

#### From the Director of Public Health

annual ICDDI 2010

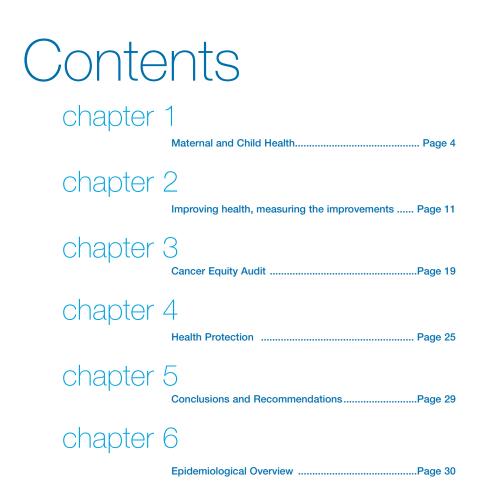
on the health of the people of North East Lincolnshire



North East Lincolnshire



Geoffrey Barnes Acting Joint Executive Director of Public Health



## Introduction

#### Welcome to the 2010 Annual Public Health Report for North East Lincolnshire.

The last year has been a challenging time for those of us working in Public Health as it has brought many changes and heralds many more. Swine flu stretched our resources but we can be satisfied that it was a job well done as the impact of the pandemic in North East Lincolnshire was much less than it might have been had we not implemented an effective programme of immunisation and worked hard to ensure that local agencies provided a coordinated response in order to meet population need.

The change of Government and the proposed NHS reforms which have been announced are going to challenge us all to adopt new ways of working in order to improve health in North East Lincolnshire. GPs will be taking a leading role in the commissioning of health services in the future and a Health and Wellbeing Board will be established to ensure that all local agencies are working to improve the health of their local population. Public Health is also heading for major reform with the lead responsibility for this moving to Local Government for the first time since 1974 and a national public health service, Public Health England, coming into existence in 2012.

2010 also saw the departure of our long time Director of Public Health, Dr Tony Hill, to take up the post of Director of Public Health in Lincolnshire. Tony had achieved a great deal in his 14 years in North East Lincolnshire and it goes without saying that we wish him every success in his new role. The first section of this year's report focuses on maternal and child health and highlights the importance of securing a healthy start to life in order to ensure long term health and wellbeing. Section 2 highlights the approach we are taking to develop our public health intelligence so that we can measure improvements in population health and identify the interventions that we need to make in order to secure improvements in health. Section 3 presents a cancer equity audit that we carried out to look at variations in cancer across North East Lincolnshire in order to identify priorities for service improvements. Section 4 describes the main health protection issues that we have confronted during the last year.

Finally I would like to acknowledge the contribution my Public Health colleagues have made to this year's report, especially Cynthia Manson-Siddle, Deputy Director of Public Health for her work on Chapter 2, Hazel Akester and Dr Abdallah Mangoud for their work on Chapter 3 and to the public health analysts for their contributions throughout the report. We are fortunate to have such an effective Public Health Intelligence team and we must ensure that we do not lose this in the forthcoming changes.

#### **Geoffrey Barnes**

Acting Joint Executive Director of Public Health January 2011



## Maternal and Child Health

The health of mothers during pregnancy and of babies and children in the first few years of life is absolutely critical to long term health and wellbeing and can have a substantial impact on a child's school achievement and future life prospects. It has been highlighted as a major priority area for health improvement in the 2010 Public Health White Paper Healthy Lives, Healthy People. We therefore urgently need to ensure that our health service, children's centre and school interventions are of the highest quality at these key life stages and that parents and other family members fully understand what they can do to ensure that their children have the best start in life.

In this section of the annual report I will summarise some of the most important findings from the 'Be Healthy' section of the Children's Needs Assessment 2010 which was led by the Public Health Directorate and identify priorities going forward in order to improve public health in North East Lincolnshire.

# Maternal and Child Health

#### **Booking Early**

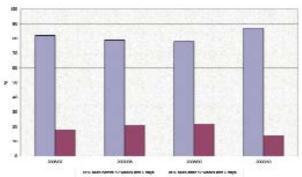
Emerging knowledge of foetal and infant development is highlighting the importance of offering early intervention and prevention in pregnancy. National studies have shown that around 16% of all pregnant women, including many of those under-18 years of age delay seeking maternity care until they are five or more months pregnant.

The promotion of early access to maternity care is important as women who book late may miss antenatal screening tests along with early opportunities for the provision of maternity care. Other benefits of early booking include:

- Early identification of needs
- Early provision of information on pregnancy care services and the options available (maternity benefits, diet, and other aspects of life which may affect the woman's health or the health of the baby)
- Information and decision making around routine screening tests
- An early ultrasound scan to estimate when the baby is due and to check if more than one baby is expected
- Blood pressure checks and urine test for the presence of protein
- Weight and height measurements.

The Maternity Matters Implementation Plan therefore highlights the importance of booking by 13 completed weeks of pregnancy<sup>1</sup>. Where such a standard is met, it will give all pregnant women in an area, the full benefit of personalised care and improve outcomes and experiences for mother and baby. Reducing the percentage of women who access maternity services late through targeted outreach work will help to reduce health inequalities.

#### Figure 1.1 Percentage of Maternity Bookings within 13 Weeks in NE Lincolnshire (2006/07 to 2009/10)



Source: Northern Lincolnshire & Goole Hospitals NHS Foundation Trust

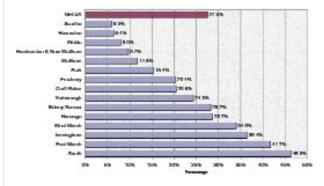
Figure 1.1 shows the percentage of maternity bookings for mothers in NE Lincolnshire that were within 13 weeks during the period 2006/07 to 2009/10. This shows that almost 90% of bookings in 2009/10 were within the 13 weeks limit which was a big improvement on previous years.

#### **Smoking During Pregnancy**

Smoking in pregnancy can do serious harm to an unborn child and unfortunately NE Lincolnshire has one of the highest smoking in pregnancy rates in England. In 2008/09 27.5% of pregnant women in NE Lincolnshire were recorded as being smokers at the time of delivery, a much larger proportion than the England average of 14.4% and the regional average of 18.2%. However a great effort by health staff helped to reduce the rate in 2009/10 to 23.4%.

Rates of smoking in pregnancy vary considerably within North East Lincolnshire. Information for 2008/09 shows that whereas only 6% of women smoked in pregnancy in Scartho ward, the figure was over 46% in the neighbouring South ward. West Marsh, East Marsh and Immingham wards also had very high rates of smoking in pregnancy as illustrated in Figure 1.2. Women living in the most deprived areas and teenage mothers are more likely to smoke during pregnancy. Women who smoked during their pregnancy had a higher prevalence of babies born at a low birth weight.

#### Figure 1.2 Percentage of Women Smoking in Pregnancy in NE Lincolnshire UA Electoral Wards (2008/09)



Source: Northern Lincolnshire and Goole Hospitals Foundation Trust

#### Breastfeeding

Promoting and supporting breastfeeding is an essential part of an integrated programme of child health promotion and parenting support. A healthy pregnancy, a healthy birth and a strong bond between a baby and his/ her parents are a vital start in life. There is clear evidence that breastfeeding has positive health benefits for both mother and baby in the short and longer-term (beyond the period of breastfeeding). Breast milk is the best form of nutrition for infants and exclusive breastfeeding is recommended for the first six months of an infant's life. Thereafter breastfeeding should continue for as long as the mother and baby wish, while gradually introducing a more varied diet.

Breastfeeding is a major health inequalities issue. National and local research data show that women from poorer communities and particularly young, low income white women, are least likely to breastfeed, however it is their babies who are at greater risk of poor health, childhood infections and hospital admissions. Targeting these groups could have a considerable impact on local child health inequalities. The rate of breastfeeding initiation in NE Lincolnshire in 2009/10 was 57.9% which is an increase of 4.3% percentage points from 53.6% in 2008/09. Figures for the PCTs in the Y&H SHA region are detailed in Figure 1.3. NE Lincolnshire had the third lowest rate of breastfeeding initiation in the Region during 2009/10, however the improvement in NE Lincolnshire compared to 2008/09 (when NE Lincolnshire had the lowest rate of initiation) was one of the highest in the region.

#### Figure 1.3 Percentage of Mothers Initiating Breastfeeding, England, Y&H SHA, NELCTP, and Y&H PCTs, 2009/10

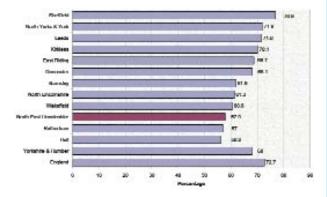
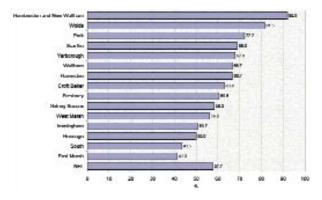




Figure 1.4 shows the breastfeeding initiation rates for the first 2 quarters of 2009/10 by the usual ward of residence of the mother. This appears to confirm a link between breastfeeding initiation and deprivation, as breastfeeding rates tend to be higher in wards with less deprivation. There is a need therefore to develop appropriate health promotion targeted to the geographic areas with higher deprivation and therefore lower breastfeeding initiation.

Figure 1.4 NE Lincolnshire Breastfeeding Initiation Rates by Ward of Residence (Financial Quarters 1 & 2 2009/10)



Source: Northern Lincolnshire & Goole Hospitals NHS Foundation Trust

Another important measure of breastfeeding prevalence is the percentage of mothers who are continuing to breastfeed their babies when they are 6 to 8 weeks old. Unfortunately only 23% of babies were being breastfed at this point in NE Lincolnshire in 2009/10 which means that more than half the mothers who initiated breastfeeding had stopped by the time their baby was 6 to 8 weeks old. We are seeking to address this by increasing support available to mothers by improving the peer support service. Peer supporters are mothers who are themselves breastfeeding their babies or who have recently done so. They provide advice and assistance to new mothers in the hospital and in the community on a voluntary basis.

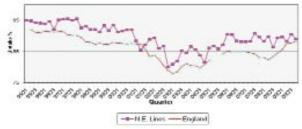
#### Immunisations

Childhood immunisation is vitally important for protecting children from a variety of infectious diseases. Ensuring high vaccine uptake is essential to prevent disease outbreaks and offer herd immunity to unvaccinated people or those where vaccination failed to confer immunity. Diseases currently routinely vaccinated against are Diphtheria, Tetanus, Polio, Pertussis (Whooping Cough), Haemophilus Influenza Type B, Meningitis C, Pneumococcal disease, Measles, Mumps and Rubella. In 2008/09, the Department of Health implemented a new vaccination programme for 12-13 year old girls, designed to protect against the human papillomavirus (HPV) which is linked to cervical and other cancers.

For Diphtheria, Tetanus, Polio, Pertussis and Hib, NE Lincolnshire immunised 94% of children by their first birthday in 2008/09, a higher proportion than the England (92%) average and equal to the Yorkshire & Humber (94%) average. NE Lincolnshire ranked joint 6th highest (with North Lincolnshire PCT, Kirklees PCT and Rotherham PCT) of the Yorkshire & Humber region PCTs. Coverage for this immunisation improved still further in 2009/10 with over 95% of babies receiving this immunisation by their first birthday.

Unfortunately Measles, Mumps and Rubella (MMR) immunisation rates over many years have been severely affected by a piece of research that alleged a link between MMR and health problems such as autism. Although this research has now been completely discredited MMR immunisation rates are still much lower than they need to be to prevent outbreaks of potentially harmful diseases of measles, mumps and rubella. Fortunately we have vet to experience a serious outbreak of measles in NE Lincolnshire but there have been significant outbreaks of mumps. Figure 1.5 shows that the uptake of the first dose of MMR by 24 months of age has remained fairly stable over the last few years following a steady improvement earlier in the decade. Although uptake is slightly higher than in many other areas, suboptimal uptake over several years means that we continue to run the risk of cases and outbreaks of measles, mumps and rubella in the local population. Locally, there was one confirmed case of measles and 156 confirmed cases of mumps during 2009. NE Lincolnshire immunised 89.1% of children against MMR by their second birthday in 2008/9, a higher proportion than the England (85%) or Yorkshire & Humber (87%) averages, and an increase on the 87% vaccinated in 2007/08. However we urgently need to get our rate back up to 95% which should ensure that outbreaks are avoided.

#### Figure 1.5 Quarterly uptake of first dose of MMR vaccine (MMR1) in North East Lincolnshire and England at 24 months, 1995-2009



(Data for England incomplete owing to problems with Child Health systems in some areas)

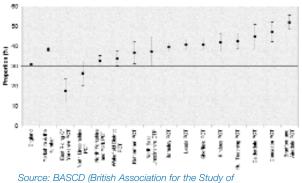
For Meningitis C, NE Lincolnshire vaccinated 98% of children by their second birthday, a figure higher than the England (92%) and Yorkshire & Humber (95%) averages. NE Lincolnshire ranked joint 2nd highest of the Yorkshire & Humber region PCTs.

The human papillomavirus (HPV) vaccine programme for adolescent girls was introduced in September 2008 to protect girls from developing cervical cancer later in life. School nurses routinely carry out the vaccination on girls in Year 8 (aged 12/13) and a catch up programme was introduced for older girls up to the age of 18 delivered by GPs for those girls who were no longer in school. Uptake of the full course of three doses in school year 8 (12-13 year olds) was high at 84.6%, exceeding national and regional averages (at 31st July 2010, data is not directly comparable as August 2010 uptake is not included in the figure). However uptake remains much lower in older girls, as expected, as many of these are no longer in educational settings where vaccination can be delivered.

#### **Oral Health in 5 Year Olds**

Dental health is an important indicator of children's health and wellbeing and therefore it is important to monitor the proportion of children with decayed and missing teeth. Extraction of severely decayed teeth under general anaesthesia is the most common reason for admission of children to hospital. One of the indicators we look at is the 'mean number of teeth per child sampled which were either actively decayed or had been filled or extracted' at aged five. In NE Lincolnshire the proportion of children aged 5 years who had experienced some dental decay was 37.4%, higher than the England (30.9%) but marginally lower than the Yorkshire & Humber (38.7%) area averages as illustrated in Figure 1.6.

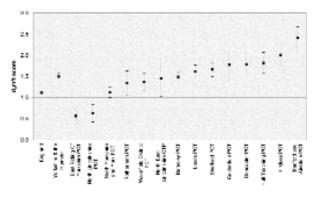
Figure 1.6 Proportion of Children with dmft>0 in England, Yorkshire & Humber GOR and the 14 PCTs in the Yorkshire & Humber Region (2007/08)





The mean number of decayed/ missing/ filled teeth in 5 year olds in NE Lincolnshire was 1.45, a figure higher than the England (1.11) but lower than the Yorkshire & Humber (1.51) area averages. NE Lincolnshire ranked 6th lowest of the 14 PCTs in the Yorkshire & Humber region as illustrated in Figure 1.7.





Source: BASCD (British Association for the Study of Community Dentistry 2007/08).

It is clear that children in the Yorkshire & Humber region experience poorer dental health than children in the rest of England and the situation in NE Lincolnshire is broadly in line with the rest of the region. Poor dental health is associated with long term social disadvantage so we therefore urgently need to ensure that children in NE Lincolnshire have full access to dentistry services. It can be seen that dental health in the neighbouring authority of North Lincolnshire, where there has been water fluoridation for over 30 years, is better than could be expected<sup>2</sup>. Therefore dental health promotion is also important in North East Lincolnshire, so that parents understand how they can prevent tooth decay from developing in their children by daily use of fluoride toothpaste and reducing the frequency of consuming sugary foods and drinks.

#### **Child Obesity**

The Government's new ambition on excess weight, announced in the Comprehensive Spending Review 2007, is to be the first major country to reverse the rising tide of obesity within the population. The initial focus is on children and the government indicated that by 2020 there should be a reduction in the proportion of overweight and obese children to 2000 levels.

Measurement of children's heights and weights in reception year and Year 6 is now routinely done as part of the National Child Measurement Programme. The measurements are converted into a Body Mass Index (BMI) centile and obesity in this analysis is defined as a BMI greater than or equal to the 95th centile.

Results for measurements carried out for reception year children during the 2008/09 school year are presented in table 1.1.

2 Note: the dental survey carried out in 2007/8 was conducted under new consent arrangements and so the results cannot be compared to earlier local dental surveys previously reported in the Annual Reports

 Table 1.1
 Obesity Prevalence Percentage and Participation Rates of Reception Year Pupils within

 England and the Yorkshire & Humber SHA Region (2008/09)

Area	Prevalence Rate	Lower Confidence Interval	Upper Confidence Interval	Participation Rate
ENGLAND	<b>9.6</b> %	9.5%	9.7%	91.2%
Yorkshire & Humber SHA	9.6%	9.3%	<b>9.8</b> %	<b>92.6</b> %
North Lincolnshire PCT	7.6%	6.3%	8.8%	95.3%
Calderdale PCT	8.0%	6.9%	9.1%	87.7%
North Yorkshire and York PC	T 8.2%	7.5%	8.8%	94.1%
Kirklees PCT	9.3%	8.5%	10.1%	94.9%
Sheffield PCT	9.4%	8.6%	10.2%	92.4%
Wakefield District PCT	9.5%	8.5%	10.5%	92.7%
Barnsley PCT	9.5%	8.3%	10.8%	90.6%
Rotherham PCT	10.0%	8.8%	11.1%	94.1%
Bradford and Airedale PCT	10.0%	9.3%	10.7%	89.4%
East Riding Of Yorkshire PCT	Г 10.2%	9.1%	11.3%	95.0%
Leeds PCT	10.3%	9.6%	11.0%	93.3%
Doncaster PCT	10.3%	9.3%	11.4%	88.1%
Hull PCT	10.3%	9.2%	11.5%	92.1%
NE Lincolnshire CTP	11.9%	10.4%	13.5%	98.8%

Data Source: National Child Measurement Programme (NCMP)

From Table 1.1, NE Lincolnshire CTP had the highest prevalence rate for obesity within the Yorkshire & Humber SHA region for reception aged school children in 2008/09. The rate was 11.9% and this was statistically significantly higher than both the England (9.6%) and the Yorkshire & Humber SHA (9.6%) rates. However the participation rates should be taken into account. The lower the rate, the more likely the room for error as this may mean selective measuring, i.e. there is evidence that overweight/obese children may be more likely to refuse to have their measurements taken. This can give rise to higher prevalence rates.

NE Lincolnshire CTP had not only the highest participation rate (98.8%) in the Yorkshire & Humber SHA region but was also in the top 10 nationally for participation rates which once again reflects a fantastic effort by school nurses. This was much higher than the overall England participation rate (91.2%) and the Yorkshire & Humber SHA (92.6%).

#### Table 1.2Obesity Prevalence Percentage and Participation Rates of Year 6 Pupils withinEngland and the Yorkshire & Humber SHA Region (2008/09)

Area	Prevalence Rate	Lower Confidence Interval	Upper Confidence Interval	Participation Rate
ENGLAND	18.3%	18.2%	19.1%	89.1%
Yorkshire & Humber SHA	<b>18.6%</b>	18.3%	19.6%	<b>88.9</b> %
North Yorkshire and York PC	T 16.3%	15.4%	17.7%	90.8%
Kirklees PCT	16.4%	15.3%	18.0%	92.1%
Calderdale PCT	16.6%	15.0%	18.9%	87.6%
East Riding Of Yorkshire PC	T 16.7%	15.4%	18.8%	87.5%
Wakefield District PCT	18.0%	16.7%	20.0%	89.9%
North Lincolnshire PCT	18.5%	16.6%	21.6%	82.0%
NE Lincolnshire CTP	18.7%	16.8%	20.7%	97.5%
Sheffield PCT	18.7%	17.6%	20.5%	88.7%
Rotherham PCT	19.0%	17.6%	21.1%	90.8%
Doncaster PCT	19.4%	18.0%	22.1%	79.9%
Barnsley PCT	19.6%	18.0%	21.8%	90.1%
Bradford and Airedale PCT	19.9%	18.8%	21.7%	86.6%
Leeds PCT	20.9%	20.0%	22.2%	93.5%
Hull PCT	21.5%	19.8%	24.3%	80.6%

Data Source: National Child Measurement Programme (NCMP)

From Table 1.2 NE Lincolnshire ranked in the mid range for the rate of child obesity at Year 6 within the Yorkshire & Humber region in 2008/09. The rate was 18.7% and this was just marginally higher than the England (18.3%) and the Yorkshire & Humber SHA (18.6%) rates. As with the reception year, NE Lincolnshire CTP had not only the highest participation rate (97.5%) in the Yorkshire & Humber SHA region but it was also in the top 10 nationally for participation rates.

Although in most parts of England, the highest rates of childhood obesity are found in deprived areas. In North East Lincolnshire high rates of childhood obesity are found in both deprived and more affluent areas, suggesting a more widespread problem.

#### **Conclusion and Recommendations**

Despite progress in recent years many of our maternal and child health indicators remain a concern. In particular our smoking in pregnancy rate is much too high and our breastfeeding rates are much too low. The continuing increase in the rate of child overweight/obesity is also a major concern. We urgently need to ensure that everyone working with mothers and families from the moment a mother becomes pregnant is passing on clear and consistent messages about what mothers and families can do to promote good health in their baby and child. Primary care services and Children's Centres have a vital role to play in this but the media and wider population can also make a substantial contribution as it is often social and cultural factors that seem to be impeding our progress in these areas.

- We need more investments in smoking in pregnancy services within the hospital and targeted tobacco control and health promotion initiatives to prevent smoking in areas where prevalence rates remain excessively high. All public authorities should have a zero tolerance of smoking on their grounds.
- We need to build on the progress that has been made in the last year by continuing to increase awareness around the importance of breastfeeding. Social marketing initiatives which aim to change attitudes in those areas of NE Lincolnshire where negative attitudes to breastfeeding remain ingrained should be developed.
- We need to continue the focus on reducing childhood obesity and ensure that our services and interventions are population focused and reach parents and children at a younger age. Children's Centres need to engage with families and ensure they fully understand the importance of a healthy diet and an active lifestyle.

#### References

HM Government. 2010. Healthy Lives, Healthy People: Our strategy for public health in England. The Stationary Office.

## Promoting Breastfeeding

Breastfeeding is one of the best things a mother can do to ensure her baby has a healthy start in life. We recognise that the proportion of mothers breastfeeding their babies in North East Lincolnshire is much too low so we have invested in services to increase the support available to mothers who choose to breastfeed their babies. We have employed an Infant Feeding Coordinator to ensure that local health and community services are designed in a way that makes it easy for mothers to choose to breastfeed their babies. This includes providing midwives, health visitors, children's centre staff and primary care staff with high quality UNICEF accredited training to ensure that they provide effective support and advice to breastfeeding mothers. We have also recently recruited a Peer Support Coordinator who will train and support our network of volunteer peer supporters. Peer supporters are breastfeeding mothers who feel passionately about the importance of breastfeeding and work in their community on a voluntary basis to support new mothers to breastfeed successfully.

It is also important that we change attitudes to breastfeeding in North East Lincolnshire. Sadly it is quite unusual to see a mother openly breastfeeding her baby in a public place such as a café in our area whereas in some parts of the country it is quite a common occurrence these days. We are working hard to change this and have established a Breastfeeding Welcome Scheme, which aims to work in partnership with local businesses to support mums to feel comfortable when feeding whilst out and about. A booklet is available which lists all the local businesses and public venues which support the scheme.

Helpful information about breastfeeding is available from the following numbers/websites:

National Breastfeeding Support Line - 0300 100 0212

National Childbirth Trust - 0870 444 8708; www.nctpregnancyandbabycare.com

La Leche League - 0845 120 2918; www.laleche.org.uk

Breastfeeding Network - 0870 900 8787; www.breastfeedingnetwork.org.uk

Association Breastfeeding mothers - 08444 122 949; www.abm.me.uk Mandy Anderson, Breastfeeding Support Midwife, Grimsby Hospital, 01472 847111 (ext 7878).



## chapter 2

### Improving health, measuring the improvements

There have been several national strategies and plans over recent decades aimed at improving the health of the population and reducing health inequalities. Accountability for improving population health has been devolved to the local level, to health authorities and then to primary care organisations, working in partnership with other local organisations and local people. Preventing people from dying prematurely has been a key aim, and measuring progress on the achievement of health improvement outcomes has largely relied on deaths data as one of the most robust 'health' data sources available. Outcomes have included improvements in life expectancy, all age all cause mortality and deaths from the major killer diseases: circulatory diseases, cancers, etc.

Death rates for local authority areas, primary care organisation areas and for regions across the country or for the country as a whole are only available annually and are a year out of date by the time of their release (provided by National Centre for Health Outcomes Development, NCHOD). The Care Quality Commission (CQC) produces more timely 'provisional' data for performance monitoring purposes in August each year. This allows slightly earlier access to mortality rate data for the indicators listed above. More timely and more frequently available data is necessary to monitor the impact of health improvement interventions, or suitable proxy indicators have to be developed.

Traditionally, progress has been monitored using 3 year rolling average death rates to overcome small number issues and annual fluctuations in rates. As well as nationally produced annual data, the chapter uses monthly mortality data and local population data to locally calculate more timely quarterly rates. Numbers are too small to monitor monthly. Although similar, these locally calculated rates are not directly comparable to nationally produced data.

The NHS White Paper, Equity and Excellence: Liberating the NHS, sets out how current performance requirements will be replaced with separate frameworks for outcomes that set the direction for the NHS, public health and social care. The proposal document for the NHS outcome framework suggests that premature mortality data, particularly from causes amenable to health care, e.g. circulatory disease, respiratory disease remain as indicators. Although amenable to health care they cannot solely be delivered by the NHS and indeed have been included in the Public Health Outcome Framework consultation document. This suggests that quarterly rates will remain a useful indicator of progress.

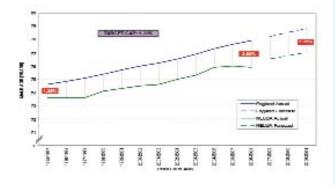
#### Life Expectancy and All Age All Cause Mortality

Life expectancy is used as a summary measure of the overall health of the population. The 2010 life expectancy national target is to reduce by 10% the gap in life expectancy between Spearhead<sup>1</sup> areas and the England average from a 1995-97 baseline (by the 3 year period 2009-11).

The average life expectancy (age in years) for men is steadily rising in North East Lincolnshire (NEL), but at a slower rate than nationally (Figure 2.1). The gap in life expectancy between NEL and England shows that there is much to be done to reduce the gap by 10%, from the baseline of 1.35% to the target of 1.22% by 2010.

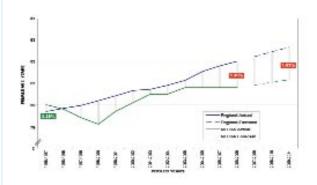
The current gap is 2.6%, with predictions for it to be 2.31% by 2010, if current trends continue.

#### Figure 2.1 Male Life Expectancy



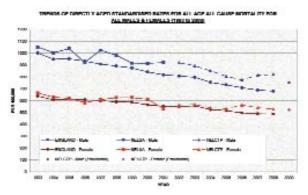
The average life expectancy (age in years) for women in NEL was initially higher at the baseline years than nationally. It dropped sharply around 1998-2000, rising steadily for a number of years (Figure 2.2) before reaching a plateau over the past 4 years. The current gap between NEL and England is 1.49% and is projected to increase to 1.83% by 2010. Again, considerable additional effort is required to reverse this trend.

#### Figure 2.2 Female Life Expectancy



Age Sex Standardised All Age All Cause Mortality rates for males and females are also used to assess progress, allowing comparisons between areas over time. Figure 2.3 shows performance since implementation of health improvement strategies and provides comparisons with the national average. Provisional CQC data for 2009 shows a decline in both the male and female rates and a reversal of the recent increasing trend in the male mortality rate. Until national data is available, the most recent progress towards closing the inequalities gap (with England as a whole) cannot be assessed.

#### Figure 2.3

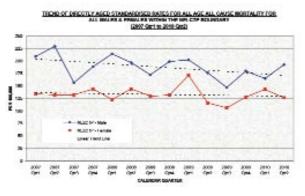


Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA Care Quality Commission (CQC) – 2009 Provisional data

Note: Early data is for local authority boundaries. PCT data is only available from 2002.

Figure 2.4 shows locally calculated quarterly performance over the most recent few years and provides the most up-to-date data available. Although fluctuating due to small numbers, the overall trend lines reflect continued decreasing rates, particularly for men.

#### Figure 2.4

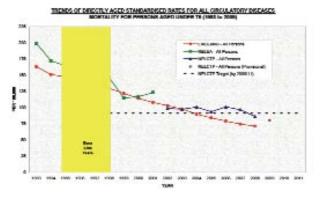




#### Cardiovascular disease (CVD) mortality

A major contributor to the all age all cause death rate is heart and circulatory disease, which includes coronary heart disease, stroke and related diseases. The mortality rate from all circulatory diseases in those aged under 75 is a national indicator, with the most recent national target being a reduction of 40% from the 1995-97 baseline by 2010 (i.e. 2009-11). Figure 2.5 shows progress for North East Lincolnshire compared to the national picture. Again, the most recent data for 2009 shows a continued steady decline in rates. It is likely that the 40% reduction target of 91.01/100,000 by 2010 will be met, but reducing the inequalities gap with England by 40% by 2010 is unlikely.

#### Figure 2.5



Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Care Quality Commission (CQC) - 2009 Provisional data

Note: Early data is for local authority boundaries. PCT data is only available from 2002.

#### ILEMENTS DEFAULT AND PROPERTING AND ALL RECORDERATION DEPAUSA MAINANT AND ALL RECORDERATION AND ALL RECORDERATION DEPAUSA DEVICES OF ALL RECORDERATION AND ALL RECORDERATION DEPAUSATION AND ALL RECORDERATION AND ALL



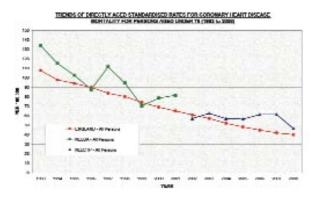
Provisional CQC data for 2009 showing a reduction in the CVD mortality rate is reflected in the quarterly data for 2009 in Figure 2.6. It is encouraging that data for the first two quarters of 2010 show a continued reduction.

#### **Coronary heart disease mortality**

A large proportion of circulatory disease deaths are due to coronary heart disease. Figure 2.7 shows the CHD premature mortality rate pattern over time, which reflects circulatory disease mortality. The most recent available data is for 2008.

#### Figure 2.7

Figure 2.6

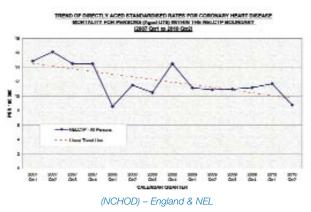


Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Note: Early data is for local authority boundaries. PCT data is only available from 2002.

Figure 2.8 shows quarterly rate data. Figures for 2009 reflect the reduction seen in the CVD provisional 2009 death rate. A slight increase in the first quarter of 2010 is followed by a reduction in the second quarter.

#### Figure 2.8

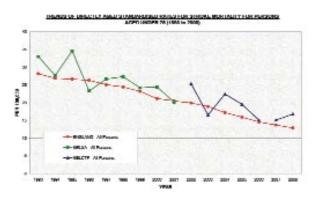


13

#### Stroke mortality

Premature deaths from stroke are fewer than from coronary heart disease. Figure 2.9 shows a slight increase in the rate for the most recent year, 2008.

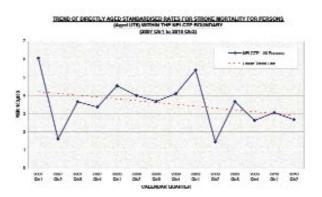
#### Figure 2.9



Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Note: Early data is for local authority boundaries. PCT data is only available from 2002.

#### Figure 2.10



Data Source: Public Health Mortality File (PHMF)

More recent quarterly data for 2009 shows an overall 2009 reduction and figures for the first two quarters of 2010 show a continued decline. The trend line shown emphasises this continued downward trend.

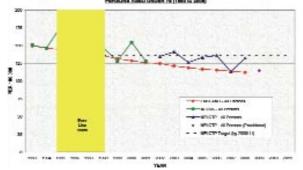
#### **Cancer mortality**

Premature mortality from cancers is a national indicator. The 'all cancers' target is to reduce the under 75s death rate by 20% by 2010 (i.e. 2009-11) from the 1995-97 baseline.

Figure 2.11 shows slower progress with reducing cancer mortality (the second main contributor to all cause death rates) since 1993 than with CVD mortality. The most recent data for 2009, however, shows a further decline and it is likely that the 20% reduction target of 136.91/100,000 by 2010 will be met, since the rate was high in the baseline years. The target to reduce the inequalities gap with England by 6% by 2010 from the same baseline years is also likely to be exceeded.

#### Figure 2.11

TRENDS OF DIRECTLY AGED STANDARDISED RATES FOR ALL CARCERS WORTALITY FOR

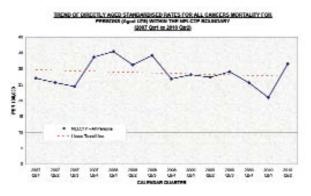


Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Care Quality Commission (CQC) – 2009 Provisional data Note: Early data is for local authority boundaries. PCT data is only available from 2002.

Quarterly monitoring data presented in Figure 2.12 and the trend line across these quarterly rates for the most recent three and a half years shows a slight reduction in mortality rates

#### Figure 2.12



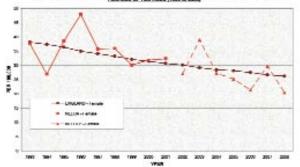
Data Source: Public Health Mortality File (PHMF)

#### **Breast cancer mortality**

A significant proportion of cancer deaths are due to breast cancer. Figure 2.13 shows a steady decline nationally and locally over recent decades. Quarterly data is based on small numbers and fluctuations in rates are considerable, however there has been a worrying increase in the first two quarters of 2010, Figure 2.14.

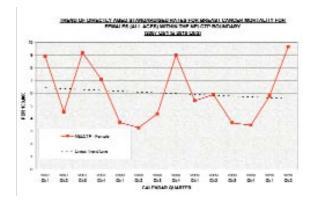
#### Figure 2.13





Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA Note: Early data is for local authority boundaries. PCT data is only available from 2002.

#### Figure 2.14

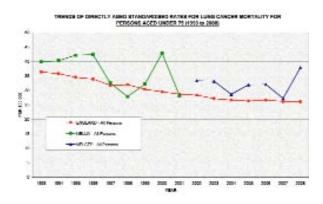


Data Source: Public Health Mortality File (PHMF)

#### Lung cancer mortality

Deaths from lung cancer are the main contributor to the all cancers death rate locally. Figure 2.15 shows progress over the last two decades and an overall decline in death rates.



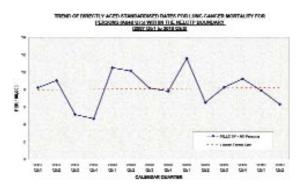


Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Note: Early data is for local authority boundaries. PCT data is only available from 2002

Quarterly rates for recent years show little evidence of a decline, although the reduction in the first two quarters of 2010 is encouraging.

#### Figure 2.16



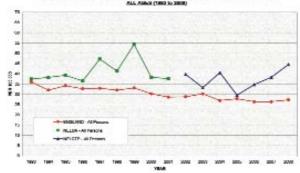
Data Source: Public Health Mortality File (PHMF)

#### **Respiratory disease mortality**

Deaths from respiratory disease are the next biggest contributor to all age all cause mortality after circulatory diseases and cancers. Death rates from chronic obstructive pulmonary disease (COPD) have increased over recent years, Figure 2.17. Quarterly data for 2009 and for the first two quarters of 2010 indicate that this trend has reversed, Figure 2.18.

#### Figure 2.17

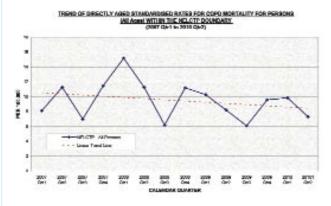
TREMETS OF DIRECTLY ADDRESSED RETERIOR FOR COPE MORTELLITY FOR PERSONS OF



Data Source: National Centre for Health Outcomes Development (NCHOD) – England & NELUA

Note: Early data is for local authority boundaries. PCT data is only available from 2002

#### Figure 2.18



Data Source: Public Health Mortality File (PHMF)

Plans continue to be implemented to improve performance against these outcome indicators and include actions that will impact in the short, medium and longer term. Although recent progress is encouraging, the inequalities gap with the country as a whole remains stubbornly wide.

National modelling work has been undertaken for primary care organisation areas to determine the number of deaths that need to be prevented to reach the national 2010 life expectancy target. The work includes a range of evidence-based interventions and the numbers of deaths that could potentially be averted, (Table 2.1.) The model shows the theoretical maximum benefit of interventions and makes assumptions around treatment affect/ adherence. A maximum of 213 deaths could be averted annually in North East Lincolnshire (i.e. 426 deaths for 2010 and 2011). However, 506 deaths need to be averted across 2010 and 2011 to achieve the national target, with only 2011 remaining in which to increase interventions.

#### Table 2.1: Estimated potential postponed deaths in one year. (Theoretical maximum benefit of interventions)

Intervention	Potential postponed deaths in one year (based on 2006-08 data)
Cardiovascular disease secondary prevention. Four treatments (beta blocker, aspirin, ACE inhibitor, statin for all patients with a previous CVD event)	
Currently untreated:	
CHD deaths averted Stroke deaths averted	16 9
Currently partially treated:	
CHD deaths averted	28
Stroke deaths averted	15
Additional treatment for hypertensives with no previous CVD event	
Further reduction in blood pressure	47
Adding a statin to treatment	21
Treatment for heart attack	
Primary angioplasty (PCI)	2
Anticoagulant therapy (Warfarin) for all patients aged over 65s with Atrial fibrillation	
Stroke deaths averted	14
Diabetes	
Reducing blood sugars (HbA1c over 7.5) by 1 unit	11
Chronic Obstructive Pulmonary Disease	
Statins to address CVD risk	40
Eliminating smoking in pregnancy	
Infant deaths averted	1
Harmful alcohol consumption	
Brief intervention for 10% of harmful drinkers	2
Smoking cessation clinics	
Per 1000 setting a quit date	1
Total number of fewer deaths each year to achieve the 2010 (2009/10/11) target.	213 * numbers may not sum due to rounding

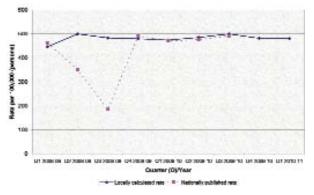
Source: Department of Health National Support Team for Health Inequalities.' Modelling the contribution of evidence based interventions to achieving life expectancy targets' Version 5.1.

#### Alcohol related hospital admissions

Alcohol related hospital admissions are used as an outcome indicator for monitoring progress on harm reduction interventions (National Indicator 39). Nationally published data suggested a considerable drop in admissions in North East Lincolnshire during quarters 2 and 3 of 2008/9<sup>2</sup>, however it was acknowledged that a full dataset had not been submitted. For this reason and to ensure timeliness of information, local quarterly rate calculations are now undertaken.

Local Area Agreement targets were set in the recognition that rates might continue to increase before interventions made an impact. The most recent quarters' data are encouraging in that the increase in admission rates has slowed, although rates are still above target.

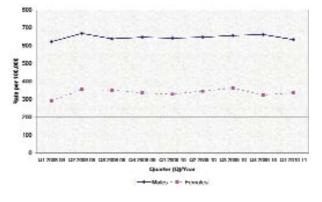
Figure 2.19 Alcohol Related hospital admissions, nationally published and locally calculated quarterly rates from 2008-09



Data Source: Hospital Episode Statistics

Although not monitored nationally, local calculations also permit a comparison of admissions for males and females across this time period. The male admission rate is almost twice that of females.





Data Source: Hospital Episode Statistics

#### **Conclusion and Recommendations**

Mortality data suggests that local interventions to implement national strategies and achieve health improvement outcomes/ targets have had positive impacts over the last two decades, but not at a fast enough rate to narrow the gap with the national average and to achieve North East Lincolnshire's contribution to the national health inequalities target. Every effort needs to be made to avert the maximum numbers of deaths by implementing the evidence based interventions in Table 2.1 and other health improvement measures, concentrating on those that will have the most impact in the short and medium term.

- The greatest impact has been with CVD mortality and continued implementation of plans to address this national and local priority, will be key to health improvement locally.
- Additional emphasis needs to be placed on reducing cancer mortality, particularly breast and lung cancer deaths and on reducing deaths from COPD.
- Efforts to reduce alcohol related hospital admissions need to be stepped up, particularly targeting men.
- Quarterly death rate data provide a more up-to-date picture of the progress being made towards improving health outcomes in North East Lincolnshire and should be used regularly to inform decisions to more effectively target resources.

#### References

- 1 1991, The Health of the Nation. (London, HMSO)
- 2 1999, Saving Lives: Our Healthier Nation. (London, The Stationery Office)
- 3 Department of Health, 2003. Tackling Health Inequalities: A Programme for Action (London, Department of Health Publications).
- 4 Department of Health, 2010. Equity and excellence: Liberating the NHS (London, The Stationery Office Ltd)

## reaching ou vulnerable young people

In tackling health inequalities, it is important to ensure that we are proactively tackling the health inequalities of our most vulnerable groups. The Asgard Project is now two years old and whilst its initial aim was to tackle the health and well being of vulnerable 16 – 25 year olds, the model is now being used in primary care.

were not acce healthcare cor st of their live

promote a proactive ial care ne past ght service tendance In addition Asgard h

Centre which patients deemed 'ha treatment can delive

Asgard also recogni significant be Project enab employment to gain this is into from 2n

Asgard's several a Health as For more i forma 01472 319667.

Asgard recognised that a significant proportion of 16 to 19 year olds sing universal healthcare services, and if they were assisted to do so it would ensure that they became responsible, which would be a solid foundation for the

Asgard exploits the period of transition in a young person's life to ositive relationship with universal health and is opposed to a negative, reactive relationship. oung people have been supported into the through opportunistic contact during their ency care services.

s also piloted a service with Raj Medical bassed all age groups and focused on those d to reach' to engage with universal services and receive all the benefits that early intervention, diagnosis and

> s that sustainable employment yields health and well being. The Asgard Work people who are not in education or ork experience in health & social care. Agai ear and has supported 23 young people on workless families into employment.

cted national recognition and has won being scrutinised by the Department of Practice Model for Early Intervention. t Asgard's work please telephone



Photo of Joanne Avison, Asgard Service Manager with Sarah Jayne Addison, Asgard Project worker and winner of the Care Trust Plus Chief Executive's Award in 2010



## chapter 3

## Cancer Equity Profile

Cancer is a major cause of illness with 829 people diagnosed in North East Lincolnshire in 2007. It is also one of the biggest causes of death both locally and nationally, accounting for 1 in 4 deaths, in 2007 <sup>(1-3)</sup>. That year 436 people in North East Lincolnshire died from cancer. Many cancers are associated with lifestyle which means that we can reduce the incidence of cancer and the number of people dying prematurely from cancer if we can ensure people adopt healthier lifestyles. Preventing people from smoking, reducing overweight and obesity in society and cutting alcohol consumption are vital to achieve this. There are significant inequalities in cancer incidence, mortality and survival. Survival from almost all cancers is better in affluent areas than in deprived ones for a variety of reasons . In July 1999 the government set a "tough" target: "to reduce the death rate from cancer in people under 75 years by at least a fifth (20%) by 2010 [compared with 1997]—saving up to 100 000 lives".<sup>(4,5)</sup>

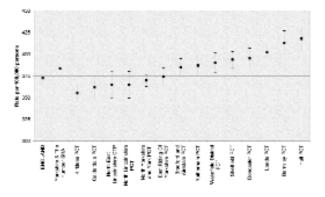
In order to update our knowledge about the incidence and causes of cancer locally and increase our understanding of the variation in cancer diagnoses and survival rates between different groups in North East Lincolnshire, we carried out a Cancer Equity Profile in 2009. This chapter of my annual report summarises the main findings and highlights the key recommendations.

#### **All Cancers**

#### **Cancer Registrations**

The North East Lincolnshire Care Trust Plus (NELCTP) population has the third lowest rate of cancer registrations per 100,000 population for all persons in the Yorkshire and Humber Strategic Health Authority (Y&H SHA). The rate for NELCTP (364.7/100,000) is lower than the national rate (372.4/100,000) and significantly lower than the regional rate (383.8/100,000), (see Figure 3.1). Despite having a low rate of cancer incidence, North East Lincolnshire has the 7th highest rate (187.4/100,000) of cancer mortality in the Yorkshire and the Humber region. North East Lincolnshire has a higher rate than the regional (183.9/100,000) and national (175.5/100,000) rates, although the difference is not statistically significant.

#### Figure 3.1 All cancer registrations in the Yorkshire and the Humber Strategic Health Authority, by Primary Care Organisation (2004-2006) - All Persons.



Data Source: The Compendium of Clinical and Health Indicators

#### Top 10 Cancer Deaths (by cancer site)

Lung cancer accounts for over a quarter (25.6%) of all cancer deaths in males in North East Lincolnshire and is the leading cause of cancer mortality. This reflects the high rate of smoking in the local population. Prostate cancer is the second most common cause of death from cancer in males, followed by colorectal cancer (see Table 3.1).

#### Table 3.1 Top 10 Deaths from Cancer in Males, North EastLincolnshire (2004-2008 Pooled Data)

Top 10 Male Deaths from Cancer	No.	%
C33-C34 : Trachea, bronchus and lung	304	25.6%
C61 : Prostate	149	12.5%
C18-C20 : Colorectum	119	10.0%
C80 : Without specification of site	107	9.0%
C15 : Oesophagus	74	6.2%
C67 : Bladder	60	5.1%
C16 : Stomach	54	4.5%
C82-C85 & C96 : Non-Hodgkin lymphom	na 39	3.3%
C91-C95 : Leukaemia	33	2.8%
C00-C14 & C30-32 : Head and Neck	31	2.6%
C00-C97 All Malignant Neoplasm's	1188	100.0%

Data Source: ADDE

Lung cancer is also the leading cause of cancer death in females in North East Lincolnshire, accounting for 18.3% of all deaths from cancer, breast cancer is the second most common cause of cancer death in females followed by colorectal cancer.

#### Table 3.2 Top 10 Deaths from Cancer in Females, North East Lincolnshire (2004-2008 Pooled Data)

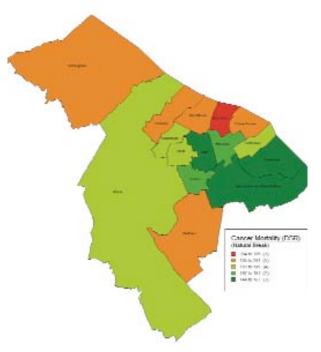
Top 10 Female Deaths from Cancer	No.	%
C33-C34 : Trachea, bronchus and lung	190	18.3%
C50 : Breast	163	15.7%
C18-C20 : Colorectum	101	9.7%
C80 : Without specification of site	97	9.4%
C56 : Ovary	59	5.7%
C25 : Pancreas	44	4.2%
C15 : Oesophagus	40	3.9%
C67 : Bladder	34	3.3%
C70-C72 : Brain, and other parts of		
central nervous system	25	2.4%
C91-C95 : Leukaemia	24	2.3%
C00-C97 All Malignant Neoplasm's	1036	100.0%

Data Source: ADDE

#### **Cancer Mortality – Ward Level**

East Marsh ward has the highest death rate (284.9/100,000) from all cancers in the North East Lincolnshire CTP area and has a significantly higher death rate than the area's average (184.5/100,000). Park (145.0/100,000) has the lowest death rate from cancers in the NELCTP area and is significantly lower than the rate for North East Lincolnshire, (see Figure 3.2).

#### Figure 3.2 Mortality from all cancers in North East Lincolnshire (2004-2008 pooled data) by electoral ward – All Persons



© This product includes mapping data licensed from Ordnance Survey © Crown Copyright 2006.

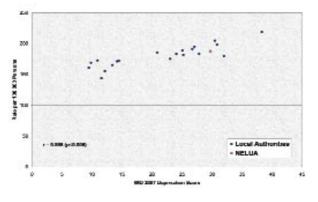
## **Cancer Equity Profile**

#### **Cancer Mortality - Socioeconomic Inequalities**

Spatial differences in cancer mortality rates within the Yorkshire & Humber region may be partially explained by levels of deprivation. For all persons (Figure 3.3) and all persons under 75 there is a positive correlation between IMD2007 deprivation scores and premature cancer mortality for local authorities within the region.

Whilst those living in the most deprived areas are no more likely to get cancer than the rest of North East Lincolnshire, they are more likely to die from cancer. One explanation for this is that people living in the most deprived areas may be presenting later with symptoms so treatment may not be as successful.

Figure 3.3 The Relationship Between Cancer Mortality and Deprivation for LA Areas in the Yorkshire & Humber Region (2005-07). All persons



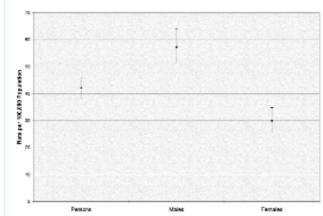
Data Source: The Compendium of Clinical and Health Indicators

Locally, there is also evidence of socioeconomic inequalities in cancer mortality. Those living in the 20% most deprived quintile with a mortality rate of 245.8/100,000 are significantly more likely to die of cancer than those living in the top 4 quintiles (173.5/100,000) and the average for North East Lincolnshire (184.5/100,000).

#### Lung Cancer

Between the years 2004-2008, lung cancer was the main cause of death for 494 people in North East Lincolnshire and was the leading cause of death from cancer in all persons. Lung cancer accounted for 304 deaths in males, 25.6% off all deaths from cancer and 190 deaths in females, 19.0% of all deaths from cancer. In North East Lincolnshire, males (57.2/100,000) are statistically significantly more likely to die of lung cancer than females (29.9/100,000), the mortality rate for males is also significantly higher than the area's average of 42.1/100,000, (see Figure 3.4).

#### Figure 3.4 Mortality from lung cancer, 2004-2008 pooled data, by sex





#### Colorectal Cancer Colorectal Cancer Incidence

NELCTP population has the second lowest rate of colorectal cancer registrations within the Y&H SHA region. At 41.0/100,000 the rate is not significantly different to either the Y&H SHA regional average rate (46.0/100,000), or the England national average rate (45.5/100,000).

#### **Colorectal Cancer – Mortality**

Colorectal cancer is the second most common cause of death from cancer for persons overall and is the third most common cause of cancer mortality in males and females, accounting for 10% of all male deaths from cancer and 9.7% in females. For the years 2004-2008, 220 deaths registered in North East Lincolnshire were directly from colorectal cancer. Males (22.3/100,000) are significantly more likely to die from colorectal cancer than females (13.9/100,000).

Although North East Lincolnshire has the second lowest incidence of colorectal cancer in the region, the same cannot be said about the death rate as North East Lincolnshire has the third highest death rate from colorectal cancer for all persons in the Yorkshire and Humber region. Although the North East Lincolnshire rate (19.4/100,000) is higher than the regional (17.7/100,000) and national rate (17.8/100,000), the difference is not statistically significant.

#### **Prostate Cancer**

#### **Prostate Cancer – Incidence**

NELCTP population has the fifth lowest rate of new prostate cancer registrations within the Yorkshire and the Humber region. At 89.6/100,000 the rate is not significantly different to either the regional average rate (95.6/100,000), or the England national average rate (99.0/100,000).

#### Prostate Cancer – Mortality

Despite the low incidence rate, North East Lincolnshire has the highest death rate (27.5/100,000) from prostate cancer in the Yorkshire and Humber region and is higher than the regional (24.5/100,000) and national (25.1/100,000) rates, however there is no statistical significance.

#### **Breast Cancer (Females)**

#### **Breast Cancer (Females) – Incidence**

North East Lincolnshire had the second lowest rate (112.5/100,000) of breast cancer registrations per 100,000 females in the Yorkshire and Humber region and is lower than the regional (120.4/100,000) and the national average (122.8/100,000), although the difference is not statistically significant.

#### **Breast Cancer (Females) – Mortality**

Females living in the 20% most deprived areas of North East Lincolnshire (37.2/100,000) are more likely to die from breast cancer than the remaining 80% (22.5/100,000) and the area as whole (24.7/100,000), however there is no statistical difference.

#### **Cervical Cancer**

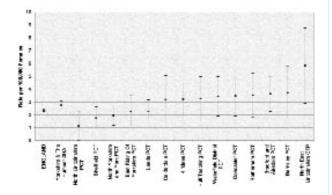
#### **Cervical Cancer – Incidence**

North East Lincolnshire has the second highest rate of new cervical cancer registrations in the Y&H SHA region. The rate for North East Lincolnshire (16.4/100,000) is significantly higher than both the regional (10.3/100,000) and national rate (8.0/100,000).

#### **Cervical Cancer – Mortality**

North East Lincolnshire has the highest rate of deaths from cervical cancer in the Y&H SHA region. The death rate for North East Lincolnshire (5.8/100,000) is higher than the regional rate (2.7/100,000) and significantly higher than the national rate (2.4/100,000). Confidence intervals are wide due to small numbers. (See Figure 3.5).

#### Figure 3.5 Deaths from cervical cancer in the Yorkshire and Humber Strategic Health Authority, by Primary Care Organisation (2005-2007) – Females.



Data Source: The Compendium of Clinical and Health Indicators

#### Skin Cancer – Other than Malignant Melanoma

#### Skin Cancer – Other than Malignant Melanoma - Incidence

North East Lincolnshire has the sixth highest rate of new skin cancer registrations in the region. The rate for North East Lincolnshire (129.1/100,000) is significantly higher than the England rate (106.9/100,000) and higher than the regional rate (125.4/100,000), although the difference is not statistically significant.

#### Skin Cancer – Other than Malignant Melanoma – Mortality

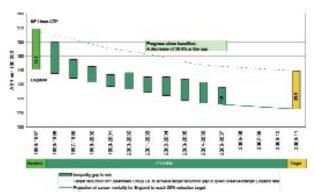
North East Lincolnshire has the fifth highest death rate from malignant melanoma in the Y&H SHA region for persons of all ages. The rate for North East Lincolnshire (2.3/100,000) is slightly higher than the regional rate (2.2/100,000) but lower than the national rate (2.5/100,000). However, numbers involved are small and there are no significant differences between North East Lincolnshire and the national and regional rates.

#### **Premature Mortality**

People in NELCTP area (127.6/100,000) are significantly more likely to die prematurely (under the age of 75) from cancer than the England average (115.5/100,000). Approximately 64% of primary care organisations within the Y&H SHA had rates statistically significantly higher than England, only North Yorkshire & York PCT had a rate statistically significantly lower. Regionally, North East Lincolnshire has the 4th highest rate and although the local rate is higher than the regional rate the difference is not statistically significant (121.0/100,000).

Figure 3.6 shows cancer mortality in North East Lincolnshire compared to England. The inequalities gap between North East Lincolnshire and England has decreased by 58.4% since the baseline year 1995/97 and it is predicted that the 2009/11 target will be met.

Figure 3.6 Cancer mortality in North East Lincolnshire all persons under age 75 - inequality gap, England 1995-2007 and target for the year '2010'



Data Source: NYCRIS

#### Premature Mortality- Colorectal Cancer

North East Lincolnshire has the highest rate of premature mortality from colorectal cancer in the Y&H SHA region. However, the local rate (14.2/100,000) was neither statistically significantly different to the England (10.9/100,000) or the Y&H SHA region (10.9/100,000) rates.

#### **Premature Mortality- Prostate Cancer**

North East Lincolnshire has the second highest premature mortality rate from prostate cancer in the Yorkshire and Humber region. However, the local rate (10.4/100,000) was neither statistically significantly different to the England (8.9/100,000) or the Yorkshire & Humber SHA (9.2/100,000) rates.

#### **Relative Survival (5 year survival)**

Overall the relative survival for all cancers is lower in North East Lincolnshire than for the Y&H SHA region, although the difference is not statistically significant. Lung cancer has the lowest relative survival rate out of the six cancer sites listed in Table 3.3. Lung cancer survival is lower in North East Lincolnshire than the region, however the difference is not statistically significant. For North East Lincolnshire the highest relative survival is found in breast cancer, the rate for North East Lincolnshire is slightly lower than the regional rate, although the difference is not statistically significant.

Table 3.3 5 year relative survival, North East Lincolnshire and the Yorkshire and Humber SHA Region, 1998-2002

		Relative			Crude	Number in	Cumulative
	Area	Survival	95% LCI	95% UCI	Rate	Cohort	Deaths
C00-C97 excluding C44.							
Invasive malignant neoplasm's	NEL	45.9	43.9	48.0	36.5	3,477	2,207
	Y&H	47.7	47.3	48.1	37.8	105,991	65,936
C18-C20 Colorectal	NEL	49.4	43.2	55.5	38.5	410	252
	Y&H	52.7	51.6	53.8	40.0	13,187	7,909
C33-C34 Trachea, bronchus	NEL	5.5	3.1	7.8	4.2	495	474
and lung	Y&H	7.1	6.7	7.6	5.5	16,372	15,466
C43 Malignant Melanoma	NEL	81.4	68.7	94.1	70.6	68	20
	Y&H	88.0	86.1	89.9	77.5	2,455	552
C50 Breast (Females)	NEL	81.6	77.0	86.2	70.3	532	158
	Y&H	82.8	82.0	83.6	72.3	15,218	4,213
C53 Cervix uteri (Females)	NEL	76.2	64.7	87.7	71.4	70	20
	Y&H	68.1	65.4	70.9	62.8	1,490	554
C61 Prostate (Males)	NEL	71.8	64.6	79.1	50.6	385	190
	Y&H	76.1	74.8	77.5	54.8	10,476	4,736

Data Source: NYCRIS

#### **Conclusions and Recommendations**

Cancer is now responsible for more deaths in Britain than anything else. There has however been progress in understanding the causes of cancer and also new therapies to treat cancer. This has led to many new interventions which are focused on both prevention (e.g. HPV immunisation) and early diagnosis (e.g. screening services for breast, cervical and bowel cancer). It is encouraging that North East Lincolnshire has a lower rate of cancer than the region and England but very concerning that despite this, mortality from cancer is higher than the region and England and survival rates are generally lower. This emphasises the importance of early diagnosis and we must therefore work hard to ensure that our screening services have the highest possible uptake, particularly from residents in deprived parts of North East Lincolnshire where cancer rates are higher but screening uptake is lower. Reducing the number of people smoking is critical if we are to achieve reductions in the number of people developing cancer and dying at an early age.

- We must continue to increase the uptake of HPV immunisation in order to ensure a long term reduction in mortality from cervical cancer
- A range of initiatives are needed to reduce the prevalence of smoking in North East Lincolnshire. This includes targeted smoking cessation support with a focus on disadvantaged communities and a redoubling of efforts to prevent young people from ever taking up smoking. This should include efforts to reduce the access of young people to tobacco products
- Target effective health promotion interventions at those communities where risk factors for cancer are highest and uptake of early detection services such as screening tend to be lowest

- Ensure that health trainers, cancer collaborative and voluntary groups work in close collaboration to assess how to continue to improve public awareness of common cancer symptoms and encourage patients to present early.
- Ensure that all North East Lincolnshire patients with appropriate symptoms are referred for specialist advice and treatment.

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### Smoke-Free Alliance in North East Lincolnshire

Reducing smoking prevalence is critical to improving health, cutting health inequalities and increasing life expectancy in North East Lincolnshire. Smoking is the biggest cause of premature death and brings enormous costs to both the NHS and the economy as a whole through the cost of treatment and loss of productivity through ill health. This is why we have established a Smoke Free Alliance of partner organisations with the aim of reducing the number of people smoking and therefore the number of people dying early as a result of smoking.

One of our priorities is to prevent young people from being recruited as smokers. More than three quarters of adult smokers start smoking in their teens. Some will manage to quit early, but many will continue to smoke for decades, unable to give up and increasingly at risk of serious illness and early death. Our prevention work is therefore focused on children and young people and seeks to reduce availability of tobacco, increase understanding of the health consequences of using tobacco and to reduce the acceptability of smoking in peer groups. Legislation has assisted in restricting use of products. The ban on tobacco advertising and the raising of the minimum age for sale of products to 18 have both helped. In addition, there are a mix of initiatives ranging from prevention work done in schools around smoking policies and classroom education, general communication on issues in newspapers, posters and leaflets and information stalls in community events. The Care Trust Plus and Local Authority work closely together to undertake a number of campaigns throughout the year aimed at raising awareness of health issues associated with tobacco use, prevent uptake and promote free NHS services.

Another important area of work for the Smoke Free Alliance is the promotion of smoke free environments. The banning of smoking in enclosed public places in July 2007 has already had a remarkable impact and is benefitting people's health. There is evidence already in Scotland of a 17% reduction in the number of heart attack admissions since smoke-free policies came into force and more people are attending stop smoking services in England. Enforcement of the legislation is undertaken by North East Lincolnshire Council Trading Standards Officers who also support the work around counterfeit and illegal tobacco and to date there have been 90,000 illegal cigarettes and over 20kg of hand rolling tobacco seized in North East Lincolnshire.

The vision driving the work of the Smoke Free Alliance is simple. It is for North East Lincolnshire to be a place where it is hard to start smoking, easy to give up and where no one is exposed against their will to the harmful effects of second hand smoke.

If you have any information about the illegal supply of tobacco to children please call 0845 404 0506 or text cigs to 82055 or e-mail tradingstandards@nelincs.gov.uk

If you would like help to stop smoking call 0845 603 2166 or try the website www.freedomfromsmoke.org.uk



## Health Protection Summary

We continue to work closely with the Health Protection Agency on health protection matters affecting North East Lincolnshire residents such as communicable disease, environmental issues and pandemic response. In 2009 our resources were challenged by the emergence of H1N1 influenza (swine flu) which led to the declaration of a pandemic by the World Health Organisation, the first for many years.

#### **Communicable Diseases**

A summary of the main surveillance information for notifiable diseases and gastrointestinal illnesses for 2009 is shown in Tables 4.1 and 4.2 respectively.

#### Table 4.1 Notifiable Diseases North East Lincolnshire 2009

Disease	Notified	Laboratory confirmed
Diphtheria	0	0
Dysentery	2	2
Leptospirosis	0	0
Malaria	0	0
Measles	7	1
Meningitis	'	
Meningococcal	5	4
Pneumococcal	2	2
Haemophilus influenzae	0	0
Viral	0	0
Meningococcal septicaemia	1	1
Mumps	347	156
Ophthalmia Neonatorum	0	0
Rubella	0	2
Scarlet Fever	20	na
Tuberculosis	4	4
Typhoid fever	0	0
Viral Hepatitis		
Hepatitis A	1	1
Hepatitis B - Acute	1	1
Hepatitis B - Chronic/unknown	2	2
Hepatitis C - antibody positive	39	39
Whooping cough	0	0

Source: Nth Yorkshire & Humber Health Protection Unit Please note data is provisional

In 2009 there was one case of confirmed measles in an infant (under 1 year old) who had not been immunised. An outbreak of mumps occurred with 347 cases being notified and 156 of these having laboratory confirmation. Most of the cases were aged between 15 and 24 and were notified between May and July; by October notifications had returned to usual reporting levels. The cases were from across the community with several linked to schools and colleges.

There were 39 positive laboratory reports for hepatitis C antibodies reported during 2009, 20 of which were PCR positive; 5 PCR negative. Most hepatitis C cases (locally and nationally) are associated with current or former injecting drug use, the virus being transmitted by sharing contaminated injecting equipment. There was one case of acute hepatitis B and two cases of chronic hepatitis B notified.

There were 5 laboratory confirmed cases of meningococcal infection (meningitis or septicaemia) during 2009. There were 4 cases of tuberculosis during the year, all confirmed on laboratory testing, compared to 8 notifications in 2008.

#### **Food poisoning and Gastrointestinal Infections**

The commonest gastrointestinal organism was Campylobacter, with 195 cases, an increase from the 160 cases in 2008. Less commonly identified gastrointestinal organisms included Salmonella (27 – compared to 34 last year); Cryptosporidium (14) and Giardia (5). There was only 1 case of the potentially serious E.Coli 0157 infection compared to 3 cases in 2008.

#### Table 4.2 Gastrointestinal organisms reported fromlaboratories 2009

Organism	
Salmonella	27
Campylobacter	195
E.coli 0157	1
Shigella sonnei	2
Shigella flexneri	0
Giardia Lamblia	5
Cryptosporidiosis	14
Rotavirus	38
SRSV/Norovirus	76

#### Swine Flu

During 2009 the health community had to manage the local manifestations of the H1N1 influenza pandemic. The initial containment phase was led by the Health Protection Agency which tried to establish a virological diagnosis and treatment for all cases and also provide prophylaxis for household and other close contacts. Once the virus was circulating widely we moved to an NHS-led treatment phase where the emphasis was on providing antiviral treatment rapidly to all clinical cases utilising antiviral distribution points at various locations within North East Lincolnshire. Once a specific H1N1 vaccine was available a staged programme of vaccination was implemented, with those at greatest risk being given first priority. Uptake of H1N1 swine flu vaccine was lower than that for seasonal influenza with around 28% uptake in the 65 plus age group and 35% in those under 65 in clinical risk groups. Uptake of the seasonal flu vaccine during the winter of 2009 -10 was lower than 2008 - 2009 in the 65+ age group, with a 70.7% uptake, a fall of 4.2%. An improvement was achieved in uptake in younger people in clinical at risk groups rising to 50.1%.

#### **HIV and AIDS**

During 2009 a total of 38 people from North East Lincolnshire accessed treatment and care services for HIV/AIDS (3 less than last year), 26 male and 12 female. 25 cases were white, 11 black African and 2 other ethnic group (includes black unspecified, other/mixed, and other Asian/ oriental). 27 were receiving either triple or quadruple drug therapy (one more than last year receiving drug therapy). No deaths were recorded during the year. 15 of the 26 male cases were acquired through sex with other men. 10 male and 11 female cases were acquired through heterosexual intercourse. There was one case contracted through intravenous drug use and one case involving mother to baby transmission. This pattern has remained broadly similar over the last three years.

# Health Protection Summary

#### **Preventing and Controlling Infection**

Not all infections can be prevented but since 2004, a national campaign has seen a 50% reduction in Methicillin Resistant Staphylococcus Aureus (MRSA) bacteraemia infections. There is a challenge to ensure any Clostridium Difficile infections are not healthcare associated. The campaign has included ongoing audit of practice and investigations into the root causes of these infections, recognising themes and changing practice to avoid future infections. It is sustaining this reduction that is the future challenge.

Viral infections are an ongoing problem in the community; especially seasonal influenza and viral gastroenteritis such as Norovirus. This is where the community is involved as infection control is everyone's responsibility. Effective hand hygiene is the single most important infection prevention measure we can all undertake. An education programme in our schools and to all health and social care workers and a whole range of organisations in the community on why, when and how to wash your hands is delivered by the community infection control nurses. There is a lot of information for the public on how to help and this poster gives you 10 top tips to follow especially if you are visiting the hospital.

#### **Conclusions and Recommendations**

Despite major challenges in the last year, the response provided by health services, local authority services and the Health Protection Agency on health protection issues was of a high standard. In particular our response to the swine flu pandemic was excellent and showed that preparations made in recent years for a potential influenza pandemic had been worthwhile. Further information is available from the North Yorkshire and the Humber Health Protection Unit Annual Report.

 With significant changes proposed for public health and health protection services arising from the NHS White Paper, it is vital that we maintain a North East Lincolnshire focus on health protection issues to ensure that we continue to respond effectively.

NHS

#### Tackling Infections: Put yourself in the picture Fighting infections together: Top tips for patients

#### 1. Clean your hands

- We all carry germs on our hands. It is important to clean your hands, especially after
- using the toilet and before eating. If you need help cleaning your hands, ask one of the nurses

#### 2. Visitors' hands

 Visitors should also clean their hands as they arrive to avoid bringing in infections.

#### 3. Keep infections away

 If a friend or relative has an infection such as a cough, cold, flu, diarrhoea or vomiting, it is best if they do not visit you. Ask one of the nurses if you're unsure.

#### 4. Ward rules

- Please follow the rules for your ward.
   You may be asked to limit your visitors. This is to reduce the number of people around your bedside and leasen the risk of infections being brought in from outside. It might be necessary to stagger your visitors so they come at
- different times. It is also best if visitors do not sit on your bed. • Limit clutter and gifts as keeping your bed
- area free from clutter makes cleaning easier.

#### 5. Patient toilets are for patients

 To minimise the risk of infection, your visitors should not use the patient toilets on the ward. Staff can direct family and friends to the visitors' toilets.

#### 6. Please tell us

Please tell one of the nurses as soon as possible if you experience any diarrhoea or vomiting. It is important to let staff know so they can keep you and other patients safe.

#### 7. Don't touch

To reduce the risk of infection, please avoid touching your wound, wound dressings, urinary catheters, intravenous (IV) drips or drains. Ask a nurse if you need help or are in any discomfort.

#### 8. It's OK to ask

 All doctors, nurses and other healthcare staff are trained to clean their hands in the right way and at the right time. But it's OK to ask if they've cleaned their hands before they tend to you. They won't mind.

#### Want to know more?

Please ask the nurses if you have any questions or concerns about infection control. For further information on infection prevention and control please visit: www.nbs.uk www.patent.association.com

The Top Tips have been developed by The Patients Association and the NHS.



### Health Trainers in North East Lincolnshire

The Health Trainer service in North East Lincolnshire was established during April 2007 and now comprises 16 Health Trainers. The Health Trainer Service is an example of how to achieve social progress through social responsibility and therefore a clear example of the 'Big Society' in action. A key factor in the Big Society is 'local civic involvement', that is encouraging and empowering individuals to effect their neighbourhood or community. The Health Trainer Service does this by recruiting and developing a workforce that is drawn from the community it serves, thus community Health Trainers are directly responsible for the health and social well-being of their local population. The core aim of the service is to improve people's health by supporting them to make healthy lifestyle choices. Since the programme began in NE Lincs, Health Trainers have seen over 2000 new clients and undertaken over 8000 1:1 client sessions contributing to positive lifestyle behaviour changes across the area women in refuges, offenders, drug users and their people with learning disabilities, carers, students, r mental health problems, children at Havelock Aca Id people, families within children's centres and mar

During 2010 health trainers have supported a wide range of local initiatives aimed at improving health in our poorest communities and reducing health inequalities. This has included work on the NHS Health Check programme, tobacco control work to reduce smoking in pregnancy, the family interventions programme and work to encourage people to attend breast and cervical screening. Health Trainers operate out of a wide range of local centres including GP Practices, Havelock Academy, Grimsby College and Grimsby Probation. Volunteer Health Trainers are a key part of the workforce with approximately 6 volunteers working at any one time. They have been involved in delivering the Midlife Check from GP surgeries and Grimsby College.

If you would like to know more about the Health Trainer Programme please contact the Health Trainer Programme Manager on Tel: 07730 426133.

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## Conclusions and recommendations

This year's annual report has presented an overview of the major areas of work which have been led by the Public Health Directorate in North East Lincolnshire during 2010. We are encouraged that the issues which we have focused on during the past year- such as better maternal and child health, improved health intelligence, and reduced health inequalities brought about by the primary and secondary prevention of chronic disease- have been highlighted as priorities in the Marmot report and the Public Health White Paper. Despite continuing improvements in health and life expectancy there is much work still to be done to improve the health of people in our most deprived communities. The changes in the delivery of the public health function which have been heralded by the NHS White Paper and the Public Health White Paper, will produce substantial challenges for all our staff over the next couple of years. Hopefully they will also bring new opportunities and renewed energy to improve the health of people in North East Lincolnshire. My three key recommendations for the next year are therefore as follows:

The emergence of the new pathfinder GP Commissioning Consortium on a North East Lincolnshire footprint provides a good opportunity to take forward the excellent work which has been done in primary care to improve health and reduce health inequalities. It is therefore vital that the impetus of recent years is maintained and the GPCC continues to prioritise primary care interventions that reduce health inequality. The effective roll out of the NHS Health Check Programme should be an early priority.

Significant health inequalities in relation to maternal and child health exist in North East Lincolnshire. The reduction of these health inequalities should be a priority for the new Health and Wellbeing Board.

Smoking is a major cause of health problems in North East Lincolnshire. If we can reduce the prevalence of smoking we will reduce our mortality rates, including our infant mortality rate, and increase life expectancy. North East Lincolnshire Council and NHS organisations should proactively support the work of the Smoke Free Alliance to change attitudes to smoking in our area and prevent children from ever taking up smoking.

Geoffrey J Barnes Acting Joint Executive Director of Public Health January 2011

### Epidemiological overview

This chapter provides demographic and health status information for the population of North East Lincolnshire. Regional data are for the government office region of Yorkshire and the Humber, and national data are for England. Where data are not available for the North East Lincolnshire Unitary Authority area, data for the North East Lincolnshire CTP area are included for information.

The data source is the Compendium of Clinical and Health Indicators (http://www.nchod.nhs.uk) as of January 2011, unless otherwise stated. Numbers and rates that are based on a count of less than five have not been disclosed, as advised by the Department of Health and the Office for National Statistics. Local data have also been collected and incorporated for the section on Public Health Programmes.

Although the Care Trust Plus was not established until 1st September 2007 and these data apply to time periods prior to this, for consistency the terminology North East Lincolnshire CTP area has been used in this section.

#### Section A – Population and Demography

Table A1: 2009 Mid-year Resident Population Estimates (2001 Census Based)

Ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	
Males	5000	4600	5200	5900	5400	4200	3900	5100	5900	
Females	4700	4400	5000	5600	4900	4500	4100	5500	6200	
Persons	9700	9000	10200	11500	10300	8700	8000	10600	12000	

Ages	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+	All Ages
Males	5700	5100	4900	4900	3700	3200	2500	1500	1100	77600
Females	5900	5000	4800	4900	3900	3700	3100	2400	2500	80900
Persons	11600	10000	9700	9800	7600	6900	5600	3900	3500	158500
Sources Office for National Statistics										

Source: Office for National Statistics

#### Table A2: Life Expectancy at Birth, Number of Years and Rank, 2007-2009, by Sex

		FEMALES						
	ENGLAND	Y&H	NELUA	NELUA RANK*	ENGLAND	Y&H	NELUA	NELUA RANK*
EOL	78.25	77.4	75.9	296	82.31	81.5	81.3	255

\*Rank out of 324 Local Authorities

#### Section B – Pregnancy, Mother and Child

Table B1: General Fertility Rate* (2009)						
England	63.85					
Yorkshire & the Humber	61.88					
North East Lincolnshire CTP	65.21					
*Live births per 1,000 women aged 15-44						

Table B2: Abortions 2009 – NHS/Non-NHS

	NHS	NHS Agency*	Non-NHS
England	36.6%	57.4%	6.0%
Yorkshire & the Humber	56.9%	38.3%	4.8%
North East Lincolnshire CTP	95.6%	*	*

\*Operations carried out in the private sector on NHS patients

+Figures have not been presented due to data suppression at source

Table B3: Abortion Rates by Maternal Age (per 1,000 women) - 2009

	<18years	18-19 years	20-24 years*	25-29 years	30-34 years	35+ years
England	18.0	31.4	29.9	22.5	15.9	6.8
Yorkshire & the Humber	18.3	27.9	25.0	19.6	13.3	5.5
North East Lincolnshire CTF	29.4	33.0	33.4	25.3	11.9	4.0

<2500g

7.5

#### Table B4: Number of Abortions by Maternal Age - 2009

	<18years	18-19 years	20-24 years*	25-29 years	30-34 years	35+ years	
England	16920	21037	52009	38791	25633	25869	
Yorkshire & the Humber	1778	2108	4993	3463	1985	2061	
North East Lincolnshire CT	P 95	71	172	118	48	45	

\*Includes age unknown

#### Table B5: Percentage of Abortions byGestational Age (in weeks) - 2009

Table B6: Percentage of births under1500 grams & under 2500 grams - 2009

<1500g

1.4

	3-9 weeks	10-12 weeks	13+ weeks
England	75.1	15.5	9.4
Yorkshire & the Humber	71.5	19.1	9.3
North East Lincolnshire CTP	62.7	22.6	14.8

Table B7: Number of Live and Still Births by Maternal Age - 2009

### 9.1 9.3 Yorkshire & the Humber 1.4 8.0 2.6 14.8 North East Lincolnshire CTP 1.6 8.9 aternal Age - 2009 Image: Age - 2009 Image: Age - 2009 Image: Age - 2009 Image: Age - 2009

England

		11-15 years	16-19 years	20-24 years	25-34 years	35-39 years	40 years+	Total 11+
England	Live births	971	39388	127800	367342	109607	25950	671058
	Still births	5	251	703	1725	609	194	3487
NELCTP	Live births	7	211	614	931	187	36	1986
	Still births	<5	<5	6	<5	<5	<5	16

 Table B8: Perinatal Mortality (Stillbirths & Deaths under 7 days – Rate per 1,000 Total Births) and

 Infant Mortality (Deaths under 1 year – Rate per 1,000 Live Births) Numbers and Rates (2009)

	England			Yorks	shire & th	e Humber	N	E Lincoln	shire CTP
Area	No.	Rate	CI	No.	Rate	CI	No.	Rate	CI
Perinatal Mortality	5109	7.6	7.4-7.8	544	8.2	7.5-8.9	21	10.5	6.8-16
Infant Mortality	3110	4.6	4.5-4.8	366	5.5	5.0-6.1	14	7.0	4.2-11.9

\*Cl is the range of the Confidence Interval at 95%

#### Section C – Public Health Programmes Table C1: NELPCT Antenatal Screening Uptake 2005-2009/10

YEAR	2005	2006	2007	2008/09	2009/10
Total Bookings	2438*	2613*	2648*	2690	2711
Rubella	2360 (96.8%) tested 62 (2.6%) negative for antibodies	2582 (98.8%) tested 93 (3.6%) negative/low level for antibodies	2591 (98%) tested 163 (6%) negative/low level for antibodies	2622 (97.4%) tested 143 (5%) negative/ low level for antibodies	96.4% tested 117 (5%) negative/low level for antibodies
Syphilis	2327 (95.4%) tested 4 positive tests	2576 (98.5%) tested 4 positive tests	2578 (97%) tested 3 positive tests	2622 (97.4%) tested 3 positive tests	94.5% tested 2 positive cases
Hepatitis B	2330 (95.6%) tested 7 (.3%) positive tests	2567 (98.2%) tested 2 positive tests	2572 (97%)tested 5 positive results	2609 (97%)tested 2 positive results	94.2% tested 1 positive case
HIV	2240 (91.9%) tested 0 positive tests	2434 (93.1%) tested 1 positive test 36 missing data	2513 (95%) tested 0 positive tests	2602 (96.8%) tested 0 positive tests	91% tested 1 positive case
Sickle Cell & Thalassaemia			40% selectively screened 8 carrier status 8 partner screens 2 at risk couple identified	28.4%selectively screened 17 carrier status 15 partner screens 1 at risk couple identified	31.5% selectively screened 11 carrier status 11 partner screens 0 at risk couple identified
Down's Syndrome Screening	1269 (52%) 49 increased risk 3.9% screen positive rate	1163 (44.5%) screened 57 increased risk 4.9% screen positive rate	07/08 2714 bookings 1256 (46.2%) 46 screen positive	1170 (43.4%) screened 34 high risk 3 case's diagnosed following Amniocentesis 3.5% Screen Positive Rate	1101 40.6% uptake 16 screen positive 0 cases diagnosed in screened population 2 cases diagnosed in screened population

Source: NE Lincolnshire CTP Antenatal and Child Health Screening Annual Report 2009/10

\*Audit and activity data is based on January to December 2007 data collection which was the required period for submission to HPA. To bring in to line with other screening programme data submissions and annual reporting this has changed to collection by fiscal year commencing April 2008.

#### Table C2: Uptake of Newborn Hearing Screening in 2008/09 and 2009/10 in NELCTP

	Total Number of Newborns in CTP 2009/10	Total No. Tested	Percentage Uptake 2009/10	Outcome (No. Referred) in 2009/10	Percentage Uptake 2008/09
Newborn Hearing Screening	2053	Attempted 2041 Completed by 4 weeks 1994	Attempted (99.3%) Completed (97.2%) Target >95%	Bilateral 7 (0.10%) Unilateral 41 (0.8%)	Attempted (99.7%) Completed (96.7%)

Source: NE Lincolnshire CTP Antenatal and Child Health Screening Annual Report 2008/09 and 2009/10

Table C3: Breast Cancer Screening in NELCTP for 2008 and 2009 (Women aged 53-64 years)

		As At 31st Mar	ch 2008	As At 31st March 2009		
	Eligible Population	No. of Women Screened	Coverage (Less than 3 years since last test)%	Eligible Population	No. of Women Screened 2	Coverage (Less than 3 years since last test)%
England	3713812	2847824	76.7%	3734110	2874703	77.0%
Yorkshire & the Humber	375801	289208	77.0%	378543	298060	78.7%
North East Lincolnshire CTP	12229	6983	57.1%	12266	9390	76.6%

Source: NHS Cancer Screening Programmes (http://www.cancerscreening.nhs.uk)

#### Table C4: Cervical Cancer Screening in NELCTP for 2008/09 and 2009/10

	2008-09				2009-	10
	Eligible Population*	Coverage (Less than 3.5 yrs since last adequate test) % +	Coverage (Less than 5 years since last adequate test) %*	Eligible Population*	Coverage (Less than 3.5 yrs since last adequate test) % +	Coverage (Less than 5 years since last adequate test) %*
Eng	13441200	72.5%	78.9%	13580500	74.0%	78.9%
Yorks + Humber	1293000	72.7%	80.2%	1299600	76.0%	80.2%
NELCTP	39200	74.0%	80.9%	39100	78.2%	81.6%

Source: NHS Cancer Screening Programmes (http://www.cancerscreening.nhs.uk)

\* Women aged 25-64 years

+ Women aged 25-49 years

#### Table C5: Uptake of Chlamydia Screening in 2009/10 in NELCTP

		All Sites – All Tests Reported *						
Gender	Age Group	Number of	Number of	% of 15-24 year				
	(Years)	Tests+	Positives ^	old Population				
Male	15-19	1434	79	6.5%				
	20-24	522	77	2.4%				
Female	15-19	2325	194	10.5%				
	20-24	1579	104	7.1%				
Total	15-19	3759	273	16.9%				
	20-24	2101	181	9.5%				
	15-24	5860	454	26.4%				

Source: COAST

\* All tests include screening tests, diagnostics tests, and contacts

+ Equals the addition of all tests reported to the NCSP and tests outside of GUM not reported to the NCSP

^ Equals the addition of all positive tests reported to the NCSP and tests outside of GUM not reported to the NCSP

#### Table C6: Smoking – Setting a Quit Data and Successful Quitters per 100,000 Population (2009/10)

	Number Setting A Quit Date	No. Successfully Quit at 4 weeks (Self Reporting)	% Successfully Quit at 4 weeks (Self Reporting)	No. Successfully Quit per 100,000 of Population (16 yrs and Over)
England	757537	373954	49.4%	895
Yorkshire & the Humber	75117	39594	52.7%	932
North East Lincolnshire CT	FP 2293	1303	56.8%	1021

Source: NHS Information Centre

#### Table C7: Health Trainer Programme Activity (2009/10)

Month	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	<b>Total</b>	
Total New Clients	36	46	35	50	32	61	48	61	44	96	109	80	698	
Ongoing Clients	34	37	40	44	43	39	39	39	37	34	28	24	438	
Total sessions	187	216	177	203	198	255	263	271	188	258	268	248	2732	
Formal Stands	17	13	30	13	23	24	22	28	14	9	9	25	227	
Signposted to other services	100	103	110	108	103	154	152	386	124	73	61	112	1586	
Referred to Smoking Cessation	2	4	5	1	0	7	3	4	1	31	8	28	94	

Source: Health Trainer Monthly Outcomes Database

#### **Section D – Cancers**

The source for the following data is the Northern and Yorkshire Cancer Registry Information Service (NYCRIS). Age-Standardised Rates (European) per 100,000 population, for selected cancer sites, by sex (1998-2008).

able D1a: Incidence (Males)					MA	ALES					
Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	387.4	392.9	426.5	431.3	443.1	412.9	395.3	404.3	392.4	439.7	449.7
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	16.0	21.3	26.7	17.0	18.5	17.5	21.4	13.0	17.9	21.4	30.7
C15: Oesophagus	17.2	15.8	12.6	9.4	8.9	29.3	9.9	15.7	11.2	15.0	17.1
C16: Stomach	16.5	20.0	25.4	14.8	18.1	21.0	11.6	26.6	15.2	25.5	16.8
C18-C20: Colorectal	50.2	50.8	53.2	48.8	63.0	51.3	50.3	50.9	48.0	48.9	71.8
C25: Pancreas	11.8	12.9	8.7	8.3	9.6	1.2	5.8	9.2	7.3	6.7	3.2
C33-C34: Trachea, Bronchus and Lung	75.4	76.8	81.9	59.8	73.0	70.1	72.8	55.7	54.8	73.1	67.8
C50: Female Breast	-	-	-	-	-	-	-	-	-	-	-
C53: Cervix uteri	-	-	-	-	-	-	-	-	-	-	-
C56-C574: Ovary	-	-	-	-	-	-	-	-	-	-	-
C61: Prostate	57.2	62.3	76.0	110.8	119.4	101.5	82.1	93.0	92.9	91.0	74.5
C64: Kidney, except renal pelvis	7.3	11.9	17.5	8.2	13.8	8.2	8.3	8.0	15.0	17.8	5.8
C67: Bladder	30.3	20.0	20.5	24.4	19.3	16.5	21.0	25.0	19.3	23.0	23.9
C82-C85 + C96: Non-Hodgkin's lymphoma	15.4	12.0	11.9	17.2	12.2	20.7	12.1	16.1	21.4	17.3	20.0
C91-C95: Leukaemia	16.7	12.1	18.0	12.8	12.4	9.8	15.9	14.1	13.3	14.4	16.4

#### Table D1b: Incidence (Females)

Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	344.4	332.3	349.8	368.9	353.3	319.4	337.8	384.3	328.7	339.7	390.7
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	5.5	5.1	10.1	5.2	10.0	8.1	10.3	6.8	2.8	8.8	8.6
C15: Oesophagus	8.0	6.8	5.2	4.3	6.3	2.2	8.4	6.4	5.6	5.9	6.4
C16: Stomach	7.3	3.0	6.2	9.1	8.8	7.0	5.3	7.3	4.8	0.8	4.0
C18-C20: Colorectal	37.6	37.0	36.0	28.1	32.1	26.8	31.0	34.8	25.2	25.6	29.7
C25: Pancreas	6.5	8.4	8.5	3.2	9.5	7.7	6.7	6.6	6.7	6.6	11.0
C33-C34: Trachea, Bronchus and Lung	32.3	37.6	29.6	41.0	28.8	34.0	37.5	27.9	32.6	38.3	44.1
C50: Female Breast	112.2	103.4	120.9	127.2	128.2	105.1	101.9	131.9	106.2	95.9	125.3
C53: Cervix uteri	13.4	18.0	13.3	26.4	17.2	12.5	15.3	18.5	15.2	15.6	17.5
C56-C574: Ovary	28.4	14.2	17.9	19.5	14.3	10.4	14.4	17.5	12.6	14.6	12.4
C61: Prostate	-	-	-	-	-	-	-	-	-	-	-
C64: Kidney, except renal pelvis	6.6	10.2	9.4	6.0	1.7	4.3	4.5	5.7	4.7	11.0	8.3
C67: Bladder	7.8	9.4	5.2	2.4	6.2	6.0	6.9	7.2	1.9	9.3	5.9
C82-C85 + C96: Non-Hodgkin's lymphoma	9.2	7.4	9.1	10.2	7.9	7.8	11.1	16.7	12.4	4.7	13.6
C91-C95: Leukaemia	6.5	5.7	6.8	7.2	9.9	6.6	5.6	7.3	8.1	5.5	13.5

**FEMALES** 

able D1c: Incidence (All Persons)					PER	SONS					
Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	365.9	362.6	388.2	400.1	398.2	366.2	366.6	394.3	360.5	389.7	420.2
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	10.7	13.2	18.4	11.1	14.2	12.8	15.9	9.9	10.4	15.1	19.6
C15: Oesophagus	12.6	11.3	8.9	6.9	7.6	15.8	9.2	11.1	8.4	10.4	11.7
C16: Stomach	11.9	11.5	15.8	11.9	13.5	14.0	8.5	17.0	10.0	13.2	10.4
C18-C20: Colorectal	43.9	43.9	44.6	38.4	47.6	39.1	40.7	42.9	36.6	37.3	50.8
C25: Pancreas	9.2	10.7	8.6	5.7	9.6	4.4	6.2	7.9	7.0	6.6	7.1
C33-C34: Trachea, Bronchus and Lung	53.9	57.2	55.7	50.4	50.9	52.0	55.2	41.8	43.7	55.7	55.9
C50: Female Breast	-	-	-	-	-	-	-	-	-	-	-
C53: Cervix uteri	-	-	-	-	-	-	-	-	-	-	-
C56-C574: Ovary	-	-	-	-	-	-	-	-	-	-	-
C61: Prostate-		-	-	-	-	-	-	-	-	-	-
C64: Kidney, except renal pelvis	7.0	11.1	13.5	7.1	7.7	6.3	6.4	6.9	9.9	14.4	7.1
C67: Bladder	19.1	14.7	12.8	13.4	12.8	11.3	14.0	16.1	10.6	16.1	14.9
C82-C85 + C96: Non-Hodgkin's lymphoma	12.3	9.7	10.5	13.7	10.0	14.3	11.6	16.4	16.9	11.0	16.8
C91-C95: Leukaemia	11.6	8.9	12.4	10.0	11.1	8.2	10.8	10.7	10.7	9.9	15.0

#### Table D2a: Mortality Rates (Males)

MALES

Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	256.5	249.2	264.9	255.9	250.7	252.6	247.1	220.8	231.4	203.6	234.6
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	4.3	5.5	6.3	6.6	5.5	11.2	8.9	5.3	4.5	2.2	11.1
C15: Oesophagus	13.6	13.6	15.9	19.8	10.0	11.3	19.0	18.5	16.6	7.9	11.2
C16: Stomach	15.0	13.8	8.9	13.4	12.1	9.4	10.9	15.7	3.8	12.2	9.9
C18-C20: Colorectal	40.6	25.7	20.8	24.8	29.8	18.8	24.4	27.4	24.5	20.1	19.7
C25: Pancreas	11.1	13.3	4.6	8.1	7.1	4.6	3.2	7.7	9.8	3.7	4.3
C33-C34: Trachea, Bronchus and Lung	62.3	68.6	81.4	59.8	62.4	65.7	59.8	53.5	58.0	61.9	61.4
C50: Female Breast	-	-	-	-	-	-	-	-	-	-	-
C53: Cervix uteri	-	-	-	-	-	-	-	-	-	-	-
C56-C574: Ovary	-	-	-	-	-	-	-	-	-	-	-
C61: Prostate	20.8	27.1	32.1	34.8	37.0	33.4	26.1	27.4	24.8	30.9	28.1
C64: Kidney, except renal pelvis	3.1	5.4	10.3	3.3	4.6	4.2	3.6	3.6	6.7	6.5	2.7
C67: Bladder	15.3	7.1	11.2	10.8	7.1	10.1	14.1	10.8	8.5	8.0	11.4
C82-C85 + C96: Non-Hodgkin's lymphoma	9.6	6.9	8.3	7.2	9.5	8.8	9.6	6.6	5.1	7.0	7.8
C91-C95: Leukaemia	7.1	6.9	3.2	6.7	7.7	8.3	6.4	4.9	6.9	5.8	8.3

#### Table D2b: Mortality Rates (Females)

Table D2b: Mortality Rates (Females)					FEN	IALES					
Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	171.7	162.1	165.4	159.2	159.2	170.2	135.4	166.3	163.1	159.8	150.7
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	2.9	2.5	0.0	6.2	1.6	4.3	4.4	3.6	3.6	0.0	2.6
C15: Oesophagus	3.9	4.4	3.6	4.4	4.7	1.2	5.1	6.1	5.6	4.0	8.0
C16: Stomach	5.6	7.0	2.9	2.8	4.8	4.6	4.3	6.1	1.0	1.5	2.5
C18-C20: Colorectal	19.3	11.9	19.9	13.9	8.4	15.8	13.4	12.9	20.7	10.1	11.8
C25: Pancreas	8.2	9.0	7.2	1.7	8.7	10.1	5.3	6.4	8.2	8.1	5.1
C33-C34: Trachea, Bronchus and Lung	24.8	29.7	33.3	34.6	26.0	31.1	20.7	28.6	33.2	29.1	37.4
C50: Female Breast	34.9	30.6	31.6	32.0	27.0	38.9	27.2	25.2	21.3	29.3	20.4
C53: Cervix uteri	6.0	5.7	5.0	2.3	4.5	2.7	1.8	6.6	7.6	3.2	2.8
C56-C574: Ovary	18.6	16.8	3.5	8.2	14.7	9.3	4.1	13.9	11.0	12.6	6.9
C61: Prostate	-	-	-	-	-	-	-	-	-	-	-
C64: Kidney, except renal pelvis	6.6	3.2	4.2	1.8	1.3	2.8	2.4	1.4	2.9	4.2	3.7
C67: Bladder	5.3	7.0	4.8	3.3	4.7	2.1	6.3	1.6	3.9	5.6	3.5
C82-C85 + C96: Non-Hodgkin's lymphoma	5.2	1.9	8.6	0.4	3.7	5.3	0.8	7.9	1.2	2.5	2.9
C91-C95: Leukaemia	2.2	1.4	1.6	3.2	6.1	2.8	1.3	9.4	1.2	3.1	4.3

Table D2c: Mortality Rates (All Persons)					PER	SONS					
Cancer/Site	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
C00-97: All malignant (exc. NM Skin)	214.1	205.6	215.1	207.6	204.9	211.4	191.3	193.5	197.3	181.7	192.6
C00-C14 + C30-C32: Head & Neck (exc. Thyroid)	3.6	4.0	3.2	6.4	3.6	7.8	6.6	4.5	4.0	1.1	6.9
C15: Oesophagus	8.7	9.0	9.7	12.1	7.3	6.3	12.1	12.3	11.1	5.9	9.6
C16: Stomach	10.3	10.4	5.9	8.1	8.5	7.0	7.6	10.9	2.4	6.8	6.2
C18-C20: Colorectal	29.9	18.8	20.4	19.4	19.1	17.3	18.9	20.1	22.6	15.1	15.8
C25: Pancreas	9.6	11.1	5.9	4.9	7.9	7.3	4.3	7.1	9.0	5.9	4.7
C33-C34: Trachea, Bronchus and Lung	43.6	49.2	57.4	47.2	44.2	48.4	40.3	41.1	45.6	45.5	49.4
C50: Female Breast	-	-	-	-	-	-	-	-	-	-	-
C53: Cervix uteri	-	-	-	-	-	-	-	-	-	-	-
C56-C574: Ovary	-	-	-	-	-	-	-	-	-	-	-
C61: Prostate	-	-	-	-	-	-	-	-	-	-	-
C64: Kidney, except renal pelvis	4.9	4.3	7.3	2.5	2.9	3.5	3.0	2.5	4.8	5.3	3.2
C67: Bladder	10.3	7.1	8.0	7.1	5.9	6.1	10.2	6.2	6.2	6.8	7.5
C82-C85 + C96: Non-Hodgkin's lymphoma	7.4	4.4	8.5	3.8	6.6	7.1	5.2	7.2	3.2	4.8	5.4
C91-C95: Leukaemia	4.6	4.1	2.4	4.9	6.9	5.5	3.9	7.1	4.1	4.4	6.3

#### Section E - MORTALITY DATA

Table E1: Numbers (2009, Ages 1yr+) and SMRs (2007 - 2009, All Ages) for Selected Causes of Death, NELCTP

CONDITION		PER	SONS		MA	LES		FEM	ALES
	No.	SMR	(95% CI)	No.	SMR	(95% CI)	No.	SMR	(95% CI)
All Cancers	450	108	102-114	237	109	101-117	213	107	99-116
- Lung Cancer	123	125	112-139	70	129	112-148	53	119	100-140
- Colorectal Cancer	39	90	75-108	16	86	66-111	23	95	72-123
- Bladder Cancer	20	146	111-188	14	138	97-190	6	162	101-245
- Melanoma	5	90	50-148	<5	55	18-128	<5	133	64-244
All Circulatory Diseases	512	113	108-118	254	118	110-126	258	108	101-116
Accidents	44	119	98-142	26	133	105-167	18	101	74-134
- Land Transport Accidents	11	149	102-211	>5	150	96-223	<5	147	64-290
Suicide & Undetermined Injury	12	100	70-137	>5	108	73-153	<5	75	30-155

#### Table E2: Numbers (2009) and SMRs (2007 - 2009) for All Causes of Death by Age Range, NELCTP

ALL CAUSES		PER	SONS		MA	LES		FEM	ALES
	No.	SMR	(95% CI)	No.	SMR	(95% CI)	No.	SMR	(95% CI)
Ages under 1	<5	123	91-164	<5	150	103-210	<5	00	50-147
Ages 1-14	<5	120	01 104	<5	150	103-210	<5	89	50-147
Ages 15-64	281	117	109-125	165	122	112-133	116	109	97-122
Ages 65-74	285	119	112-127	166	122	112-133	119	116	104-128
Ages 75+	1051	*	*	447	*	*	604	*	*

\*Data not available

Age-standardised Mortality Rates (European) per 100,000 Population, by Sex, 2000-09 (Selected Indicators, Saving Lives: Our Healthier Nation).

#### Table E3a: All Circulatory Disease (Males)

Table E3a: All C	rculatory	Disease	(Males)				IM	ALES			
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Ages under 65	5 NELUA NELCTP	88.2	93.1	67.1 66.4	74.0 73.2	65.5 66.1	67.6 66.9	76.3 75.4	72.6 75.5	58.4 59.3	61.3 61.9
Ages 65-74	NELUA	1108.6	1315.3	1043.0 1033.6	1038.8 1073.7	960.0 966.6	861.2 852.9	902.4 922.1	1074.2 1093.3	874.0 864.9	705.4 697.3
Ages under 75	NELUA	162.6	182.2	138.3 136.9	144.3 146.2	130.7 131.7	125.5 124.2	136.5 137.2	145.6 149.7	117.9 118.0	108.2 108.3
All ages	NELUA NELCTP	352.2	347.3	328.0 328.5	299.9 303.0	296.6 299.3	266.7 264.7	280.6 280.5	285.8 289.1	260.0 260.2	228.6 228.0

able E3b: All Cir	culatory Di	sease (Fo	emales)					FEMA	LES		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Ages under 65	NELUA	28.3	25.7	19.8	16.4	38.8	30.3	38.4	17.4	17.2	27.7
0	NELCTP	-	-	19.6	16.2	38.4	30.0	38.0	18.4	18.4	27.4
Ages 65-74	NELUA	653.0	597.2	611.8	500.7	504.8	488.8	446.0	395.9	507.3	365.7
-	NELCTP	-	-	607.5	497.0	501.2	498.4	442.3	392.3	529.0	362.7
Ages under 75	NELUA	73.9	67.4	63.0	51.7	72.8	63.7	68.1	45.0	53.0	52.3
-	NELCTP	-	-	62.5	51.3	72.1	64.1	67.5	45.7	55.6	51.8
All ages	NELUA	207.3	196.7	190.4	189.4	185.6	178.7	180.9	152.3	161.9	140.3
Ũ	NELCTP	-	-	190.1	188.7	184.9	179.0	180.1	152.8	163.9	139.9
able E3c: All Cir	culatory Di	sease (A	ll Person	is)			/	ALL PER	SONS		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Ages under 65	NELUA	58.0	59.3	43.5	45.2	52.2	49.1	57.4	45.0	37.8	44.4
rigeo unaci co	NELCTP	-	-	43.0	44.7	52.3	48.5	56.8	47.0	38.9	44.6
Ages 65-74	NELUA	861.4	933.8	814.5	753.1	717.6	663.3	660.2	720.6	684.7	528.0
	NELCTP	-	-	808.0	767.9	719.1	664.5	667.8	728.5	691.9	520.0
Ages under 75	NELUA	116.6	123.1	99.7	96.8	100.7	93.9	101.4	94.3	85.0	79.7
. gee andor ro	NELCTP			98.8	97.5	100.9	93.5	101.4	96.7	86.5	79.5
All ages	NELUA	267.1	264.3	246.5	243.0	234.0	219.9	226.0	213.4	205.9	179.9
	NELCTP	-	-	246.4	243.8	234.8	219.1	225.6	215.4	207.0	179.5
uble E4a: Coron	ary Heart L	Disease (l	Males)					MALI	ES		
				0000-	0000	0004	0005			0000	0000
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Ages under 65	NELUA	65.1	65.9	46.9	48.1	40.4	42.3	56.1	50.9	36.7	36.7
	NELCTP	-	-	46.3	47.6	41.3	41.8	55.4	52.9	37.8	37.6
				10.0	TT .U	41.0					
Ages 65-74		781 7	896.0	691 7	746.0	585.3	594 7	588.6	125 /	540.0	42h I
Ages 65-74	NELUA NELCTP	781.7 -	896.0 -	691.7 685.4	746.0 783.7	585.3 595.3	594.7 588.9	588.6 611.5	725.7 717.6	540.0 534.4	426.1 421.2
	NELUA NELCTP	-	-	685.4					717.6		
Ages 65-74 able E4b: Coron	NELUA NELCTP	-	-	685.4				611.5	717.6		
able E4b: Coron	NELUA NELCTP Dary Heart L AREA	- <b>Disease (I</b> 2000	- Females 2001	685.4 ) 2002	783.7 2003	595.3 2004	588.9 2005	611.5 <b>FEMA</b> 2006	717.6 L <b>ES</b> 2007	534.4 2008	421.2 2009
J. J	NELUA NELCTP Dary Heart E AREA NELUA	- <b>Disease (I</b> 2000 18.0	- Females 2001 12.8	685.4 2002 4.3	783.7 2003 8.2	595.3 2004 18.1	588.9 2005 13.0	611.5 FEMA 2006 12.8	717.6 LES 2007 5.6	534.4 2008 5.0	421.2 2009 9.5
able E4b: Coron	NELUA NELCTP AREA AREA NELUA NELCTP	- <b>Disease (I</b> 2000 18.0 -	- Females 2001 12.8 -	685.4 2002 4.3 4.3	783.7 2003 8.2 8.1	595.3 2004 18.1 17.9	588.9 2005 13.0 12.9	611.5 FEMA 2006 12.8 12.7	717.6 LES 2007 5.6 6.7	534.4 2008 5.0 6.3	421.2 2009 9.5 9.4
able E4b: Coron	NELUA NELCTP Dary Heart E AREA NELUA	- <b>Disease (I</b> 2000 18.0	- Females 2001 12.8	685.4 2002 4.3	783.7 2003 8.2	595.3 2004 18.1	588.9 2005 13.0	611.5 FEMA 2006 12.8	717.6 LES 2007 5.6	534.4 2008 5.0	421.2 2009 9.5
Ages under 65 Ages 65-74	NELUA NELCTP AREA NELUA NELUA NELCTP	- Disease (I 2000 18.0 - 354.8 -	- Females 2001 12.8 - 376.9 -	685.4 2002 4.3 4.3 266.2 264.4	783.7 2003 8.2 8.1 258.5	595.3 2004 18.1 17.9 238.5	588.9 2005 13.0 12.9 272.3 283.8	611.5 FEMA 2006 12.8 12.7 230.1	717.6 LES 2007 5.6 6.7 229.5 227.4	534.4 2008 5.0 6.3 190.0	421.2 2009 9.5 9.4 226.3
Ages under 65 Ages 65-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP ARY Heart Dis	- 2000 18.0 - 354.8 - sease (All	- Females 2001 12.8 - 376.9 - Persons	685.4 2002 4.3 4.3 266.2 264.4	783.7 2003 8.2 8.1 258.5 256.6	595.3 2004 18.1 17.9 238.5 236.7	588.9 2005 13.0 12.9 272.3 283.8	611.5 FEMA 2006 12.8 12.7 230.1 228.2 ALL PER	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS	534.4 2008 5.0 6.3 190.0 199.8	421.2 2009 9.5 9.4 226.3 224.4
Ages under 65 Ages 65-74 Able E4c: Corona	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000	- Females 2001 12.8 - 376.9 - - Persons 2001	685.4 2002 4.3 4.3 266.2 264.4	783.7 2003 8.2 8.1 258.5 256.6 2003	595.3 2004 18.1 17.9 238.5 236.7 2004	588.9 2005 13.0 12.9 272.3 283.8 2005	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007	534.4 2008 5.0 6.3 190.0 199.8 2008	421.2 2009 9.5 9.4 226.3 224.4 2009
Ages under 65 Ages 65-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA AREA NELUA	- 2000 18.0 - 354.8 - sease (All	- Females 2001 12.8 - 376.9 - Persons	685.4 2002 4.3 4.3 266.2 264.4 2002 2002 25.6	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3	588.9 2005 13.0 12.9 272.3 283.8 2005 272.7	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0
Ages under 65 Ages 65-74 Able E4c: Corona	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000	- Females 2001 12.8 - 376.9 - - Persons 2001	685.4 2002 4.3 4.3 266.2 264.4	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3 29.7	588.9 2005 13.0 12.9 272.3 283.8 2005 2005 27.7 27.4	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5
Ages under 65 Ages 65-74 Able E4c: Corona	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA AREA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000	- Females 2001 12.8 - 376.9 - - Persons 2001	685.4 2002 4.3 4.3 266.2 264.4 2002 2002 25.6	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0
Ages under 65 Ages 65-74 Ages under 65	NELUA NELCTP AREA AREA NELUA NELCTP AREA AREA NELUA NELUA NELUA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000 41.3 -	- Females 2001 12.8 - 376.9 - - 1 Persons 2001 39.4 -	685.4 2002 4.3 4.3 266.2 264.4 2002 2002 25.6 25.6 25.3	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3 29.7	588.9 2005 13.0 12.9 272.3 283.8 2005 2005 27.7 27.4	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5
Ages under 65 Ages 65-74 Ages under 65 Ages under 65 Ages 65-74	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP	- Disease (I 2000 18.0 - 354.8 - sease (All 2000 41.3 -	- Females 2001 12.8 - 376.9 - - 1 Persons 2001 39.4 -	685.4 2002 4.3 4.3 266.2 264.4 264.4 2002 25.6 25.6 25.3 466.1	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9 487.0	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8	588.9 2005 13.0 12.9 272.3 283.8 2005 2005 27.7 27.4 423.9	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1 398.5	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4
Ages under 65 Ages 65-74 Ages under 65	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP	- Disease (I 2000 18.0 - 354.8 - sease (All 2000 41.3 -	- Females 2001 12.8 - 376.9 - - 1 Persons 2001 39.4 -	685.4 2002 4.3 4.3 266.2 264.4 264.4 2002 25.6 25.6 25.3 466.1	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9 487.0	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8	588.9 2005 13.0 12.9 272.3 283.8 2005 2005 27.7 27.4 423.9	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1 398.5 408.5	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4
Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages under 65 Ages 65-74	NELUA NELCTP AREA NELUA NELUA NELCTP AREA AREA NELUA NELUA NELUA NELUA NELCTP NELUA NELUA NELCTP AREA	- Disease (I 2000 18.0 - 354.8 - sease (Al 2000 41.3 - 551.4 - 2000	- Females, 2001 12.8 - 376.9 - - V Persons 2001 39.4 - - 620.0 - -	685.4 2002 4.3 4.3 266.2 264.4 266.2 264.4 2002 25.6 25.3 466.1 462.3 466.1	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9 487.0 504.1	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8 404.8	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 423.9 427.3	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2 360.0	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009
Ages under 65 Ages 65-74 Ages under 65 Ages under 65 Ages 65-74	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP NELUA NELCTP AREA NELUA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000 41.3 - 551.4 - 2000 14.2	- Females, 2001 12.8 - 376.9 - - V Persons 2001 39.4 - - 620.0 - - 2001 39.4 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 25.6 25.6 25.3 466.1 462.3 2002 2002 10.2	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9 487.0 504.1 2003	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 2004 2003 400.8 404.8	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 423.9 427.3	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 6.6	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2 360.0 357.2 360.0	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0
Ages under 65 Ages 65-74 Ages 65-74 Ages under 65 Ages 65-74 Ages 65-74 Ages 100 Figure 65 Ages under 65	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA	- Disease (I 2000 18.0 - 354.8 - sease (Al 2000 41.3 - 551.4 - - 2000 41.3 - -	- Females, 2001 12.8 - 376.9 - - V Persons 2001 39.4 - - 620.0 - - - 2001 39.4 - - -	685.4 2002 4.3 4.3 266.2 264.4 266.1 2002 25.6 25.3 466.1 462.3 2002 2002 2002	783.7       2003       8.2       8.1       258.5       256.6       2003       282       27.9       487.0       504.1       2003       11.0       10.9	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3 29.7 400.8 404.8 404.8 2004 10.1 10.0	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.5 17.3	611.5 FEMAL 2006 12.8 12.7 230.1 228.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 6.6 7.7	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 2009 8.0 8.0 8.0
Ages under 65 Ages 65-74 Ages under 65 Ages 05-74 Ages under 65 Ages 65-74 Ages 65-74	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP NELUA NELCTP AREA NELUA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (All 2000 41.3 - 551.4 - 2000 14.2	- Females, 2001 12.8 - 376.9 - - V Persons 2001 39.4 - - 620.0 - - 2001 39.4 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 25.6 25.6 25.3 466.1 462.3 2002 2002 10.2	783.7 2003 8.2 8.1 258.5 256.6 2003 28.2 27.9 487.0 504.1 2003	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 2004 2003 400.8 404.8	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 423.9 427.3	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 6.6	534.4 2008 5.0 6.3 190.0 199.8 2008 20.8 22.1 357.2 360.0 357.2 360.0	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0
Ages under 65 Ages 65-74 Ages 05-74 Ages under 65 Ages 65-74 Ages 05-74 Ages 05-74 Ages under 65 Ages 05-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP	- Disease (I 2000 18.0 - 3554.8 - sease (Al 2000 41.3 - 551.4 - - 2000 14.2 - 195.4 -	- Females, 2001 12.8 - 376.9 - - V Persons 2001 39.4 - - 620.0 - - - 2001 39.4 - - -	685.4 2002 4.3 4.3 266.2 264.4 2002 25.6 25.6 25.3 466.1 462.3 2002 10.2 10.2 10.1 261.9	783.7       2003       8.2       8.1       258.5       256.6       2003       282       27.9       487.0       504.1       2003       11.0       10.9       87.2	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3 29.7 400.8 404.8 404.8 2004 2004 10.1 10.0 244.7	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 423.9 427.3 2005	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 6.6 7.7 132.6 146.6	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 8.0
Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages 100 Figure 65 Ages 100 Figure 65	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA	- Disease (I 2000 18.0 - 3554.8 - sease (Al 2000 41.3 - 551.4 - - 2000 14.2 - 195.4 -	- Females 2001 12.8 - 376.9 - Persons 2001 39.4 - 620.0 - - 2001 13.2 - 239.1 -	685.4 2002 4.3 4.3 266.2 264.4 2002 25.6 25.3 466.1 462.3 2002 2002 10.2 10.1 261.9 259.6	783.7       2003       8.2       8.1       258.5       256.6       2003       282       27.9       487.0       504.1       2003       11.0       10.9       87.2       86.3	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8 404.8 404.8 2004 2004 10.1 10.0 244.7 242.5	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.3 97.4 96.4	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5 167.8 FEMAL	717.6 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 132.6 146.6 146.6	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8 119.6	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 8.0
Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages 05-74 Ages under 65 Ages 65-74 Ages 65-74	NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA AREA	- Disease (I 2000 18.0 - 354.8 - sease (Al 2000 41.3 - 551.4 - 2000 14.2 - 195.4 - -	- Females 2001 12.8 - 376.9 - Persons 2001 39.4 - 620.0 - - 2001 13.2 - 239.1 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 25.6 25.3 466.1 462.3 2002 10.2 10.1 2002 10.2 10.1 261.9 259.6	783.7       2003       8.2       8.1       258.5       256.6       2003       2003       282       27.9       487.0       504.1       2003       11.0       10.9       87.2       86.3       2003	595.3 2004 18.1 17.9 238.5 236.7 2004 2004 29.3 29.7 400.8 404.8 404.8 2004 10.1 10.0 244.7 242.5	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.3 97.4 96.4	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5 167.8 FEMAL 2006	717.6 LES 2007 5.6 6.7 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 132.6 146.6 7.7 132.6 146.6 2007	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8 119.6	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 96.8 95.7
Ages under 65 Ages 65-74 Ages 05-74 Ages under 65 Ages 65-74 Ages 05-74 Ages 05-74 Ages 05-74 Ages 05-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (AI 2000 41.3 - 551.4 - 2000 14.2 - 195.4 - 195.4 - 2000 9.1	- Females 2001 12.8 376.9 - Persons 2001 39.4 - 620.0 - 2001 13.2 - 239.1 - - 239.1 - - 239.1 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 255.6 25.3 466.1 462.3 2002 10.2 10.2 10.1 2002 10.2 10.1 2002 2002	783.7 2003 8.2 8.1 258.5 256.6 2003 282.2 27.9 487.0 504.1 2003 11.0 10.9 87.2 86.3 2003 8.2	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8 404.8 29.7 400.8 404.8 2004 10.1 10.0 244.7 242.5	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.3 97.4 96.4 2005	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5 167.8 FEMAL 2006 10.0	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 132.6 146.6 7.7 132.6 146.6 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 28.2 2007 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 2	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8 119.6 2008	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 96.8 95.7
Ages under 65 Ages 65-74 Ages 05-74 Ages 05-74 Ages under 65 Ages 65-74 Ages 05-74 Ages 05-74 Ages 05-74 Ages 05-74 Ages 05-74 Ages 05-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP	- Disease (I 2000 18.0 - 3554.8 - sease (Al 2000 41.3 - 551.4 - 2000 14.2 - 195.4 - 195.4 - - 2000	- Females 2001 12.8 376.9 - Persons 2001 39.4 - 620.0 - 2001 13.2 - 239.1 - - 239.1 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 255.6 25.3 466.1 462.3 2002 10.2 10.2 10.1 2002 10.2 10.1 2002 10.2 10.	783.7 2003 8.2 8.1 258.5 256.6 2003 282.2 27.9 487.0 504.1 2003 11.0 10.9 87.2 86.3 2003 8.2 8.2 8.1	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8 404.8 404.8 29.7 2004 10.1 10.0 244.7 242.5	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.3 97.4 96.4 2005	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5 167.8 FEMAL 2006 10.0 9.9	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 132.6 146.6 146.6 146.6 2007 132.6 146.6	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8 19.6 2008 8.8 8.7 120.8 119.6	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 8.0 96.8 95.7
Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages under 65 Ages 65-74 Ages 05-74 Ages under 65 Ages 65-74 Ages 65-74	NELUA NELCTP AREA AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP NELUA NELCTP AREA NELUA NELCTP AREA NELUA NELCTP AREA NELUA	- Disease (I 2000 18.0 - 354.8 - sease (AI 2000 41.3 - 551.4 - 2000 14.2 - 195.4 - 195.4 - 2000 9.1	- Females 2001 12.8 376.9 - Persons 2001 39.4 - 620.0 - 2001 13.2 - 239.1 - - 239.1 - - 239.1 - -	685.4 2002 4.3 4.3 266.2 264.4 2002 255.6 25.3 466.1 462.3 2002 10.2 10.2 10.1 2002 10.2 10.1 2002 2002	783.7 2003 8.2 8.1 258.5 256.6 2003 282.2 27.9 487.0 504.1 2003 11.0 10.9 87.2 86.3 2003 8.2	595.3 2004 18.1 17.9 238.5 236.7 2004 29.3 29.7 400.8 404.8 29.7 400.8 404.8 2004 10.1 10.0 244.7 242.5	588.9 2005 13.0 12.9 272.3 283.8 2005 27.7 27.4 423.9 427.3 2005 17.5 17.3 97.4 96.4 2005	611.5 FEMAL 2006 12.8 12.7 230.1 28.2 ALL PER 2006 34.5 34.1 398.5 408.5 MALL 2006 5.4 5.4 169.5 167.8 FEMAL 2006 10.0	717.6 LES 2007 229.5 227.4 SONS 2007 28.2 29.8 467.9 463.3 ES 2007 132.6 146.6 7.7 132.6 146.6 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 29.8 467.9 463.3 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 28.2 2007 2007 28.2 2007 28.2 29.8 467.9 463.3 2007 2	534.4 2008 5.0 6.3 190.0 199.8 2008 2008 20.8 22.1 357.2 360.0 2008 8.8 8.7 120.8 119.6 2008	421.2 2009 9.5 9.4 226.3 224.4 2009 23.0 23.5 322.4 319.2 2009 8.0 8.0 8.0 8.0 96.8 95.7

able E5c: Strok	e (All Persor	ns)						ALL PER	SONS		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Ages under 65	NELUA	11.7	8.7	10.0	9.6	9.1	11.6	7.8	6.7	6.5	9.2
	NELCTP	-	-	9.9	9.5	9.0	11.5	7.7	7.2	6.4	9.1
Ages 65-74	NELUA	187.1	166.8	224.1	107.5	195.2	124.7	111.1	109.4	143.3	71.7
	NELCTP	-	-	222.4	106.6	193.7	123.5	110.1	115.8	149.5	71.1
able E6a: Cance	ers (Males)							MAL	ES		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All Cancers											

Ages under 65	NELUA	83.5	80.7	76.2	84.4	95.8	71.5	73.8	52.3	86.2	55.2	
	NELCTP	-	-	75.4	83.5	97.4	72.0	74.5	51.7	85.2	54.5	
Ages 65-74	NELUA	1458.9	1013.5	1286.2	1157.3	964.0	1112.4	1134.4	987.1	1252.7	1045.1	
	NELCTP	-	-	1304.0	1146.2	970.5	1101.7	1122.8	976.3	1255.2	1074.0	
Ages under 75	NELUA	183.8	148.7	164.5	162.6	159.1	147.4	151.1	120.5	171.3	127.4	
	NELCTP	-	-	165.0	160.9	161.1	147.1	151.0	119.1	170.6	128.9	
All ages	NELUA	272.6	258.8	252.1	254.2	248.5	228.8	230.4	208.6	247.8	214.4	
	NELCTP	-	-	253.0	252.7	249.8	228.0	232.3	207.7	246.6	215.3	
Breast Cancer												
Ages 50- 69	NELUA	-	-	-	-	-	-	-	-	-	-	
	NELCTP	-	-	-	-	-	-	-	-	-	-	
Lung Cancer												
Ages under 75	NELUA	59.1	34.3	48.1	44.2	43.4	40.5	37.8	35.0	49.4	44.1	
	NELCTP	-	-	48.8	43.7	44.2	40.1	37.4	34.6	48.8	45.5	

FEMALES

#### Table E6b: Cancers (Females)

	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All Cancers											
Ages under 65	NELUA	81.5	71.9	73.1	75.3	55.6	77.6	70.8	63.8	52.0	60.3
	NELCTP	-	-	72.4	74.6	55.0	78.3	70.1	63.1	52.6	62.4
Ages 65-74	NELUA	735.5	589.7	567.9	757.9	595.0	687.6	790.0	689.8	666.9	565.4
	NELCTP	-	-	563.5	752.2	590.6	681.8	795.3	698.3	661.4	574.9
Ages under 75	NELUA	129.2	109.6	109.2	125.1	94.9	122.0	123.3	109.5	96.9	97.2
	NELCTP	-	-	108.2	124.0	94.0	122.3	123.0	109.4	97.0	99.8
All ages	NELUA	170.6	159.1	160.1	173.3	135.8	168.6	165.0	162.0	152.6	151.5
	NELCTP	-	-	158.9	172.8	135.2	168.5	164.5	161.7	152.4	154.2
Breast Cancer											
Ages 50- 69	NELUA	55.5	62.8	56.3	63.6	62.0	50.7	54.3	48.7	40.2	41.8
	NELCTP	-	-	55.7	63.1	61.4	50.2	53.8	48.1	39.8	45.9
Lung Cancer											
Ages under 75	NELUA	28.0	22.7	19.7	23.8	14.0	25.0	27.5	20.9	28.1	29.0
	NELCTP	-	-	19.5	23.6	13.9	24.7	27.3	20.7	27.8	28.7

able E6c: Cance	rs (All Per	sons)						ALL PER	SONS		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All Cancers											
Ages under 65	NELUA	82.5	76.0	74.6	79.8	75.6	74.5	72.4	58.1	69.1	57.8
	NELCTP	-	-	73.9	79.0	76.1	75.1	72.4	57.4	68.9	58.5
Ages 65-74	NELUA	1073.4	790.2	904.4	944.5	768.0	886.8	950.9	830.0	944.2	795.0
	NELCTP	-	-	910.7	936.5	769.1	878.8	948.4	829.3	943.0	813.8
Ages under 75	NELUA	154.7	128.1	135.1	142.9	126.1	133.7	136.4	114.4	132.9	111.6
	NELCTP	-	-	134.9	141.6	126.6	133.7	136.2	113.7	132.6	113.6
All ages	NELUA	213.8	198.1	199.3	204.4	183.7	192.9	191.9	179.4	196.7	177.9
	NELCTP	-	-	199.1	203.5	184.3	192.5	192.3	178.7	196.1	179.8
Breast Cancer											
Ages 50- 69	NELUA	-	-	-	-	-	-	-	-	-	-
	NELCTP	-	-	-	-	-	-	-	-	-	-
Lung Cancer											
Ages under 75	NELUA	42.9	28.2	33.1	33.6	28.3	32.4	32.5	27.6	38.3	36.2
	NELCTP	-	-	33.3	33.2	28.7	32.0	32.1	27.3	38.0	36.7

Table E7a: Su	icide & Undete	rmined li	njury (M	ales)	MALES							
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Suicide & Un	determined Injur	y		1								
All ages	NELUA	17.8	13.7	23.9	10.5	23.5	13.2	9.4	13.9	13.6	12.6	
	NELCTP	-	-	23.7	10.4	23.3	13.1	9.3	14.8	13.5	12.5	
Suicide												
All ages	NELUA	14.6	4.3	16.0	7.9	11.7	7.8	7.8	9.0	12.3	12.6	
	NELCTP	-	-	15.8	7.8	11.6	7.7	7.8	10.0	12.2	12.5	
Table E7b: Su	icide & Undete	rmined li	njury (Fe	emales)				FEMAL	.ES			

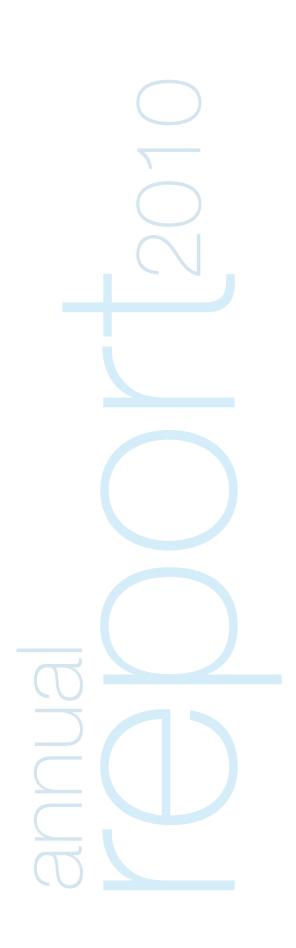
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Suicide & Unc All ages	determined Injury NELUA NELCTP	3.5 -	2.8	3.2 3.2	3.8 3.8	5.8 5.7	1.2 1.2	2.8 2.8	0.0 0.0	4.9 4.9	3.1 3.1
Suicide All ages	NELUA NELCTP	1.0 -	1.3 -	1.8 1.8	0.0 0.0	4.6 4.6	1.2 1.2	1.5 1.5	0.0 0.0	4.9 4.9	1.7 1.7

ble E7c: Suic	s)	ALL PERSONS									
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Suicide & Und	etermined Injur	у									
All ages	NELUA	10.4	7.9	13.4	7.2	14.4	6.8	5.7	6.6	9.2	7.7
	NELCTP	-	-	13.3	7.1	14.3	6.8	5.7	7.1	9.2	7.7
Suicide											
All ages	NELUA	7.7	2.7	8.8	3.8	8.0	4.4	4.3	4.4	8.6	7.0
	NELCTP	-	-	8.8	3.8	7.9	4.4	4.2	4.9	8.6	7.0

Table E8a: All (	Causes (Males		MALES								
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All ages	NELUA NELCTP	914.4 -		916.4 920.5		849.9 853.2		777.8 777.6			

Table E8b: All C	Causes (Fema	iles)						FEMA	LES		
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All ages	NELUA NELCTP	611.2 -	533.5 -		570.4 567.8		531.9 531.3		540.1 540.9	523.9 528.3	515.8 518.8

able E8c: All C		ALL PERSONS									
	AREA	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
All ages	NELUA NELCTP	739.8	703.0	710.0 711.4		677.5 678.0		661.9 660.1	661.1 663.7	665.1 665.7	614.8 617.1





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