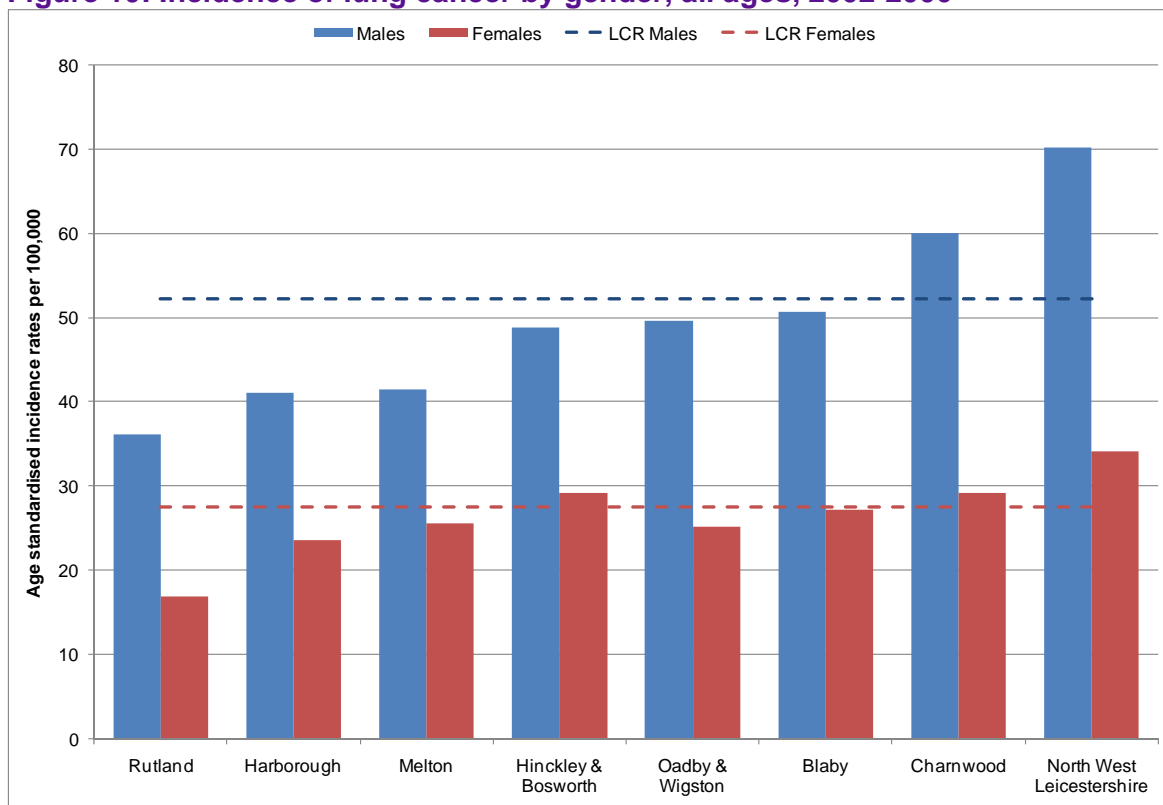
## 4.2 Lung Cancer

Figure 10 illustrates the incidence of lung cancer by sex across the districts; the numbers are included in Table 5. This shows:

- North West Leicestershire has the highest incidence of lung cancer in males (70.3 per 100,000) and females (34.2 per 100,000). Both are higher than the LCR average.
- Males and females in Charnwood also have higher incidence than the PCT average.
- Rutland has the lowest incidence of lung cancer for both males and females. Harborough, Melton, Oadby and Wigston and Blaby all have lower incidence than the LCR average.

<sup>8</sup> National Centre for Health Outcomes Development. Compendium of clinical indicators. [Online] 2009 May. Available from URL: <http://www.nchod.nhs.uk>

**Figure 10: Incidence of lung cancer by gender, all ages, 2002-2006<sup>9</sup>**



**Table 5: Incidence of lung cancer by gender, all ages, 2002-2006**

	Males		Females	
	ASIR	Numbers	ASIR	Numbers
Rutland	36.2	9	17.0	6
Harborough	41.2	21	23.7	14
Melton	41.5	13	25.6	10
Hinckley & Bosworth	48.9	32	29.2	22
Oadby & Wigston	49.7	18	25.3	11
Blaby	50.8	30	27.3	19
Charnwood	60.1	55	29.3	33
North West Leicestershire	70.3	39	34.2	21
<b>NHS Leicestershire County &amp; Rutland</b>	<b>52.3</b>	<b>218</b>	<b>27.6</b>	<b>137</b>

### 4.3 Breast Cancer

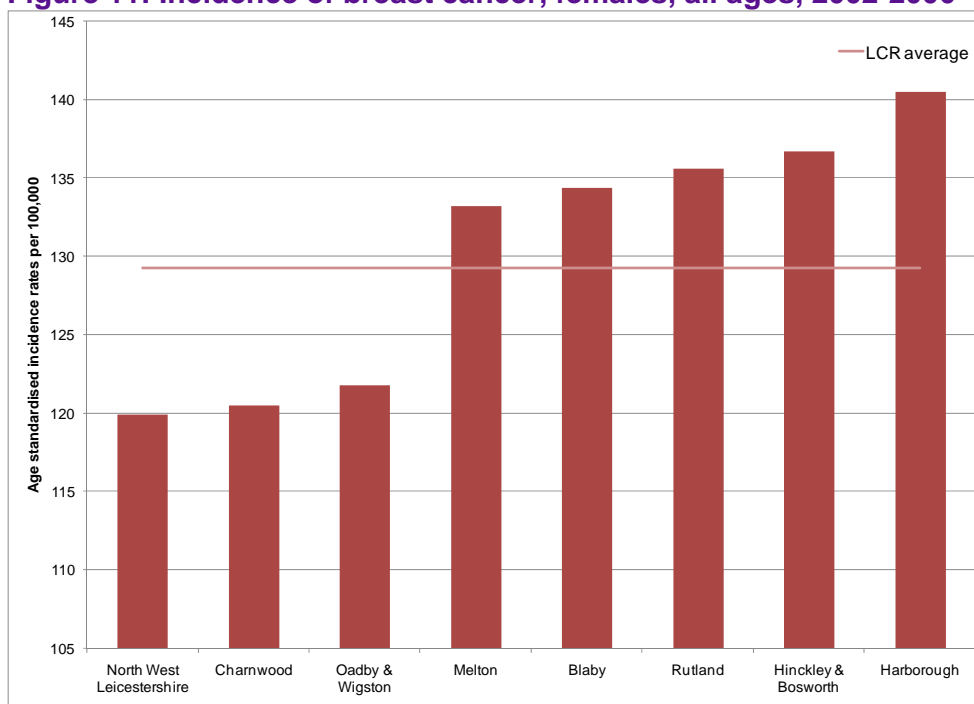
Figure 11 illustrates the incidence of breast cancer by sex across the districts, the numbers are included in Table 6. This shows:

- Harborough has the highest incidence of breast cancer (140.5 per 100,000)

<sup>9</sup> Trent Cancer Registry, Cancer Factsheets

- North West Leicestershire, Charnwood and Oadby and Wigston all have lower incidence of breast cancer than the PCT average

**Figure 11: Incidence of breast cancer, females, all ages, 2002-2006<sup>10</sup>**



**Table 6: Breast cancer, females, all ages, 2002-2006**

	Females	
	ASIR	Numbers
North West Leicestershire	119.9	68
Charnwood	120.5	116
Oadby & Wigston	121.8	44
Melton	133.2	43
Blaby	134.4	77
Rutland	135.6	32
Hinckley & Bosworth	136.7	91
Harborough	140.5	73
<b>NHS Leicestershire County &amp; Rutland</b>	<b>129.3</b>	<b>545</b>

<sup>10</sup> Trent Cancer Registry , Cancer Factsheets

#### 4.4 Colorectal Cancer

Figure 12 and Table 7 illustrates the incidence of colorectal cancer by sex across the districts. This shows:

- North West Leicestershire has the highest incidence of colorectal cancer in males (55.8 per 100,000)
- Blaby has the highest incidence of colorectal cancer in females (38.8 per 100,000) and the lowest incidence for men (47.6 per 100,000)

Figure 12: Incidence of colorectal cancer by gender, all age, 2002-2006s<sup>11</sup>

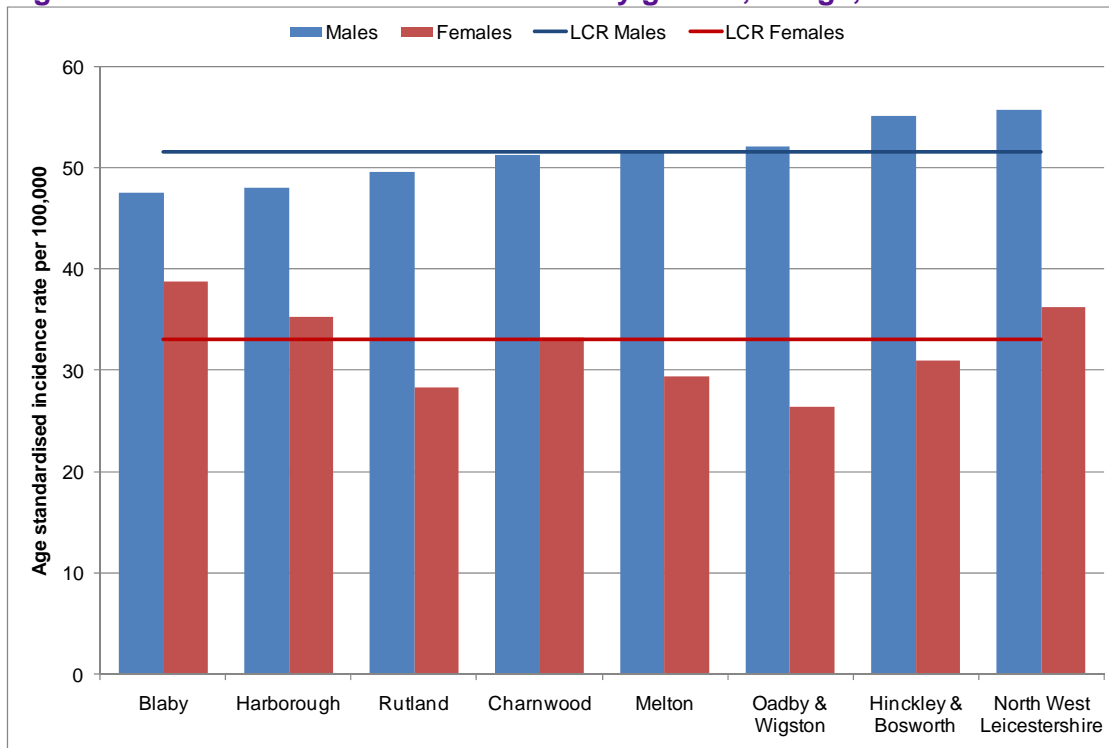


Table 7: Incidence of colorectal cancer by gender, all ages, 2002-2006

	Males		Females	
	ASIR	Numbers	ASIR	Numbers
Blaby	47.6	27	38.8	25
Harborough	48.1	25	35.4	21
Rutland	49.7	12	28.4	8
Charnwood	51.4	46	33.3	38
Melton	51.7	16	29.5	12
Oadby & Wigston	52.2	19	26.4	12
Hinckley & Bosworth	55.2	37	31	28
North West Leicestershire	55.8	31	36.3	25
<b>NHS Leicestershire County &amp; Rutland</b>	<b>51.6</b>	<b>214</b>	<b>33.1</b>	<b>170</b>

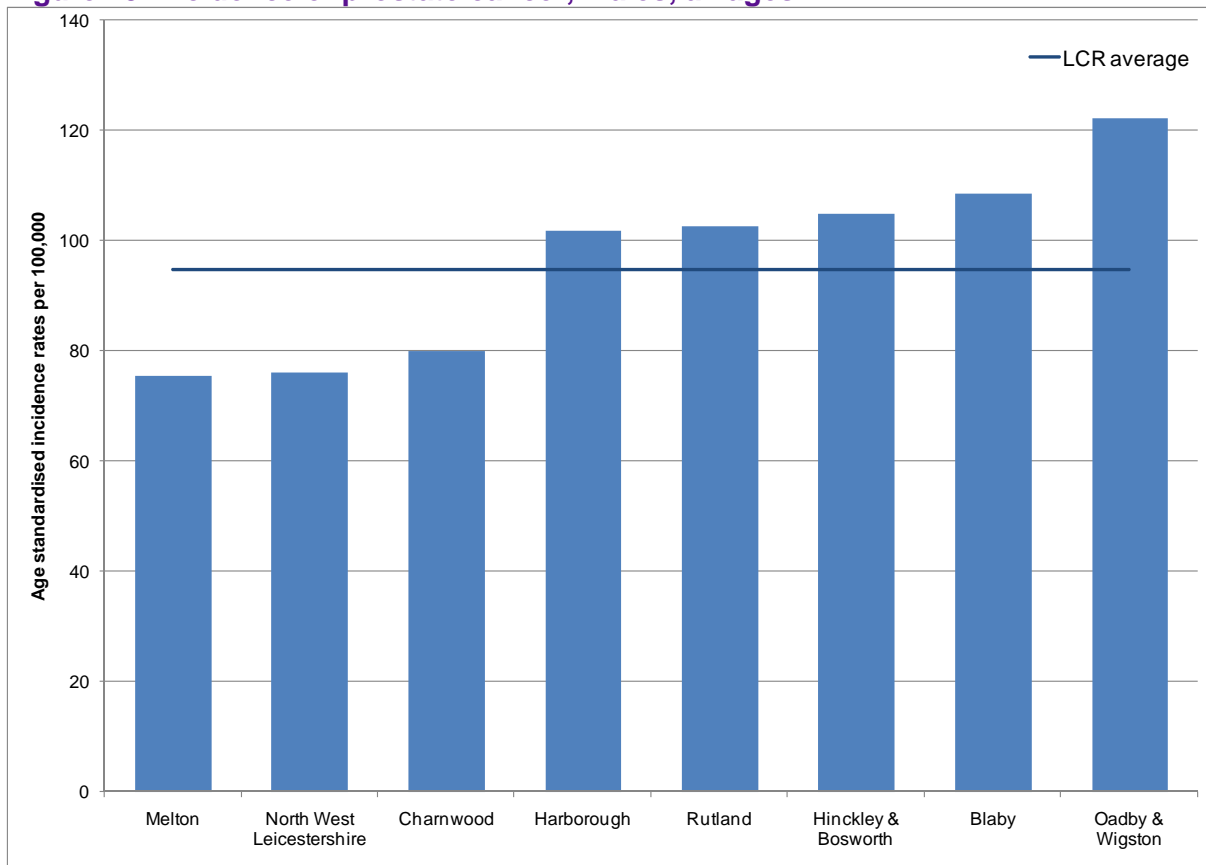
<sup>11</sup> Trent Cancer Registry, Cancer Factsheets

## 4.5 Prostate Cancer

Figure 13 illustrates the incidence of prostate cancer across the districts, the numbers are included in Table 8. This shows:

- Oadby & Wigston has the highest incidence of prostate cancer (122.2 per 100,000) which is higher than the LCR average.
- Harborough, Rutland, Hinckley & Bosworth and Blaby all have higher incidence than the PCT average.
- Melton has the lowest incidence of prostate cancer. North West Leicestershire and Charnwood also have lower incidence than the LCR average.

**Figure 13: Incidence of prostate cancer, males, all ages<sup>12</sup>**



**Table 8: Incidence of prostate cancer, males, all ages**

	Males	
	ASIR	Numbers
Melton	75.6	24
North West Leicestershire	76.1	43
Charnwood	80	73

<sup>12</sup> Trent Cancer Registry , Cancer Factsheets

	Males	
	ASIR	Numbers
Harborough	101.9	51
Rutland	102.6	25
Hinckley & Bosworth	104.9	68
Blaby	108.6	61
Oadby & Wigston	122.2	43
<b>NHS Leicestershire County &amp; Rutland</b>	<b>94.7</b>	<b>390</b>

#### 4.6 Mortality from All Cancers, All Ages

Table 9 details the cancer mortality rates for all ages between 2005 and 2007. Between 2005 and 2007 4,728 people in Leicestershire County and Rutland died from cancer. This is 27% of all deaths in Leicestershire County and Rutland.

2,422 deaths were in all ages, this is approximately 51% of the cancer deaths. 43% of all deaths to all ages (5,647 total deaths) were due to cancer.

Mortality rates from cancer for all ages and for people are significantly lower in Leicestershire County and Rutland than the England average.

**Table 9: Mortality from Cancer 2005-07 Pooled** <sup>13</sup>

	PERSONS – ALL AGES			
	Observed	Directly Standardised Rate	95% CL	
			LOWER	UPPER
ENGLAND	380,744	175.55	174.96	176.13
Leicestershire County and Rutland	4,728	158.14	153.46	162.81
Leicestershire	4,456	158.78	153.94	163.61
Rutland	272	149.52	130.55	168.48
Blaby	645	157.53	144.93	170.14
Charnwood	967	146.59	137.03	156.14
Harborough	585	158.82	145.52	172.11
Hinckley and Bosworth	735	153.8	142.29	165.31
Melton	369	162.63	145.31	179.96
North West Leicestershire	704	179.33	165.61	193.05
Oadby and Wigston	451	167.43	151.09	183.78

Source: Compendium of Clinical and Health Indicators, The NHS Information Centre

<sup>13</sup> NCHOD. <http://www.nchod.nhs.uk>

#### 4.6.1 Mortality Trends for Males

Figure 14: Mortality from all cancers, all ages, males, 1993 to 2008

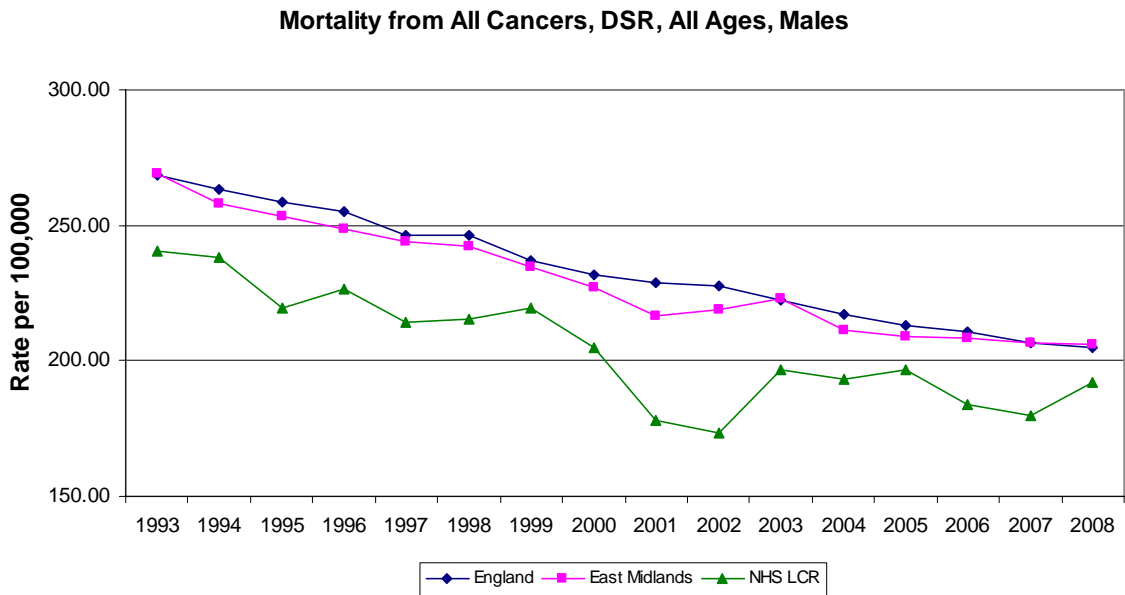


Figure 14 shows male mortality from all cancers in LCR is below the East Midlands and England rate.

Figure 15: Mortality from Prostate Cancer 1993 – 2008

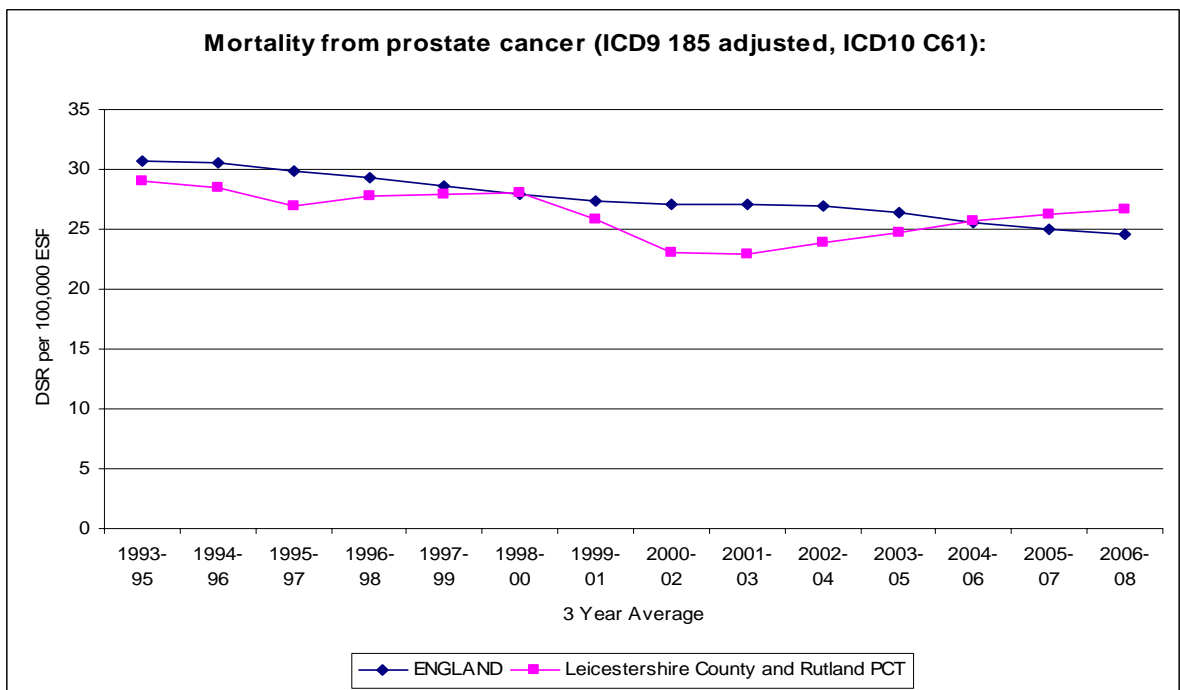


Figure 15 shows prostate cancer mortality for LCR in 2005-07 is above the England rate. From 2001-03 to 2005-07 LCR has shown an increase in the mortality rate rather than a decrease like England.

#### 4.6.2 Mortality Trends for Females

**Figure 16: Mortality from all cancers, all ages, females, 1993 to 2008**

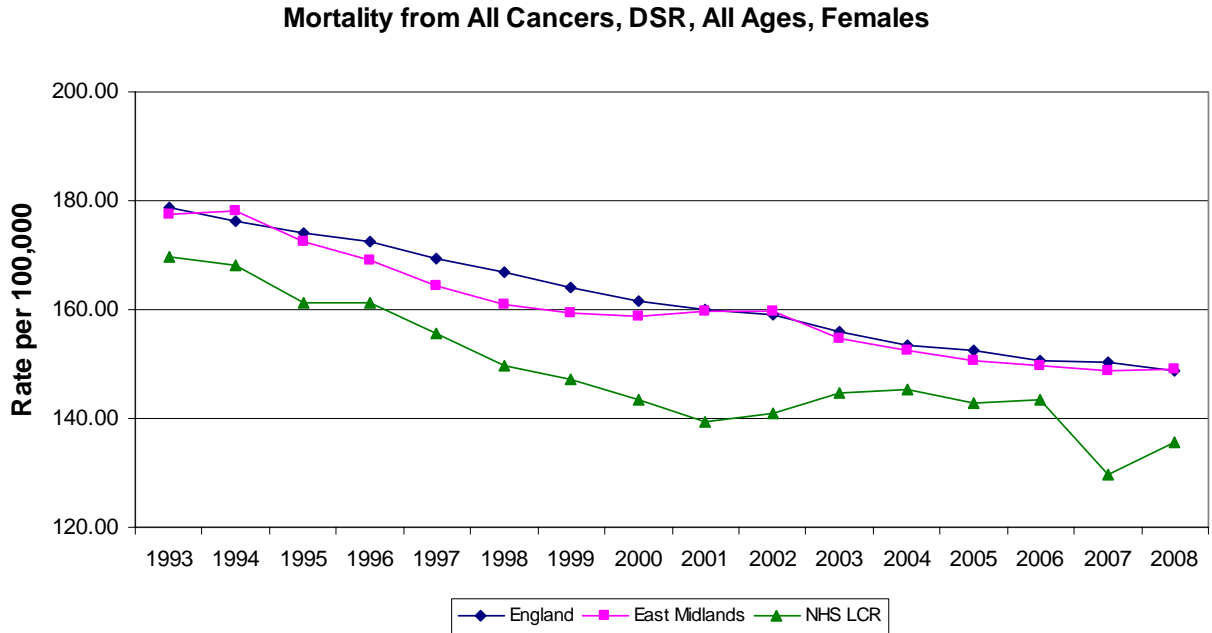


Figure 16 shows female mortality from all cancers in LCR is below the East Midlands and England rate.

**Figure 17: Mortality from Cervical Cancer 1993 - 2008**

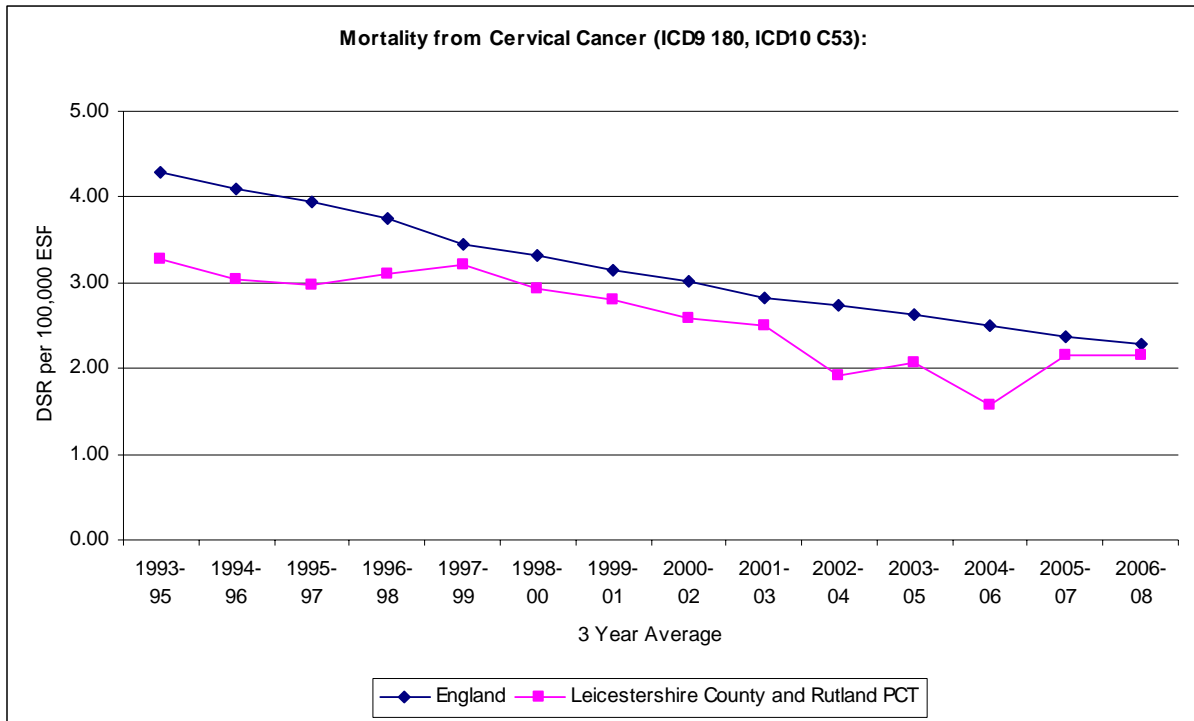


Figure 17 shows cervical cancer mortality for LCR is not consistent with England trend. From 2004-06 to 2005-07 LCR has shown an increase in mortality where as England has had a downward trend from 1993-95 to 2005-07.

**Figure 18: Mortality from Breast Cancer 1993 - 2008**

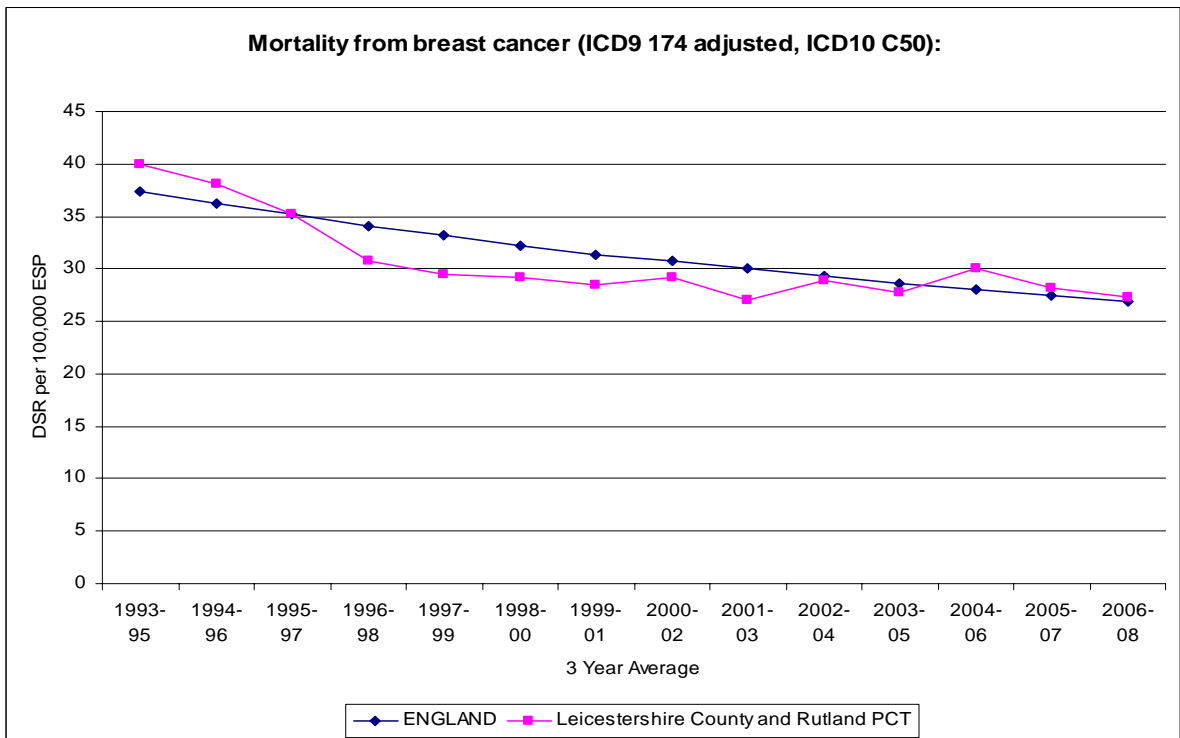


Figure 18 shows breast cancer mortality for LCR has a similar trend to England. However, in 2004-06 LCR mortality rate increased. In 2005-07 LCR rate shows a decrease in mortality rate.

**4.6.3 Mortality All Persons**

**Figure 19: Mortality from Lung Cancer 1993 – 2007**

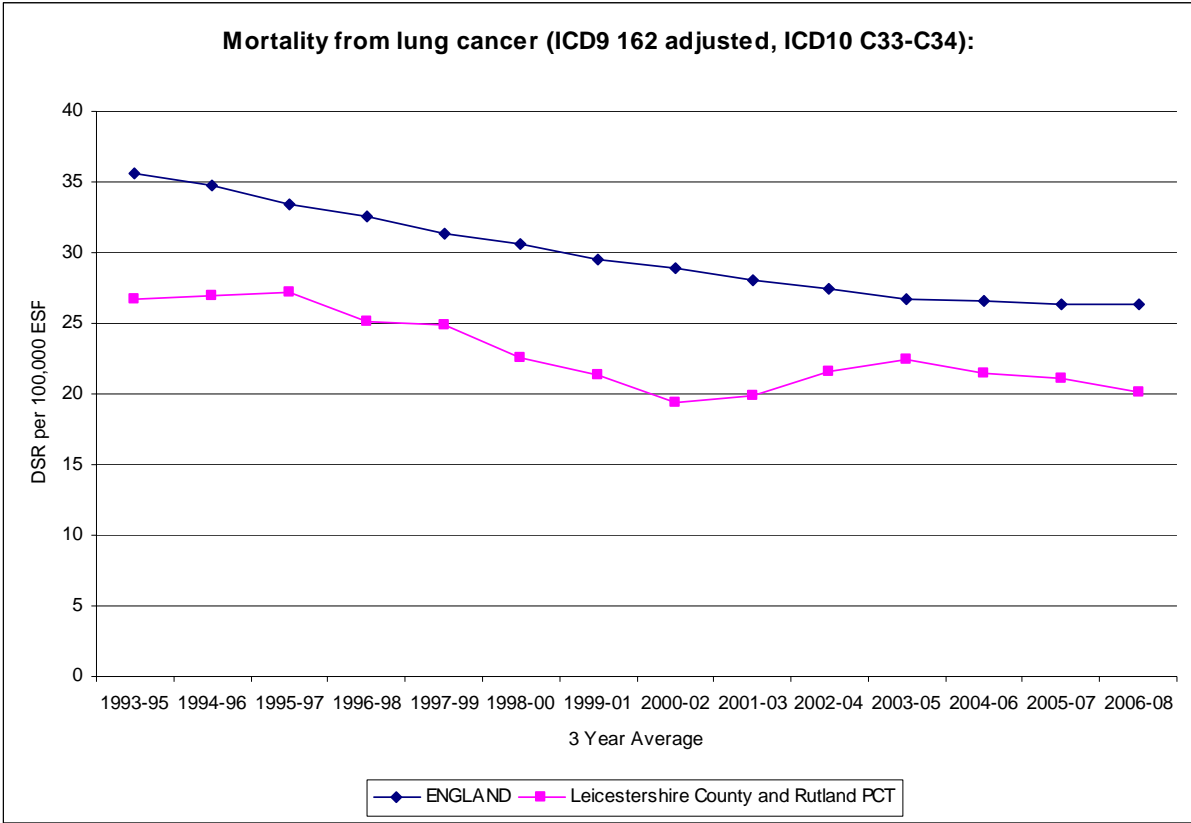
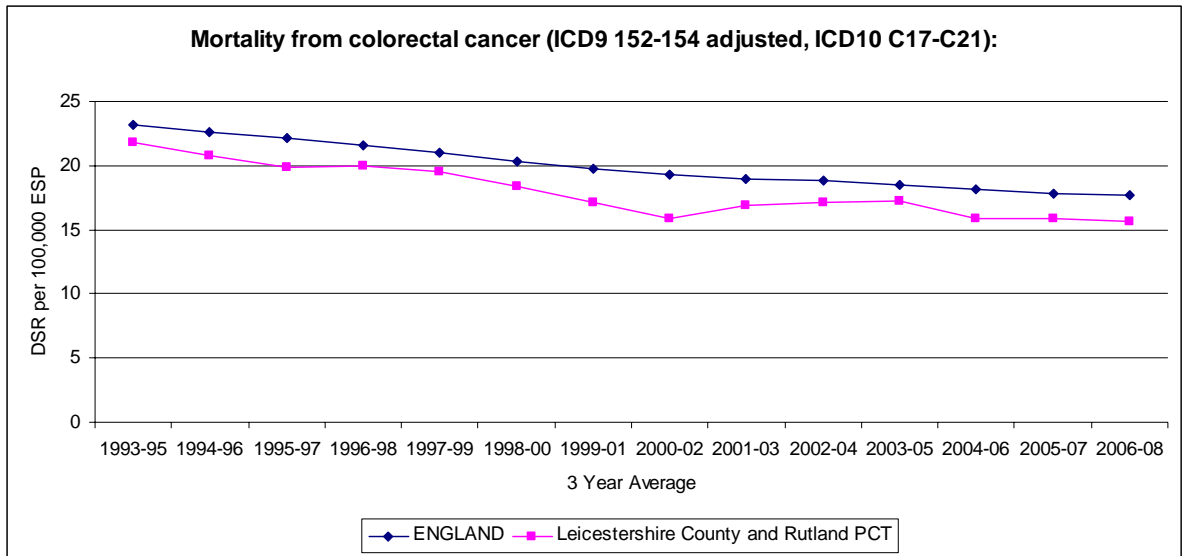


Figure 19 shows that lung cancer mortality for LCR has a similar trend to England.

**Figure 20: Mortality from Colorectal Cancer 1993 – 2007**

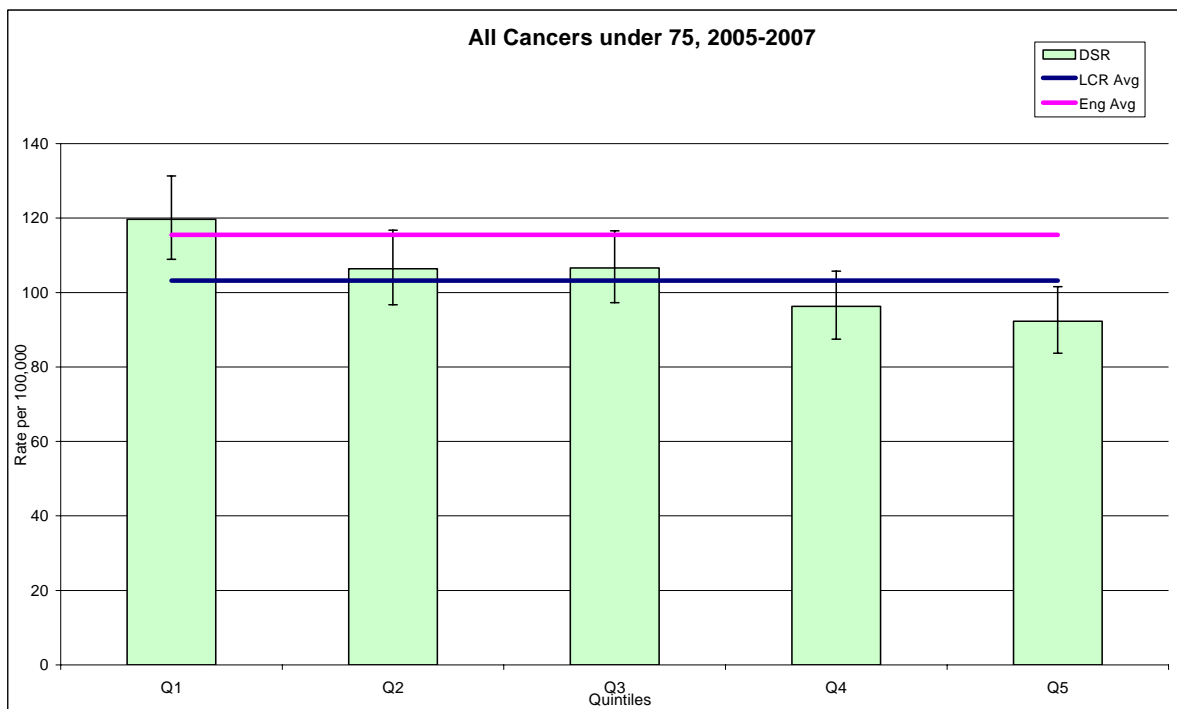


**Figure 20 shows colorectal cancer mortality for LCR has a similar trend to England.**

#### 4.6.4 Mortality and Deprivation

People who experience material disadvantage, poor housing, lower educational attainment, insecure employment or homelessness are among those more likely to suffer poorer health outcomes and an earlier death compared with the rest of the population. For many types of cancer, there are known to be socio-economic differentials in incidence and mortality. Figure 21 and 22 illustrate the differential premature mortality rates experienced by quintile of deprivation. People in the most deprived areas of Leicestershire County and Rutland are over 30% more likely to die prematurely from cancer than people living in the least deprived areas. See Appendix 1 for various cancer types by quintile of deprivation.

**Figure 21: Variations in Cancer Mortality Rates for Under 75's by Quintile of Deprivation**



**Figure 22: Variations in Cancer Mortality Rates for All Ages by Quintile of Deprivation**

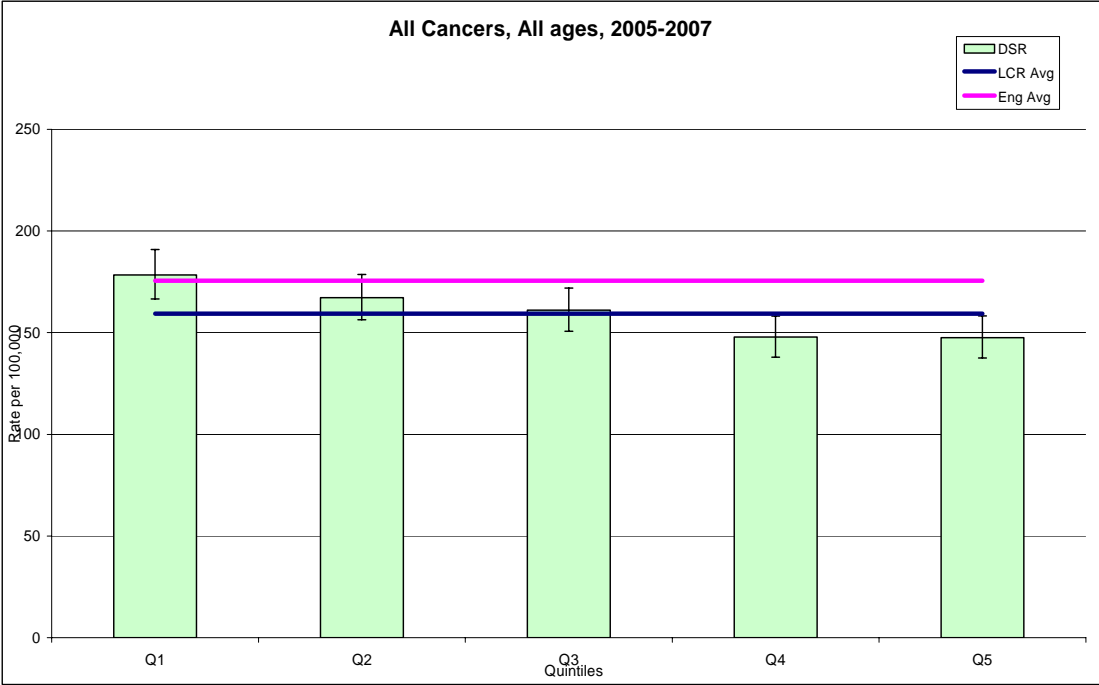
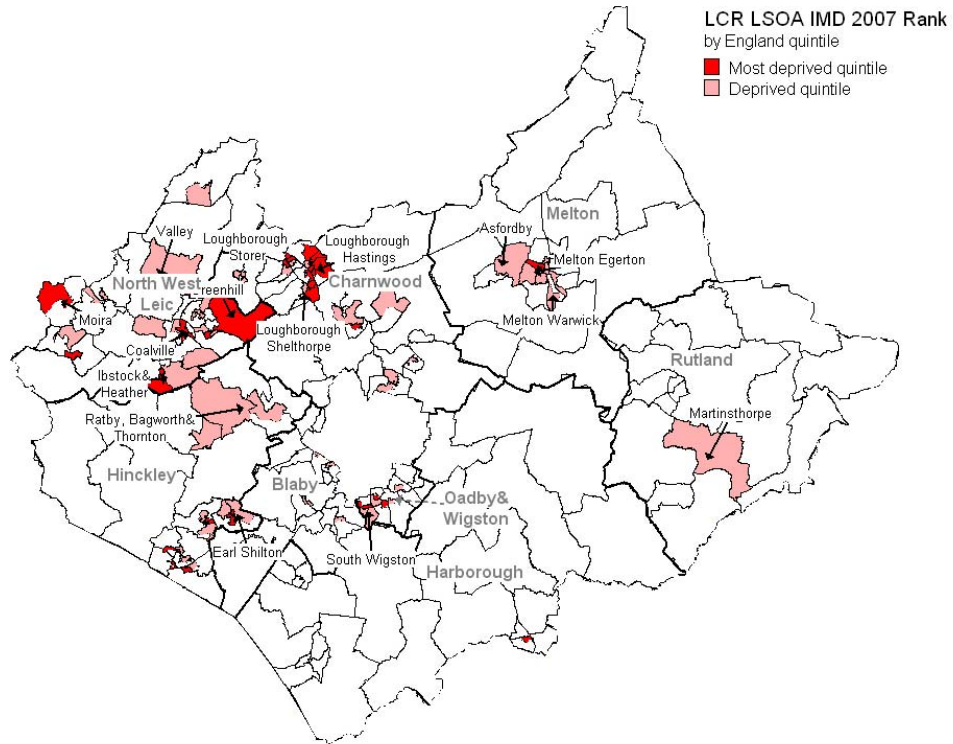


Figure 23 shows that a small number of lower super output areas (LSOA's) within LCR fall into the top 40% most deprived LSOAs in England.

**Figure 23: IMD 2007 for NHS LCR grouped by national quintiles**



#### 4.7 Age and Cancer

Figure 24: Cancer Mortality DSR, 2005-07, All Ages

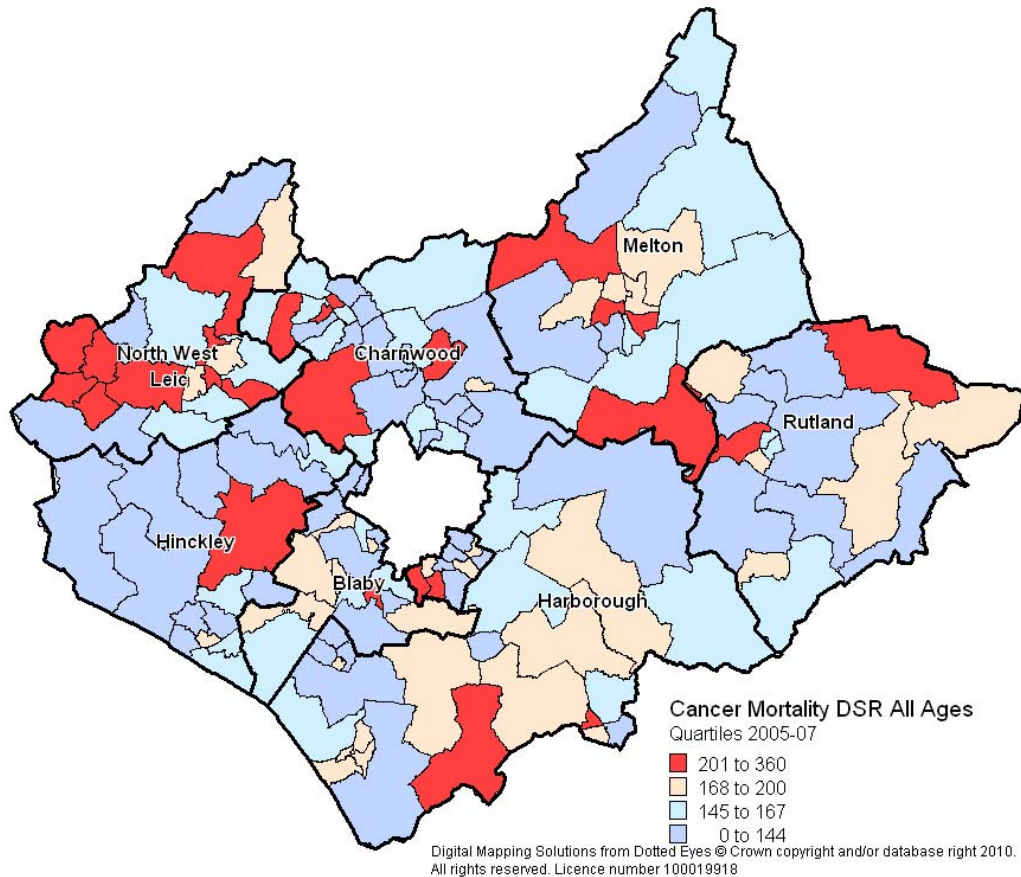


Figure 24 illustrates the variation in cancer mortality. Appendix 2 shows the different types of cancer mortality by DSR. It shows:

- Bardon (NWL) has the highest mortality rate for all cancers (359.1). Bardon also has the highest mortality rate for lung cancer (149.1).
- Bosworth (Harborough) has the highest mortality for breast cancer (207.1).
- Broughton Astley – Astley (Harborough) has the highest mortality rate for colorectal cancer (80.30).
- Whissendine (Rutland) has the highest mortality rate for prostate cancer (138.3).

## 5 Incidence and Mortality Under 75 years of age

### 5.1 Incidence Rates

#### 5.1.1 Incidence from All Cancers, Under 75 years

**Table 10: Incidence from Cancer 2004-06**

	<b>Males</b>	<b>Females</b>	<b>Persons</b>
NHS LCR	277.40	288.03	281.95
East Midlands	292.21	302.12	298.23
England	297.74	291.42	293.38

Table 10 demonstrates that NHS LCR has incidence rates that are below East Midlands and England rates.

### 5.2 Mortality Rates

#### 5.2.1 Mortality from All Cancers, Under 75 years

Table 11 details the cancer mortality rates for under 75 year olds between 2005 and 2007. 2,306 deaths were in the under 75 year olds. This is nearly 50% of the cancer deaths. 40% of all deaths to under 75 year olds (5,647 total deaths) were due to cancer.

Mortality rates from cancer for under 75 years are significantly lower in Leicestershire County and Rutland than the England average.

**Table 11: Mortality from Cancer 2005-07 Pooled** <sup>13</sup>

	<b>PERSONS - Under 75 years</b>			
	Observed	Directly Standardised Rate	95% CL	
			LOWER	UPPER
ENGLAND	186,020	115.48	114.96	116.01
Leicestershire County and Rutland	2,306	101.28	97.13	105.44
Leicestershire	2,180	101.78	97.48	106.07
Rutland	126	95.57	78.44	112.71
Blaby	317	100.77	89.59	111.95
Charnwood	478	94.51	86	103.01
Harborough	298	103.59	91.77	115.42
Hinckley and Bosworth	344	94.75	84.68	104.82
Melton	179	104.99	89.51	120.47
North West Leicestershire	357	117.91	105.62	130.21
Oadby and Wigston	207	106.45	91.72	121.18

## 6 Lifestyle Factors associated with Cancer

There are a number of lifestyle risk factors with different combinations being associated with cancers, these are outlined in Table 12.

It has been estimated that 50% of cancer is preventable, for dramatic reductions in cancer incidence, widespread lifestyle changes are necessary.

**Table 12: Modifiable Risk Factors for Cancer<sup>14</sup>**

Cancer Risk Reduction Benefits	Prevention Strategy				
	Avoid Tobacco	Be Physically Active	Maintain a Healthy Weight	Eat a Healthy Diet	Limit Alcohol
Bladder	✓			✓	
Breast		✓	✓	✓	✓
Cervix	✓				
Colorectal	✓	✓	✓	✓	✓
Oesophagus	✓		✓	✓	✓
Kidney	✓		✓		
Larynx	✓			✓	✓
Lung	✓			✓	
Oral	✓			✓	✓
Pancreas	✓			✓	
Prostate	✓			✓	
Stomach				✓	
Uterus (exlc. Cervix)			✓		

<sup>14</sup> Table 16 Modifiable Risk Factors: Potential Cancer Risk Reductions from [http://www.cancer.ca/canada-wide/about%20cancer/cancer%20statistics/canadian%20cancer%20statistics/special%20topics/progress%20in%20cancer%20prevention%20modifiable%20risk%20factors.aspx?sc\\_lang=en#ccsfix](http://www.cancer.ca/canada-wide/about%20cancer/cancer%20statistics/canadian%20cancer%20statistics/special%20topics/progress%20in%20cancer%20prevention%20modifiable%20risk%20factors.aspx?sc_lang=en#ccsfix)

## 6.1 Reducing the Risk of Cancer

Smoking is the biggest single preventable risk factor for cancer, and it disproportionately affects those already disadvantaged by poverty.<sup>1</sup>

It is less well known that a poor diet is the second largest risk factor for cancer. Increasing fruit and vegetable consumption is the second most effective strategy to reduce the risk of cancer, after reducing smoking.<sup>1</sup> People who do not eat fruit and vegetables regularly are at a greater risk of getting several common cancers.<sup>1</sup>

**Figure 25: Map of Smoking Clients, 2007-08**

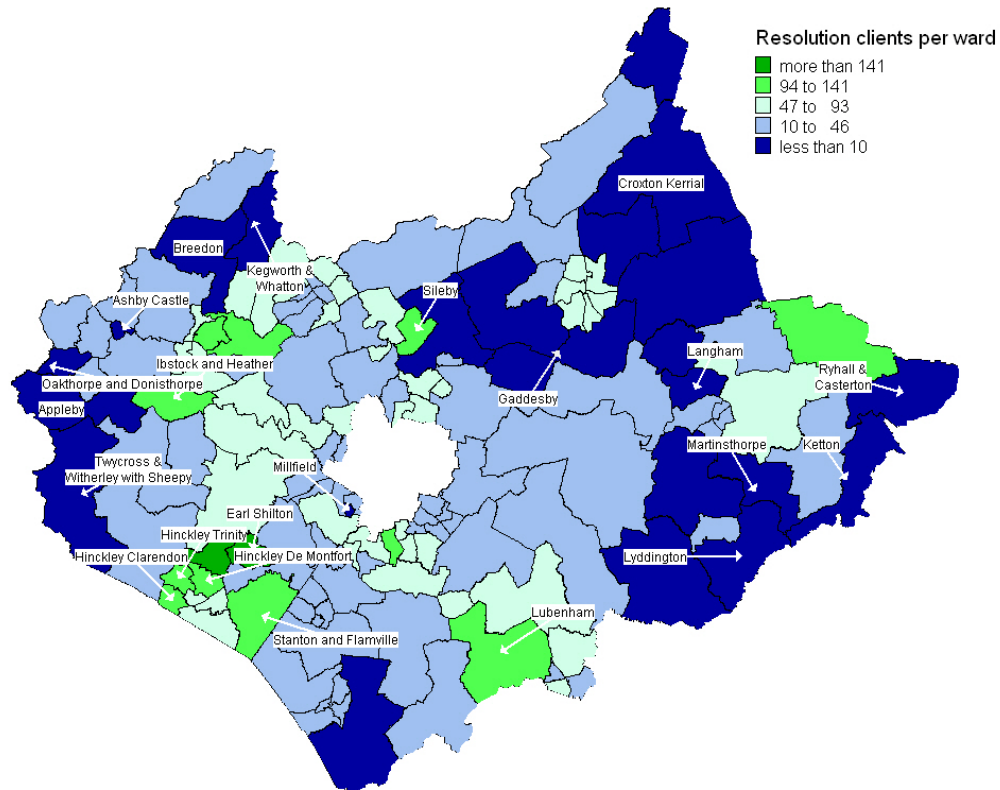


Table 13 illustrates the wards with the highest number of smokers accessing the smoking service (resolution). Smoking habits are associated with deprivation, with a higher smoking prevalence found in low income, manual and economically inactive communities.

**Table 13: Highest Smoking Clients, Ward Level DSR, 2005-2007**

Ward	Deprivation 2007	Lung Cancer Mortality	Smoking Prevalence
Sileby	13.2	64.0	29.9
Whitwick	13.9	41.7	24.7
Greenhill	28.0	38.6	28.8
South Wigston	17.9	44.4	31.2
Lubenham	11.4	30.2	19.8
Stanton and Flamville	7.5	28.7	19.1
Hinckley De Montfort	9.0	12.9	20.6
Ibstock & Heather	16.5	46.6	25.3

Appendix 2 shows synthetic estimates of smoking by ward and use: needs ratios for smoking at a ward level. The use:need ratios look at the estimated number of smokers in a particular group and compares them against the number of service users in that group. It is a way of exploring whether service use is linked to need by taking smoking prevalence as the measure of need in that area

## 7 Diagnosing Cancer

### 7.1 Screening Programmes

#### 7.1.1 Cervical Cancer Screening

The NHS Cervical Screening Programme (NHSCSP) aims to reduce the number of women who develop invasive cervical cancer and the number of women who die from it. Nationally, over the last ten years the percentage of eligible women who have been screened at least once in the previous 5 years (coverage) has fallen to 78.6% compared with 79.2% last year and 82.5% in 1998.

#### 7.1.2 Breast Cancer Screening

Breast cancer is one of the top 10 causes of death for women in England.<sup>15</sup>

The NHS Breast Screening Programme is now saving 1,400 lives every year in England. The programme provides free breast screening every three years for all women in the UK aged 50 and over. Around one-and-a-half million women are screened in the UK each year. Women aged between 50 and 70 are now routinely invited.<sup>16</sup>

As at March 2008, 84.6% of eligible women within NHS LCR had been screened in the last three years, this exceeds the national standard of 70% of women to be screened in three years.<sup>16</sup> NHS LCR has the highest coverage of breast cancer screening in the region.<sup>16</sup>

#### 7.1.3 Bowel Cancer Screening

Bowel cancer is the third most common cancer in the UK, with approximately 100 people every day being diagnosed with it.<sup>16</sup> Around half of people diagnosed with bowel cancer survive for at least five years after diagnosis and research suggests over 80% of bowel cancer patients will survive for more than five years if diagnosed at the earliest stage.<sup>16</sup>

The NHS Bowel Cancer Screening Programme offers screening every two years to all men and women aged 60 to 69. People over 70 can request a screening kit by calling a freephone helpline when the programme reaches their area.<sup>15</sup>

#### 7.1.4 Prostate Cancer Screening

Prostate cancer is an important health problem, however evidence does not support population screening for prostate cancer. The UK National Screening Committee has recommended that a prostate cancer screening programme should not be introduced in England at this time.<sup>17</sup>

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<sup>15</sup> JSNA Chapter Cancer. NHS LCR

<sup>16</sup> JSNA Board Report: Cancer. January 2010

<sup>17</sup> <http://www.cancerscreening.nhs.uk/prostate/faqs.html#uk-wide>

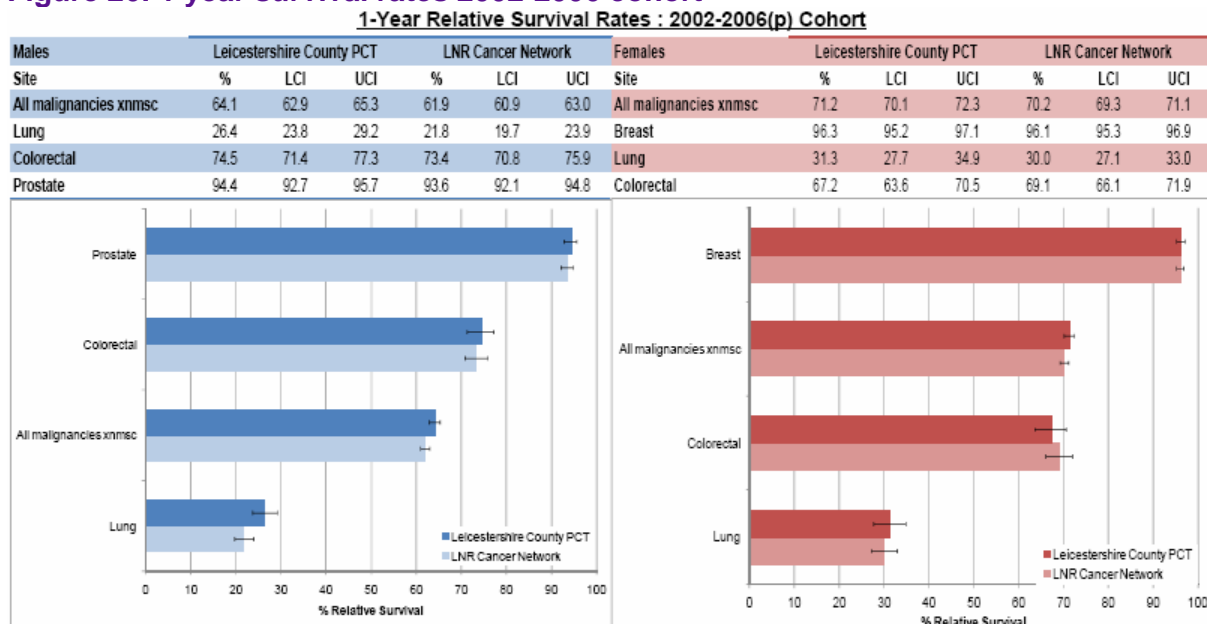
## 8 Cancer Survival

Cancer survival data has been published by the Trent Cancer Registry at a PCT level. This data is comparable with data for the Leicestershire Northamptonshire and Rutland Cancer Network. There is no PCT data available for survival that is comparable at a national level.

Figure 26 illustrates relative cancer survival at 1 year for men and women for NHS LCR. This shows us that:

- 64% of men diagnosed with cancer are alive at 1 year
- 71.2% of women diagnosed with cancer are alive at 1 year
- For men, 1 year survival is highest for prostate cancer at 94.4%, it is 74.5% for colorectal cancer and drops to 26.4% for lung cancer
- For women, 1 year survival is highest for breast cancer at 96.3%, it is 67.2% for colorectal cancer and drops to 31.3% for lung cancer

**Figure 26: 1 year survival rates 2002-2006 cohort<sup>18</sup>**

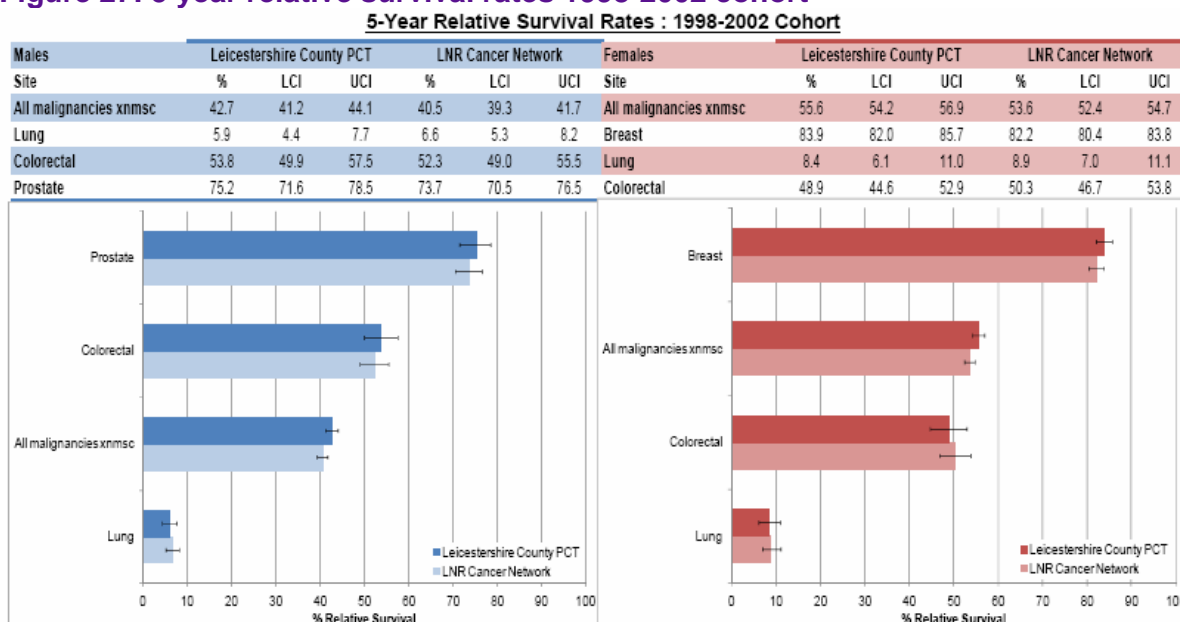


5 year relative survival rates are illustrated in Figure 27. This shows us that:

- 42.7% of men diagnosed with cancer are alive at 5 years
- 55.6% of women diagnosed with cancer are alive at 5 years
- For men, 5 year survival is highest for prostate cancer at 75.2%, it is 53.8% for colorectal cancer and drops to 5.9% for lung cancer
- For women, 5 year survival is highest for breast cancer at 83.9%, it is 48.9% for colorectal cancer and drops to 8.4% for lung cancer

<sup>18</sup> Trent Cancer Registry – Cancer Factsheet; [www.empho.org.uk](http://www.empho.org.uk)

**Figure 27: 5 year relative survival rates 1998-2002 cohort**



## 9 Actions required

The report of the All Party parliamentary Group on Cancer's Inquiry into Inequalities in Cancer highlights the following priority actions:

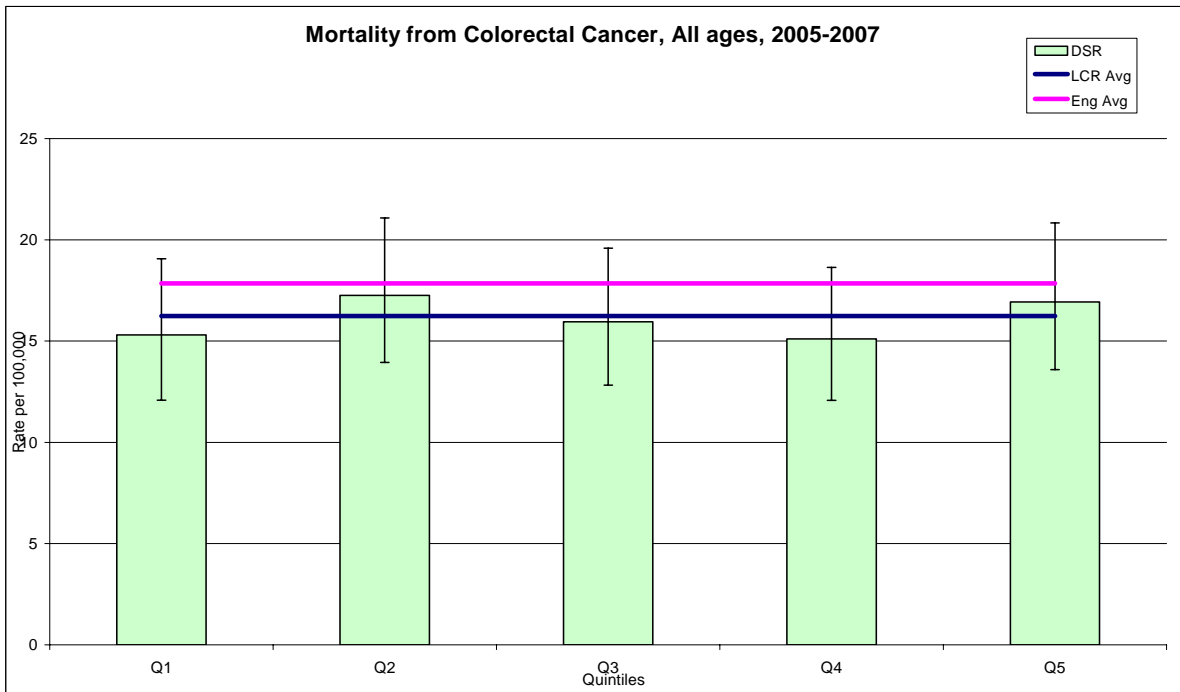
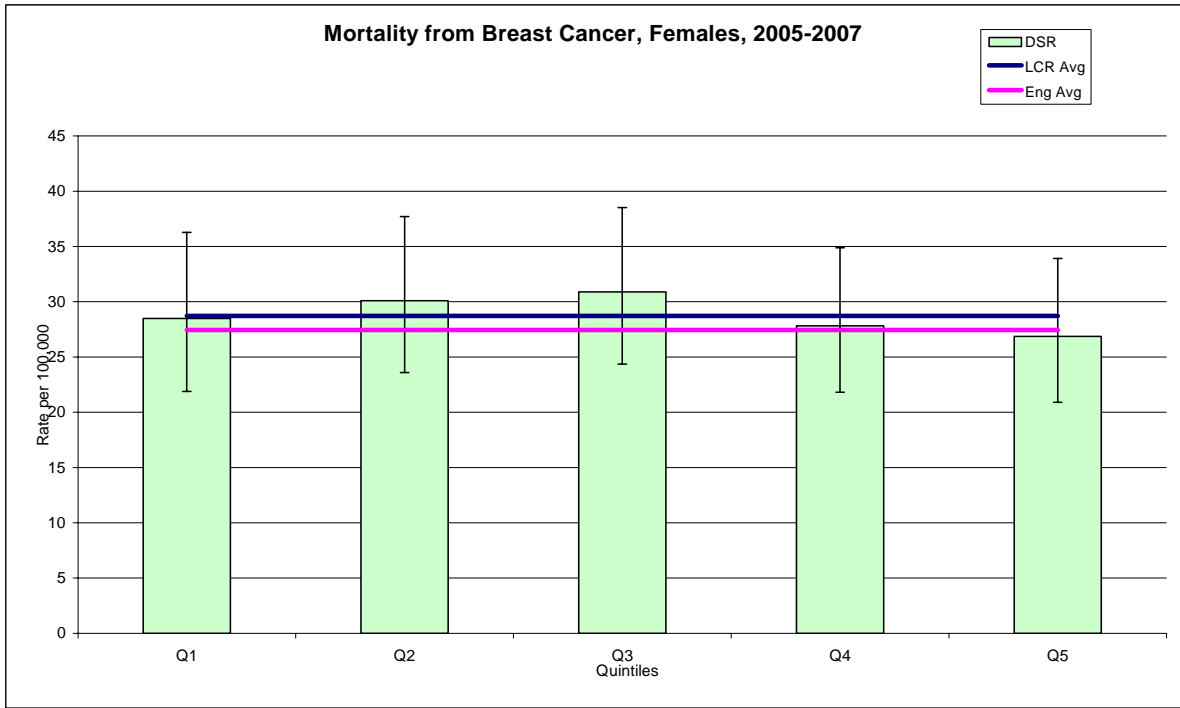
- Action 1:** A new indicator for one year survival rates for all.
- Action 2:** New measures to improve prevention and early detection.
- Action 3:** Better collection of data about cancer patients.
- Action 4:** Speed up the introduction of the cancer patient experience survey.
- Action 5:** Provide better quality information for all patients
- Action 6:** Provide more help specifically for people with rarer cancers
- Action 7:** Promote further research into the causes of cancer inequalities
- Action 8:** Ensure all cancer patients receive a regular care needs assessment

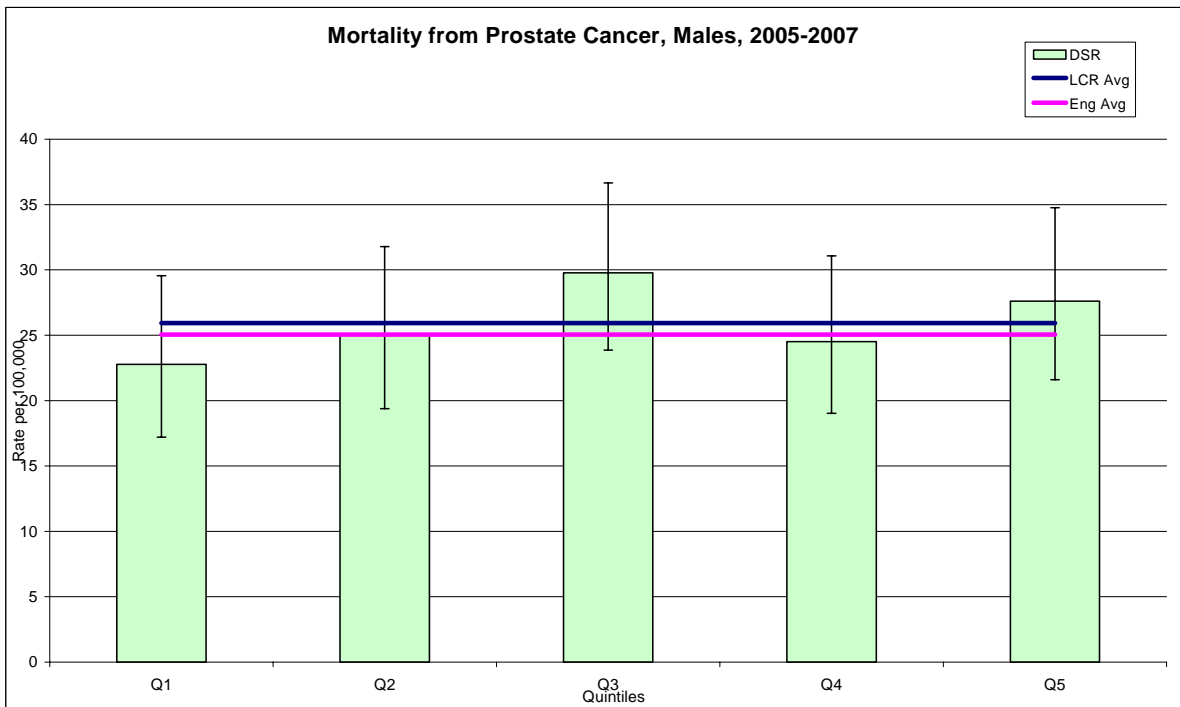
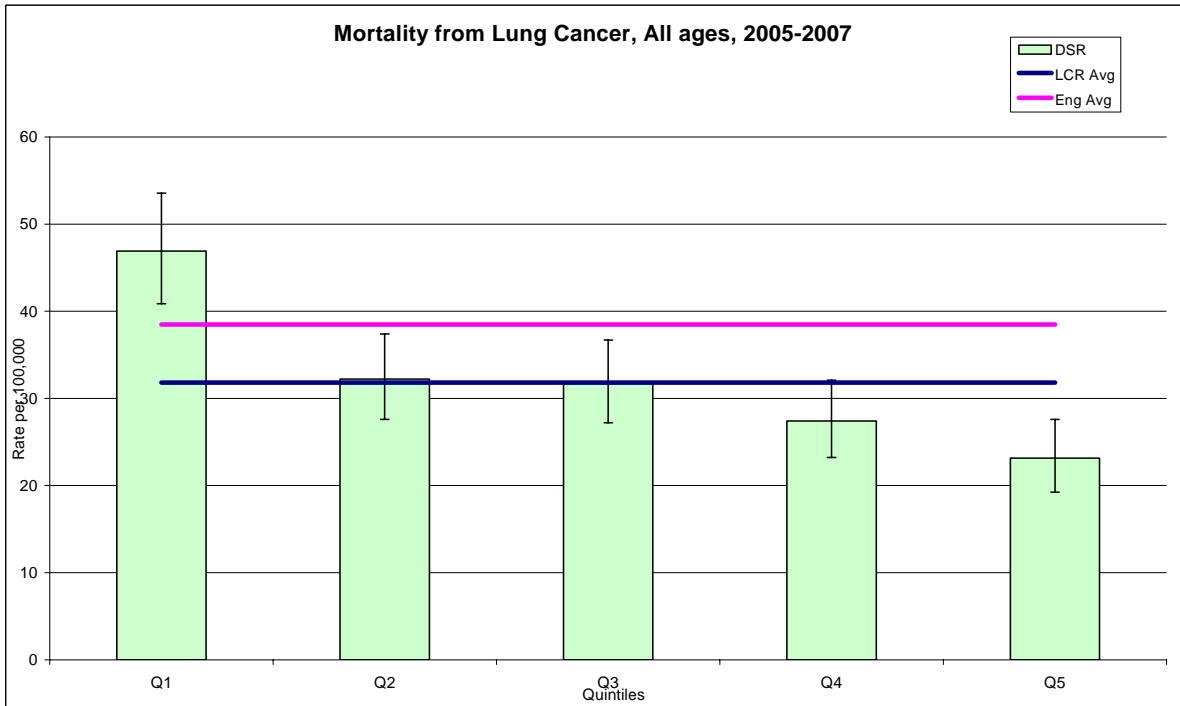
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**Appendix 1: Directly Standardised Cancer Mortality Rates by Quintile of Deprivation**





## Appendix 2: Mortality Common Cancers, Ward Level DSR, All Ages, 2005-2007

Significantly higher than LCR average, Significantly lower than LCR average

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
Rutland	Braunston and Belton	140.1	10.4	38.4	55.9	0.0	0.0	65.9	14.3	4.03%	Lowest 0-20%
Rutland	Cottesmore	86.5	5.5	0.0	0.0	10.5	17.9	63.7	19.9	2.24%	20-40%
Rutland	Exton	140.7	11.4	27.2	0.0	0.0	84.6	59.8	22	23.65%	40-60%
Rutland	Greetham	227.5	14.0	46.0	42.2	15.5	0.0	177.6	18.8	33.16%	20-40%
Rutland	Ketton	117.5	8.5	16.4	22.9	0.0	38.9	55.5	13.8	0.96%	Lowest 0-20%
Rutland	Langham	97.2	5.3	11.4	0.0	34.1	0.0	50.2	16.2	2.84%	20-40%
Rutland	Lyddington	160.3	10.1	32.5	28.1	18.4	0.0	102.9	12.2	0.74%	Lowest 0-20%
Rutland	Martinsthorpe	50.2	15.9	9.6	15.2	21.4	0.0	0.0	15.3	3.33%	Lowest 0-20%
Rutland	Normanton	161.8	5.9	15.7	25.2	21.0	37.5	101.7	16.6	3.17%	20-40%
Rutland	Oakham North East	159.7	5.6	47.1	49.4	0.0	24.3	122.5	17.7	5.24%	20-40%
Rutland	Oakham North West	203.0	9.0	20.2	0.0	33.0	53.8	134.0	25.1	5.08%	60-80%
Rutland	Oakham South East	153.6	6.2	12.9	50.0	11.9	20.9	112.1	16.9	3.57%	20-40%
Rutland	Oakham South West	172.2	4.1	14.0	37.0	0.0	0.0	112.9	18.9	4.28%	20-40%
Rutland	Ryhall and Casterton	189.9	6.9	30.1	0.0	17.4	16.3	139.2	17.6	0.24%	20-40%
Rutland	Uppingham	169.0	7.3	29.2	22.8	26.9	28.9	126.7	19.5	2.08%	20-40%
Rutland	Whissendine	186.9	4.4	23.5	24.4	9.9	138.3	60.7	12.3	5.95%	Lowest 0-20%
Blaby	Blaby South	135.5	9.9	28.3	16.0	10.0	9.6	83.2	22.1	4.80%	40-60%
Blaby	Cosby with South Whetstone	137.6	5.2	25.4	25.3	13.9	13.0	99.6	18.9	5.57%	20-40%
Blaby	Countesthorpe	199.4	6.7	36.4	71.5	20.4	33.1	132.3	19.2	8.41%	20-40%
Blaby	Croft Hill	184.3	9.3	36.4	0.0	42.1	76.6	108.8	18.5	5.91%	20-40%
Blaby	Ellis	130.8	6.7	15.8	43.4	20.6	14.5	90.6	19.4	4.56%	20-40%
Blaby	Enderby and St John`s	178.2	13.4	57.3	4.7	27.5	8.6	140.7	27	6.09%	60-80%
Blaby	Fairestone	138.0	9.8	18.7	17.8	5.5	44.8	94.8	19.3	2.26%	20-40%
Blaby	Forest	169.3	7.8	42.0	30.8	12.2	46.5	102.9	17.6	2.12%	20-40%
Blaby	Millfield	169.4	9.4	52.8	38.4	11.9	24.1	120.7	19.6	0.82%	20-40%
Blaby	Muxloe	140.2	6.9	22.2	26.2	13.0	13.8	110.2	15.1	1.86%	Lowest 0-20%
Blaby	Narborough and	150.1	6.0	26.5	7.6	9.0	50.7	84.7	20.4	4.73%	40-60%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
	Littlethorpe										
Blaby	Normanton	200.9	6.4	50.8	45.8	10.5	30.3	136.3	22.7	5.11%	40-60%
Blaby	North Whetstone	223.3	8.2	43.7	24.2	31.9	0.0	145.8	23.1	5.76%	40-60%
Blaby	Pastures	178.5	4.8	53.4	13.2	12.4	0.0	97.8	18.6	4.31%	20-40%
Blaby	Ravenhurst and Fosse	136.0	12.9	27.7	22.7	9.7	8.8	96.6	25.5	1.14%	60-80%
Blaby	Saxondale	150.7	8.7	26.9	34.4	4.7	24.4	67.5	22	5.83%	40-60%
Blaby	Stanton and Flamville	159.3	7.5	28.7	49.4	18.5	42.9	86.4	19.1	9.55%	20-40%
Blaby	Winstanley	162.6	10.7	36.0	23.0	10.6	21.2	129.1	25.5	1.87%	60-80%
Charnwood	Anstey	160.4	10.1	37.6	11.2	15.0	11.2	74.8	22.8	4.96%	40-60%
Charnwood	Barrow and Sileby West	155.8	7.3	40.6	26.3	13.6	64.3	99.5	20.2	5.82%	20-40%
Charnwood	Birstall Wanlip	148.2	4.7	36.4	41.7	17.6	12.6	101.0	16.2	4.42%	20-40%
Charnwood	Birstall Watermead	107.8	9.2	26.5	14.2	17.7	8.9	72.9	22.5	3.97%	40-60%
Charnwood	East Goscote	183.3	6.1	32.2	18.0	23.3	33.9	131.2	19.8	4.27%	20-40%
Charnwood	Forest Bradgate	203.5	10.1	41.8	5.8	35.8	67.3	112.6	15	7.80%	Lowest 0-20%
Charnwood	Loughborough Ashby	229.7	15.1	30.9	54.2	6.0	45.6	169.6	33.8	1.64%	Highest 80-100%
Charnwood	Loughborough Dishley and Hathern	147.7	10.5	38.8	15.8	17.4	22.5	87.2	22.2	5.77%	40-60%
Charnwood	Loughborough Garendon	159.1	10.8	31.0	19.5	6.6	23.1	100.9	17.8	6.73%	20-40%
Charnwood	Loughborough Hastings	138.9	34.4	56.0	24.2	11.3	0.0	88.7	30.5	5.22%	Highest 80-100%
Charnwood	Loughborough Lemyngton	125.9	23.3	29.2	19.1	18.9	8.8	85.3	30.9	4.56%	Highest 80-100%
Charnwood	Loughborough Nanpantan	110.6	3.6	8.0	11.1	6.4	34.2	62.7	13.4	1.53%	Lowest 0-20%
Charnwood	Loughborough Outwoods	145.6	4.4	17.5	25.7	3.5	24.4	86.5	14	2.82%	Lowest 0-20%
Charnwood	Loughborough Shelthorpe	113.0	19.2	50.1	0.0	0.0	13.6	86.8	29.4	4.90%	Highest 80-100%
Charnwood	Loughborough Southfields	149.8	13.2	51.6	31.4	9.5	42.7	103.2	21	2.88%	40-60%
Charnwood	Loughborough Storer	204.9	19.2	30.5	93.6	17.9	0.0	134.7	32.6	1.97%	Highest 80-100%
Charnwood	Mountsorrel	121.8	9.6	28.1	28.5	6.7	32.6	64.0	23.7	4.99%	40-60%
Charnwood	Queniborough	117.5	7.4	28.3	14.0	9.6	16.1	65.0	17.4	3.59%	20-40%
Charnwood	Quorn and Mountsorrel	98.3	8.6	10.3	13.7	18.3	35.3	62.9	16.9	3.60%	20-40%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
	Castle										
Charnwood	Rothley and Thurstaston	124.1	5.5	27.9	31.9	9.6	31.5	102.2	14.7	4.22%	Lowest 0-20%
Charnwood	Shepshed East	223.2	11.4	47.8	33.2	35.5	30.5	134.1	24.6	5.12%	40-60%
Charnwood	Shepshed West	146.3	11.1	37.1	7.0	8.4	35.2	105.7	25.4	5.77%	60-80%
Charnwood	Sileby	222.0	13.2	64.0	44.8	15.2	0.0	166.3	29.9	7.82%	Highest 80-100%
Charnwood	Syston East	129.0	10.7	26.9	10.7	10.4	16.4	94.8	24.8	5.98%	60-80%
Charnwood	Syston West	138.8	11.3	17.7	33.9	10.1	52.3	108.1	22.6	4.33%	40-60%
Charnwood	The Wolds	158.1	7.9	22.3	47.8	16.5	30.2	86.5	14.1	4.20%	Lowest 0-20%
Charnwood	Thurmaston	158.1	14.5	21.7	49.5	34.4	23.4	108.8	24.5	3.93%	40-60%
Charnwood	Wreake Villages	137.3	5.4	21.3	30.4	28.7	39.0	99.5	13.6	2.19%	Lowest 0-20%
Harborough	Billesdon	183.6	9.9	26.7	22.9	52.7	63.2	129.5	15.9	5.53%	Lowest 0-20%
Harborough	Bosworth	214.9	7.8	13.7	207.2	21.9	78.3	161.4	17.1	9.69%	20-40%
Harborough	Broughton Astley - Astley	178.5	3.8	13.7	0.0	80.3	0.0	163.8	23.8	6.65%	40-60%
Harborough	Broughton Astley - Broughton	84.2	2.4	26.6	33.2	22.4	0.0	87.8	16.9	4.42%	20-40%
Harborough	Broughton Astley - Primethorpe	142.7	7.3	14.7	58.5	0.0	0.0	96.0	21.5	5.79%	40-60%
Harborough	Broughton Astley - Sutton	119.8	4.4	19.1	13.7	0.0	54.5	36.3	19.7	6.51%	20-40%
Harborough	Dunton	119.2	5.6	38.6	15.5	0.0	19.3	75.7	15.7	4.46%	Lowest 0-20%
Harborough	Fleckney	143.1	5.6	31.0	21.6	35.4	26.6	87.1	20.7	9.61%	40-60%
Harborough	Glen	155.6	5.0	36.1	58.9	12.7	22.2	115.1	15.2	3.06%	Lowest 0-20%
Harborough	Kibworth	182.9	6.4	27.5	33.0	27.3	14.2	125.9	16.5	7.21%	20-40%
Harborough	Lubenham	168.2	11.4	30.2	10.9	27.2	27.4	75.6	19.8	22.95%	20-40%
Harborough	Lutterworth Brookfield	175.2	3.4	10.5	20.5	18.0	68.3	81.2	14.8	3.96%	Lowest 0-20%
Harborough	Lutterworth Orchard	180.8	8.4	37.4	7.2	36.6	45.6	121.2	20.7	3.17%	40-60%
Harborough	Lutterworth Springs	182.3	11.7	53.6	0.0	13.6	0.0	101.7	21.8	5.82%	40-60%
Harborough	Lutterworth Swift	172.4	8.5	14.8	29.0	19.2	0.0	66.6	23.2	5.44%	40-60%
Harborough	Market Harborough - Great Bowden and Arden	148.2	7.4	31.8	27.0	15.0	5.5	94.9	20.2	5.16%	20-40%
Harborough	Market Harborough - Little Bowden	122.2	3.9	16.6	21.0	0.0	14.9	96.7	18.7	5.23%	20-40%
Harborough	Market Harborough -	223.1	7.5	32.4	8.4	28.2	64.7	168.0	18.2	6.29%	20-40%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
	Logan										
Harborough	Market Harborough - Welland	196.7	12.3	44.5	32.2	21.1	18.2	155.4	23	8.04%	40-60%
Harborough	Misterton	104.0	7.9	11.2	22.3	16.9	40.1	55.9	15.1	3.00%	Lowest 0-20%
Harborough	Nevill	146.3	9.8	38.8	0.0	8.5	11.3	96.7	15.4	3.42%	Lowest 0-20%
Harborough	Peatling	176.8	8.0	40.0	23.0	17.7	76.7	122.9	13.5	6.55%	Lowest 0-20%
Harborough	Thurnby and Houghton	160.6	5.5	30.7	24.9	14.1	28.6	102.4	14.8	3.07%	Lowest 0-20%
Harborough	Tilton	140.6	11.6	0.0	45.0	14.8	34.7	58.7	15.2	7.44%	Lowest 0-20%
Harborough	Ullesthorpe	145.4	5.8	41.9	46.8	10.1	0.0	104.4	14.1	4.81%	Lowest 0-20%
Hinckley and Bosworth	Ambien	142.8	8.6	10.7	51.7	30.0	22.3	85.5	16.3	5.31%	20-40%
Hinckley and Bosworth	Barlestone Nailstone and Osbaston	154.7	8.8	44.2	57.4	34.3	34.7	89.7	21.3	5.52%	40-60%
Hinckley & Bosworth	Barwell	147.9	14.9	35.6	14.1	14.0	14.2	77.9	27.5	9.60%	60-80%
Hinckley & Bosworth	Burbage St Catherines and Lash Hill	148.2	15.4	33.7	52.6	10.9	3.2	86.7	22	7.50%	40-60%
Hinckley & Bosworth	Burbage Sketchley and Stretton	161.0	4.5	31.1	13.2	17.2	30.3	107.3	18.2	6.14%	20-40%
Hinckley & Bosworth	Cadeby Carlton & Market Bosworth with Shackerston	196.7	6.4	40.0	42.7	24.2	9.8	127.7	13.5	6.36%	Lowest 0-20%
Hinckley & Bosworth	Earl Shilton	144.7	15.4	45.0	9.0	12.3	19.7	96.9	27.1	8.81%	60-80%
Hinckley & Bosworth	Grobby	163.9	5.2	22.2	30.0	9.7	39.3	107.8	17.5	7.25%	20-40%
Hinckley & Bosworth	Hinckley Castle	200.5	13.9	34.6	47.2	22.8	24.6	134.0	26.6	6.36%	60-80%
Hinckley & Bosworth	Hinckley Clarendon	143.9	11.4	55.1	0.0	12.9	20.9	96.3	29.5	6.51%	Highest 80-100%
Hinckley & Bosworth	Hinckley De Montfort	119.9	9.0	12.9	16.6	7.2	19.5	72.9	20.6	7.33%	40-60%
Hinckley & Bosworth	Hinckley Trinity	131.4	16.3	34.7	23.2	7.6	13.2	82.8	28	7.30%	60-80%
Hinckley &	Markfield Stanton and	156.7	8.7	12.8	23.9	14.8	45.1	83.1	18.4	9.74%	20-40%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
Bosworth	Fieldhead										
Hinckley & Bosworth	Newbold Verdon with Desford and Peckleton	220.6	9.4	34.7	35.7	27.5	14.2	159.1	18.2	6.70%	20-40%
Hinckley & Bosworth	Ratby Bagworth and Thornton	125.2	11.7	26.5	12.5	15.8	5.5	75.7	25.1	6.36%	60-80%
Hinckley & Bosworth	Twycross and Witherley with Sheepy	112.8	11.2	0.0	52.3	7.1	0.0	64.8	15.1	0.52%	Lowest 0-20%
Melton	Asfordby	176.3	11.1	48.5	13.3	12.4	0.0	108.1	24.3	6.22%	40-60%
Melton	Bottesford	162.1	4.9	24.4	0.0	22.3	35.5	98.9	16.6	0.00%	20-40%
Melton	Croxton Kerrial	149.7	13.8	6.5	33.6	7.9	0.0	112.2	18	1.15%	20-40%
Melton	Frisby-on-the-Wreake	142.8	8.6	0.0	33.9	0.0	64.6	104.6	14.6	2.81%	Lowest 0-20%
Melton	Gaddesby	165.2	10.6	12.4	13.6	35.5	41.7	120.8	15.8	0.93%	Lowest 0-20%
Melton	Long Clawson and Stathern	141.8	9.0	6.2	30.7	4.8	15.4	76.6	15.8	2.53%	Lowest 0-20%
Melton	Melton Craven	209.9	11.6	28.1	67.9	33.6	0.0	158.3	22.3	8.95%	40-60%
Melton	Melton Dorian	119.5	9.1	27.1	13.2	10.8	59.4	61.2	23.7	7.02%	40-60%
Melton	Melton Egerton	201.6	20.5	62.2	52.3	21.2	18.9	139.5	32.5	6.72%	Highest 80-100%
Melton	Melton Newport	172.5	8.5	17.3	53.0	22.4	18.2	133.2	21.5	6.86%	40-60%
Melton	Melton Sysonby	169.0	8.7	56.8	8.0	18.8	8.5	111.6	21.1	7.31%	40-60%
Melton	Melton Warwick	150.3	11.8	15.8	54.7	5.6	20.9	119.1	22.6	9.99%	40-60%
Melton	Old Dalby	245.6	9.0	62.7	77.3	0.0	67.9	136.2	18.6	11.18%	20-40%
Melton	Somerby	205.8	11.9	8.0	37.9	12.2	84.1	101.0	16.8	4.52%	20-40%
Melton	Waltham-on-the-Wolds	177.8	7.1	20.0	6.0	14.2	18.2	80.4	14.8	3.86%	Lowest 0-20%
Melton	Wyndham	151.1	14.0	26.4	0.0	0.0	22.1	94.0	23.2	2.42%	40-60%
North West Leic	Appleby	134.7	8.1	31.5	16.2	5.5	62.8	87.4	14.8	0.78%	Lowest 0-20%
North West Leic	Ashby Castle	104.0	6.2	4.0	74.9	0.0	10.0	62.0	12.6	1.47%	Lowest 0-20%
North West Leic	Ashby Holywell	109.2	11.1	24.6	23.2	0.0	0.0	69.8	21.6	3.77%	40-60%
North West Leic	Ashby Ivanhoe	216.3	13.3	23.2	19.3	28.8	38.9	151.0	21	3.80%	40-60%
North West	Bardon	359.1	7.1	149.1	15.3	53.0	0.0	101.9	23.7	6.10%	40-60%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
Leic											
North West Leic	Breedon	226.4	10.1	96.4	67.1	13.8	25.6	164.5	16.8	0.91%	20-40%
North West Leic	Castle Donington	130.9	11.6	40.7	17.1	14.9	32.5	89.0	22.5	2.13%	40-60%
North West Leic	Coalville	226.8	20.5	47.8	22.2	35.2	37.8	153.9	33.3	5.44%	Highest 80-100%
North West Leic	Greenhill	157.5	28.0	38.6	31.3	3.6	32.9	83.9	28.8	6.46%	60-80%
North West Leic	Hugglescote	159.3	13.7	46.6	39.6	15.6	27.9	87.2	23.9	5.84%	40-60%
North West Leic	Ibstock and Heather	165.8	16.5	46.6	52.6	25.5	17.7	117.6	25.3	7.88%	60-80%
North West Leic	Kegworth and Whatton	168.4	9.0	44.2	17.5	11.2	15.1	103.8	20.3	0.27%	20-40%
North West Leic	Measham	217.8	16.8	38.3	54.9	22.6	20.1	148.8	26	1.63%	60-80%
North West Leic	Moira	209.1	16.2	60.0	12.9	20.1	41.2	148.9	23	2.02%	40-60%
North West Leic	Oakthorpe and Donisthorpe	230.5	16.1	73.0	0.0	11.8	19.2	163.2	24.2	1.01%	40-60%
North West Leic	Ravenstone and Packington	248.0	10.5	34.6	68.5	53.1	32.7	152.7	16.4	4.69%	20-40%
North West Leic	Snibston	171.2	14.7	37.8	51.9	9.0	42.5	96.5	26.6	6.78%	60-80%
North West Leic	Thringstone	205.0	15.7	22.2	41.8	30.5	41.4	141.5	24.9	7.54%	60-80%
North West Leic	Valley	153.0	15.0	42.1	13.5	12.2	44.9	136.4	19.5	4.16%	20-40%
North West Leic	Whitwick	192.0	13.9	41.7	47.5	25.7	37.7	138.2	24.7	7.15%	60-80%
Oadby and Wigston	Oadby Brocks Hill	168.9	6.5	26.3	22.3	9.5	68.3	98.7	13.2	6.11%	Lowest 0-20%
Oadby and Wigston	Oadby Grange	99.5	4.3	30.8	19.7	26.5	23.9	50.6	11.7	1.72%	Lowest 0-20%

District	Ward Name	Mortality (all cancers)	IMD 2007	Lung Cancer	Breast Cancer	Colorectal Cancer	Prostate Cancer	Mortality (all cancers) U75	Smoking Percent	Use:Need Ratio	Quintiles of Smoking Prev
Oadby and Wigston	Oadby St Peter`s	164.6	15.0	28.4	21.3	6.5	12.7	104.8	21.9	3.78%	40-60%
Oadby and Wigston	Oadby Uplands	184.3	6.6	37.6	18.7	19.3	23.6	128.6	15	1.92%	Lowest 0-20%
Oadby and Wigston	Oadby Woodlands	136.7	5.3	16.3	44.7	11.2	0.0	111.3	12.6	3.41%	Lowest 0-20%
Oadby and Wigston	South Wigston	201.3	17.9	44.4	22.5	19.4	29.5	140.4	31.2	4.94%	Highest 80-100%
Oadby and Wigston	Wigston All Saints	233.8	11.5	32.7	58.8	20.1	47.8	138.8	21.3	6.67%	40-60%
Oadby and Wigston	Wigston Fields	170.3	15.5	26.7	32.7	18.7	38.3	116.5	24.8	5.16%	60-80%
Oadby and Wigston	Wigston Meadowcourt	119.3	8.9	34.4	25.8	11.2	9.2	81.0	22.8	4.48%	40-60%
Oadby and Wigston	Wigston St Wolstan`s	164.9	9.5	32.0	57.8	5.6	31.6	113.2	18.9	3.99%	20-40%
	<b>LCR</b>	<b>159.3</b>	<b>10.6</b>	<b>31.8</b>	<b>28.7</b>	<b>16.2</b>	<b>25.9</b>	<b>103.2</b>	<b>21.9</b>	<b>5.19%</b>	<b>40-60%</b>

### Appendix 3: Useful Links

National Centre for Health Outcomes Development (NCHOD) <http://nww.nchod.nhs.uk/>

National Cancer Intelligence Network (NCIN). National Cancer e-Atlas  
<http://www.ncin.org.uk/analysis/eatlas.shtml>

The United Kingdom Association of Cancer Registries (UKACR) <http://www.ukacr.org/>

Trent Cancer Registry <http://www.empho.org.uk/tcr/aboutUs.aspx>

The NCRI Oncology Information Exchange <http://www.ncri-onix.org.uk/portal/#S1>

Office for National Statistics (ONS). Cancer Incidence and Mortality  
<http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14209>

The NHS Information Centre. Cancer Screening <http://www.ic.nhs.uk/statistics-and-data-collections/screening>

The NHS Information Centre. Qof 2008/09 data tables <http://www.ic.nhs.uk/statistics-and-data-collections/supporting-information/audits-and-performance/the-quality-and-outcomes-framework/qof-2008/09/data-tables>

NHS Evidence <http://www.library.nhs.uk/cancer/>

National Cancer Research Institute <http://www.ncri.org.uk/>

National Cancer Research Network <http://www.ncrn.org.uk/>

Cancer Research UK. Cancer Statistics. <http://info.cancerresearchuk.org/cancerstats/>

Macmillan Cancer. Cancer Information  
<http://www.macmillan.org.uk/Cancerinformation/Cancerinformation.aspx>