
North East
North West
Yorkshire and the Humber
East Midlands
West Midlands
East of England
London
South East
South West

THE REGIONS

Health problems and initiatives

In this section, each of the geographical areas covered by England's nine public health groups highlight a specific issue or local health intervention.

Better recognition of mental health problems

Mental health problems are more common in the North East than many other regions in England. According to *Indications of Public Health in the English Regions 7: Mental Health*, produced by the Association of Public Health Observatories, the region has higher than national average rates for common mental health conditions such as depression and anxiety, for hospitalisations for self-harm, and for mortality from suicide.

To help combat this, the North East is applying the principles of Mental Health First Aid, a scheme that trains people in the public sector to recognise the symptoms of mental health problems, provide initial help and guide people to appropriate professional help. Mental Health First Aid originated in Australia, and the Care Services Improvement Partnership in England has developed a version appropriate for use here.

The National Institute for Mental Health in England delivers the programme through a network of 12 national training team members. They provide mental health instructor training. Since October, 16 instructors have been trained in the North East, who have gone on to train around 120 staff from statutory and voluntary agencies, such as local Mind organisations, primary care trusts, Newcastle City Council and Jobcentre Plus offices.

One organisation implementing the programme is the Northumbria Probation Area, which supervises adult offenders serving community orders and those released from prison on licence. With around 700 staff supervising approximately 7,000 offenders at any one time, Northumbria Probation Area is one of the largest in the country. As in many other organisations, mental health problems are one of the most significant reasons for staff absence. Additionally, around 90% of prisoners have a mental illness and/or substance misuse problem. Training staff to recognise problems in colleagues and offenders will help them address the issue and get appropriate assistance.

Northumbria Probation Area began delivering Mental Health First Aid in January 2008. Optional training is offered to all staff, and it is compulsory for trainee probation officers. Plans are to deliver approximately 15 courses during 2008, reaching an estimated 150 staff.

Early indications are that the course is fulfilling its objectives. Participant evaluations show that a high percentage of those who completed the course encountered someone with a mental health issue and were able to help. Additionally, a large percentage of participants reported an improvement in their own mental health following the course. The feasibility of further evaluation of the training, and of the programme's impact on specific groups such as employers or those in hard-to-reach communities, is being investigated.

Improvements in pregnancy outcomes for women with diabetes

Last year's Annual Report detailed the success of the Northern Diabetes in Pregnancy Survey in supporting improvements in pregnancy care and outcomes for women with pre-existing diabetes. This continuous survey involved a regional, multi-centre, collaborative clinical audit that tracked regional trends in prevalence, outcomes and standards of care.

The Report noted that future surveillance should encompass gestational diabetes – diabetes that develops or is identified during pregnancy – which is becoming an increasingly common problem. This may, in part, be due to the rising levels of obesity among women becoming pregnant, as obesity is a major risk factor for the development of gestational diabetes. Gestational diabetes increases the risk of poor pregnancy outcomes, but the provision of high-quality specialist antenatal care can reduce these risks.

Building on the successful model of the Northern Diabetes in Pregnancy Survey, a clinical working group consisting of diabetes specialists, obstetricians, specialist nurses, midwives and a dietitian, developed regional standards of care for gestational diabetes. These standards are based on the existing regional guidelines for pre-gestational diabetes.

The Northern Survey of Gestational Diabetes is being piloted in five maternity units, beginning in April 2008. Information on all deliveries in women with gestational diabetes will be collected until the end of 2008. The data will be reviewed to determine the feasibility of rolling out the programme across the region in 2009/10 and to determine the level of participation of maternity units in the region. The work will establish a continuous audit of standards of care and pregnancy outcomes in women with gestational diabetes, and make it possible for clinicians to track regional trends, compare experiences and share good practice. It will also provide a foundation for the implementation of National Institute for Health and Clinical Excellence guidance on the management of diabetes in pregnancy, which was published in March 2008.

Profiles of children's health and well-being

The health and well-being of today's children and adolescents is fundamental to a healthy population in years to come. In order to target local action more effectively, the North West Children, Young People and Maternal Health Board commissioned the North West Public Health Observatory to provide a picture of the health of children and young people across all local authorities in the region.

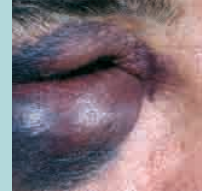
The North West Children and Young People's Health Indicators are available through an online health profiler (www.nwph.net/cayphi), which enables each local authority district to see, at a glance, where it is positioned with regard to the health and well-being of its children. The current position of each area compared with the rest of the region and the level of inequality are illustrated across 50 indicators, showing where areas of improvement can be locally targeted. Developed using a number of publicly available datasets as well as Hospital Episode Statistics data, the Children and Young People's Health Indicators describe the population of children and adolescents up to the age of 18 years (unless otherwise specified). They are intended as the first step towards producing comprehensive child health data for the region, but it is recognised that key information gaps remain.

A report has been published to accompany the online tool, which illustrates the geographic distribution of each indicator across the North West as well as inequalities relating to multiple deprivation. A summary statistic across the 50 indicators has been generated to show the overall position within the region for each local authority. The average rank across all indicators shows a very strong relationship with deprivation (see **Figure 1**), which illustrates the size of the challenge of tackling children's inequalities for the North West region. Each local area can not only identify where it lies within this overall regional picture, but can also focus in on the detail where there is good practice or where more action might be needed.

The tool contains new measures never published before at the local authority district level: obesity in both boys and girls aged 4–5 years and 10–11 years, and the dental health of both 5-year-old and 10-year-old children. Over the next 12 months, the North West Public Health Observatory and the North West Regional Public Health Group will maintain and further develop the Children and Young People's Health Indicators to enhance the set available.

Figure 1: Child health is correlated with deprivation in North West local authorities

Source: North West Children and Young People's Health Indicators



The impact of violence on public health

Last year's Annual Report highlighted the extent and impact of violence in England, its contribution to health inequalities, and the need to target violence prevention using a multi-agency approach. Efforts to tackle violence have since been strengthened, both in the North West and across England.

The Government's Public Service Agreements for 2008–11 include a specific commitment to 'reduce the most serious violence, including tackling serious sexual offences and domestic violence'. To support this, the Home Office published *Saving Lives. Reducing Harm. Protecting the Public: An action plan for tackling violence 2008–11* in February 2008. This draws on the World Health Organization's public health approach to violence prevention, with its key objective of ensuring that local agencies work together to identify individuals and communities most at risk of violence and target evidence-based interventions appropriately.

In 2007, new national regulations placed an obligation on local agencies, including health services, to share data with partner agencies for crime prevention. Such data sharing is critical for violence prevention due to the large proportion of violent incidents that are not reported to police. In the North West, the accident and emergency data-sharing system, developed by the Trauma and Injury Intelligence Group in Merseyside, is being expanded throughout the region. Routinely collected accident and emergency data feed into local violence prevention initiatives, whilst Trauma and Injury Intelligence Group staff work with individual accident and emergency departments to collect enhanced information on the location and circumstances of violence. Such systems are also being developed elsewhere in England.

While accident and emergency data are critical in assisting police and partnership interventions to better target violence, better use of hospital admission data can also help identify where violence prevention is urgently needed. Building on analyses undertaken for the North West, the North West Public Health Observatory and the Centre for Public Health have examined links between violence and deprivation across England as a whole. Not only does this identify a steep deprivation gradient, it also reveals that such links between exposure to violence and deprivation start at a very young age. Even in the 0–14 year age group, rates of hospital admission for violence are more than fivefold higher in the most deprived areas compared with the most affluent.

The North West is continuing to work closely with the World Health Organization to disseminate evidence-based practice and strengthen capacity for violence prevention. The Centre for Public Health at Liverpool John Moores University – in collaboration with NHS North West, the Health Protection Agency North West and the North West Public Health Observatory – has been designated a World Health Organization Collaborating Centre for Violence Prevention. A four-year work programme with the World Health Organization commenced in 2007, and will see the results of systematic literature reviews, data analyses and policy reviews incorporated into an online tool to enable local, national and international agencies to better target and implement violence prevention.

A slow recovery after the floods

The period between May and July 2007 was the wettest ever since records began in 1766. The rainfall during June and July 2007 was unprecedented, resulting in severe flooding that affected most of the country. In the Yorkshire and the Humber region around 23,600 homes, 3,600 businesses and 290 schools were badly affected, largely around Doncaster, Hull, Grimsby, Sheffield and Rotherham, and in parts of the East Riding. Disruption was widespread: power supplies were in jeopardy; road and rail transport was cut off; and there were three fatalities.

Public health concerns moved quickly to focus on minimising negative health impacts as the long recovery period for communities began. The strategic health authority commissioned public health trainees to undertake an initial baseline assessment. This enabled local primary care trusts in the worst affected areas to take stock of the impact on local services.

Subsequent surveys showed increased reports of both physical and mental health impacts on affected residents compared with residents in unaffected households. Some existing mental health problems have been exacerbated. Physical effects include minor complaints linked to damp conditions and some exacerbation of chronic illness. Worries about finance and insurance and anxiety about the possibility of future floods have also surfaced.

Work in Hull showed both children and adults suffering stress and anxiety as a result of the disruption to their normal lives (including being displaced from their support systems). Fourteen per cent of homes in Hull were flooded. Eleven months after the floods, approximately one-third of those affected have still not been able to move back in. It is expected to take a further six months before most people are back to normal in Hull.

Children in Doncaster have also been showing signs of distress. Close multidisciplinary liaison with schools allowed health teams to identify those children who were exhibiting disruptive behaviour, staying at home when it rains, drawing disturbing pictures and carrying on stressful conversations during class 'circle times'. Through the Improving Access to Psychological Therapies pilot programme, the primary care trust was able to ensure that teachers were trained and helped to support them.

In late 2007, researchers from Lancaster University began following people from Hull affected by the flood. The team will be tracking how the residents deal with the aftermath of the flood over 18 months. This is similar to previous work undertaken by the researchers on the impact of the foot and mouth outbreak. Their final report is expected in 2009.

The floods were an example of a 'slow burn' emergency: they took time to develop and continued over an extended period, demanding people's time and attention. Beyond the immediate threat to life, dealing with the floods and their consequences has posed a number of key questions for local services, including health services.

Previously unconsidered issues include determining the point at which a home becomes uninhabitable due to a lack of or reduced water supply.

The experience in Yorkshire also highlighted the importance of general practitioners having business continuity plans in place to ensure that they can continue to offer normal services, even if surgery buildings have been affected by flooding. It also suggests that more use should be made of the local knowledge of healthcare workers, for example in identifying where the most vulnerable people in the community live.

Evidence from public health professionals in the region helped to inform Sir Michael Pitt's independent review, *Learning Lessons from the 2007 Floods*, which was published recently.

The impact of genetic conditions on infant mortality in Bradford

Last year's Annual Report featured work in Bradford on infant mortality, as the city has one of the highest rates in England. In particular, it highlighted the role of genetics and its importance in infant mortality and morbidity.

The Bradford Infant Mortality Commission published its report on infant deaths in December 2006. Genetic inheritance was one of a number of factors highlighted as contributing to above-average infant mortality levels in the borough. Subsequent work to reduce these levels has included focusing on improving nutrition in pregnant women and infants, reducing smoking in pregnant women, as well as increasing community understanding of the role of genetic inheritance in causing infant death. A large-scale cohort study, 'Born in Bradford', was started in March 2007. It aims to track 10,000 babies from birth to adulthood to find out why Bradford has some of the highest rates of disease and infant mortality in Britain.

There is continued focus on access to genetic services, early antenatal screening and promoting early access to maternity services. Work on genetic service delivery is being informed by current qualitative research with the Pakistani-origin community, at-risk families and health professionals in Bradford, Derby and Blackburn.

Initial findings revealed that:

- the vast majority of community and at-risk family members have received the erroneous message that cousin marriage in itself causes disability in children and should be avoided. This message is perceived as illogical, as consanguineous couples have healthy children and non-consanguineous couples have children with disabilities, leading to confusion and mistrust of health messages
- few have sufficient grasp of recessive inheritance to fully understand the genetic implications for family members and the relevance of genetic and support services
- community and at-risk family members want a greater understanding of genetic risk and an increased awareness of genetics within the extended family, community and wider society.

These findings have highlighted the need for training a range of health professionals to communicate information on genetic risk effectively to a multi-ethnic population. A community genetics steering group is taking this work forward, focusing on staff training, community outreach and linking to the Yorkshire Regional Genetics Service. The steering group is investigating how best to raise awareness of these issues, and how to increase uptake of specialist genetics services by families most at risk.

Kirklees Council and Primary Care Trust have completed research investigating infant deaths in the area around North Kirklees. Published in January 2008, it revealed similar genetic-related issues and highlighted substantial problems caused by poor nutrition and smoking. This suggested a need for targeted work with women of child-bearing age.

Tackling surgical site infection following Caesarean section

Healthcare-associated infections delay recovery, increase hospital stay and have economic consequences. In England, Caesarean section rates have risen from approximately 3% per annum in 1950 to 24% in 2006. Within the East Midlands the current rate is 22%, which is slightly less than the national average.

In 2001, the East Midlands initiated a regional study to assess the post-discharge infection rate following Caesarean section. The pilot study was conducted in a single hospital Trust. Following this, 11 maternity units across the East Midlands agreed to participate in the extended study. This ran between July 2003 and March 2005 and led to the collection of complete records for 5,563 women undergoing Caesarean section. A total of 14% reported wound problems, 9% of these meeting national criteria for surgical site infection (see **Figure 1**). Importantly, 84% of these presented after discharge from hospital.

The patient information was examined to look for possible risk factors for wound infection; age, body mass index, operative blood loss, method of wound closure and emergency surgery were identified as being significant. A further study is currently under way to look at the United States' Centers for Disease Control and Prevention indices for uterine and incision wound infections, and to assess their utilisation in a United Kingdom setting.

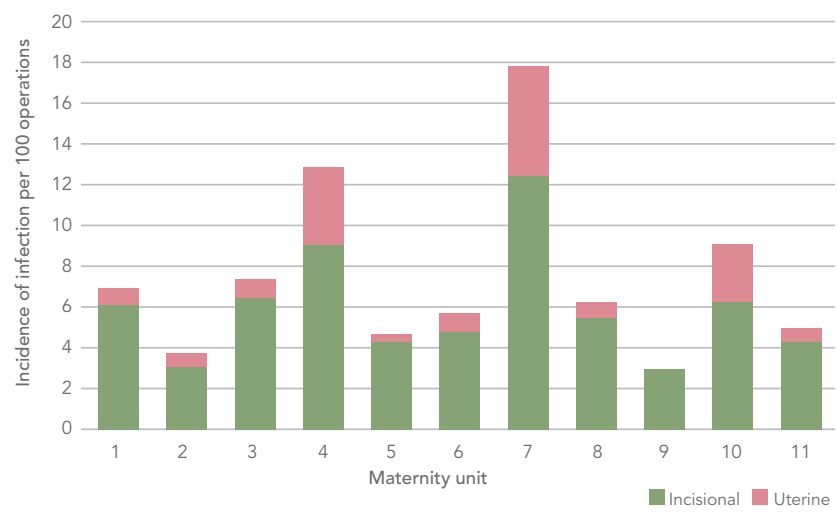
The current study suggests that infection rates can be reduced when routine surveillance with feedback to staff is undertaken. When obstetricians and midwives were informed of the high incidence of wound problems, they were more receptive to infection control measures. When evidence was presented of increased infection with certain wound closure measures, clinicians tended to review their practice.

Prophylactic antibiotics are now administered to 98% of women having Caesarean sections, and compliance is good. However, there is no consensus between Trusts with regard to the choice of drug, regimen, method of administration, and whether prophylaxis should be restricted to high-risk patients.

Further analysis is being carried out to compare these factors and assess their impact on the incidence of infection.

The initiative has shown that Caesarean section is associated with relatively high infection rates. The extent of this is underestimated unless there is post-discharge monitoring. Such monitoring has led to increased awareness in target groups and improvement in service provision. The units involved will continue post-discharge surveillance and the results will be audited in 2008.

Figure 1: Incidence of incisional and uterine infections following Caesarean section in 11 East Midlands maternity units



Source: Health Protection Agency Centre for Infections and East Midlands Regional Office

Driving down heart attack rates

Last year's Annual Report highlighted the region's success in reducing heart attacks and premature mortality from circulatory disease. This was achieved using a three-pronged approach: increased statin prescribing, targeted exercise referral and increased emphasis on smoking cessation targets and advice.

Two local authority areas in North Derbyshire (North Eastern Derbyshire and Bolsover) were the focus. Both are former coalfield areas. Both had substantially higher hospital admissions from heart attacks and significantly higher rates of premature deaths from circulatory disease compared with the England average.

The fall in hospital admission rates for heart attacks since 2002/03 has continued in the former North Eastern Derbyshire Primary Care Trust area. Although there was a slight increase in heart attack admission rates between 2005/06 and 2006/07 (up from 120.1 to 127.6 per 100,000 population), this is still a significant fall from the 2002/03 rate of 145.9 per 100,000 population. It is also a significant reduction of the inequalities gap between the area and the national average.

The Bolsover Wellness Programme, an integral part of the area's approach, was updated in 2006. Five primary priorities – tackling circulatory disease, pulmonary disease, cancer, long-term conditions (including disability), and obesity – were reaffirmed. Smoking and lack of exercise were also targeted for further action.

The new action plan, Bolsover Wellness Plus, called for a 50% increase in exercise referrals, rising from 500 in 2006 to 750 in 2008. It also called for a 33% increase in the number of exercise referral programmes across the district and extending access to these programmes to local schools by 2008. At the end of 2007, the Local Strategic Partnership was halfway to achieving those targets. It agreed an additional £35,000 to increase the availability of smoking cessation services, including specific targeting of hard-to-reach groups.

It is difficult to be sure about the link between the newer interventions and improved premature mortality rates, but early death rates from circulatory disease have continued to fall in Bolsover and North Eastern Derbyshire. Premature mortality rates from circulatory disease are published as pooled three-year averages. In last year's Annual Report, it was noted that premature deaths from circulatory disease in the two local authority areas fell considerably between the baseline years of 1995–97 and 2003–05. In Bolsover, the rate fell from 157.4 to 116.5 per 100,000 population, and in North Eastern Derbyshire the rate fell from 154.4 to 89.0 per 100,000 population. Pooled figures for 2004–06 show a further significant reduction in the premature death rate from circulatory disease to 100.1 and 80.9 per 100,000 population in Bolsover and North Eastern Derbyshire respectively.

Increasing cervical screening uptake

The NHS Cervical Screening Programme, which began in 1988, has contributed hugely to the reduction in the incidence of invasive cervical cancer. In 1987 there were 465 cases of invasive cervical cancer in the West Midlands. By 2006, this figure dropped by almost half to 253. There is still a significant difference between the rates of cervical cancer in women in the most and the least deprived parts of the West Midlands. A greater proportion of women from deprived areas diagnosed with invasive cervical cancer have failed to attend for screening.

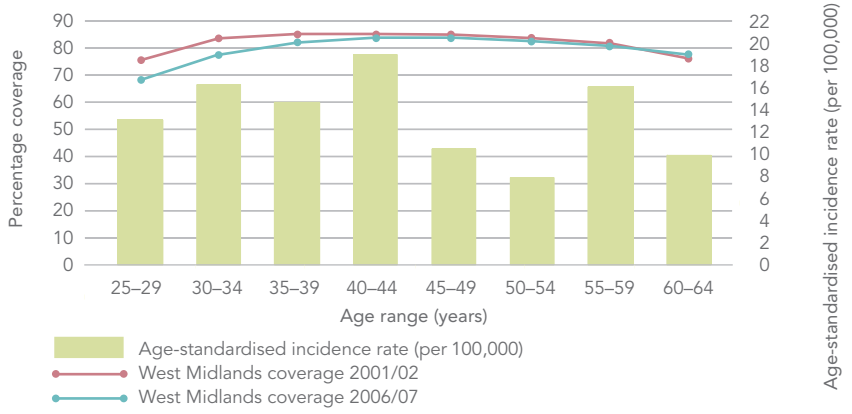
In October 2003, the NHS Cervical Screening Programme changed the age at first invitation for cervical screening from 20 years to 25 years. This was based on research suggesting that screening was not effective in preventing the rare cases of cervical cancer diagnosed in women under 25 years old.

Success is dependent on achieving a high uptake of cervical screening once women reach 25 years of age, as the incidence rates for cervical cancer begin to rise rapidly in the 25 to 29 year age group, and are highest in women aged 25 to 44 years. Rates in the West Midlands are slightly higher than nationally in these age groups. However, screening attendance in women aged 25 to 39 years has been falling steadily since 2001. Only 76% of eligible women in the West Midlands now have a cervical screening test every five years, well below the national coverage target of 80%. This equates to 23,000 under-screened women. Decreasing coverage is greatest in women aged 25 to 29 years. Regional coverage in this group is 68%, compared with 82% in women aged 40 to 64 years (see Figure 1).

In 2008, a three-year West Midlands-wide promotional campaign was introduced to increase awareness of cervical screening, with a particular focus on appealing to younger women. Region-wide posters with the slogan, 'What's pants but could save your life?' will target young women via general practices and local health clinics, young mothers' groups and community centres in addition to bus and bus shelter advertising. Information cards with key messages will be included with all cervical screening invitation letters for the next three years. Small pants-shaped cards with key messages will be included with purchases in selected lingerie stores and supermarkets. A website will provide information and the contact numbers of local clinics offering cervical screening. Alongside the campaign, each primary care trust has developed an action plan, which includes activities such as establishing stands in shopping centres to raise awareness of the importance of cervical screening.

The West Midlands Quality Assurance Reference Centre will evaluate the impact of the campaign after the end of March 2009 via routinely collected cervical screening data. The results will be used to review the strategy for the remaining two years of the project.

Figure 1: Variation in cervical screening and cervical cancer incidence coverage with age



Source: West Midlands Quality Assurance Reference Centre

Reducing childhood injury

In last year's Annual Report, unintentional injury in children was highlighted as a leading cause of morbidity and death in the West Midlands. Many of these injuries are preventable. The latest data on child injury show some improvement in the region. Of particular note are a 17% reduction in hospital admissions for transport accidents (202 fewer admissions), a 4% reduction in admissions for falls (165 fewer admissions) and an 11% reduction in admissions for poisonings (106 fewer admissions). All are significantly lower than the previous year (see **Figure 2**). Whilst these reductions are very encouraging, it is too soon to draw conclusions.

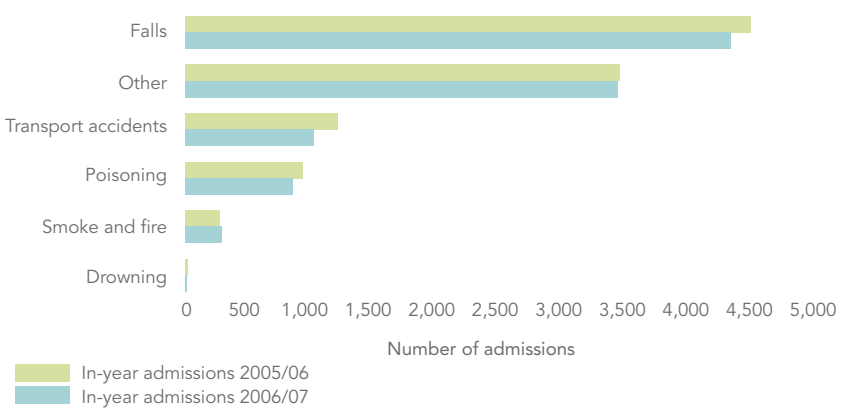
Regional initiatives addressing this issue continue to go from strength to strength. In 2007, a workshop was held jointly with the Child Accident Prevention Trust to focus regional action. Outcomes included the need to identify local champions and determining how to introduce children to risk assessment and management, including school curriculum opportunities through personal, social and health education. The Child Accident Prevention Trust and the Department of Health West Midlands are developing an advocacy toolkit to support delivery of these actions. The toolkit also looks at training and core skills in injury prevention. Further opportunities are being realised through policy links with the *Staying Safe: Action Plan* and the public health role in Child Death Review Panels from April 2008. The latter enables trends of deaths in children and young people to be reviewed and analysed, and ensures that injuries are connected with safeguarding priorities.

The national theme for Child Safety Week, held in June 2007 – 'Safer children, healthier lives. Pass it on' – reflected the opportunities for wider community engagement in the safety and well-being of children and young people. The West Midlands played an active part in Child Safety Week and secured extensive media coverage of its work on injury prevention.

The World Health Organization's Children's Environment and Health Action Plan for Europe addresses environmental risk factors that most affect the health of children, including accidents. As part of this project, a West Midlands pilot programme to develop a set of children's environmental health indicators, including childhood injury, has been developed during 2007/08. This pilot is being used as a model to develop an international resource on children's environmental health indicators.

Reducing childhood injuries continues to be a high priority in the West Midlands. The *West Midlands Health and Well-being Strategy*, published in January 2008, looks at broader issues affecting people's health and well-being such as access to transport, good housing and economic issues. A priority in the strategy for children and young people is preventing injury. Healthy Schools, Sport England and Play England initiatives, School Travel Programmes and Local Area Agreements continue to include priorities on injury prevention, safety and safe risk taking.

Figure 2: Main causes of unintentional injury admission amongst people aged under 15 years



Source: West Midlands Public Health Observatory

Tackling healthcare-associated infection

In March 2007, an acute hospital Trust with historically low levels of healthcare-associated infection identified rising rates of *Clostridium difficile* with severe illness in those affected. The Trust had implemented full control measures, except that affected patients were isolated in ward side rooms. When an isolation ward was opened, rates of infection reduced dramatically.

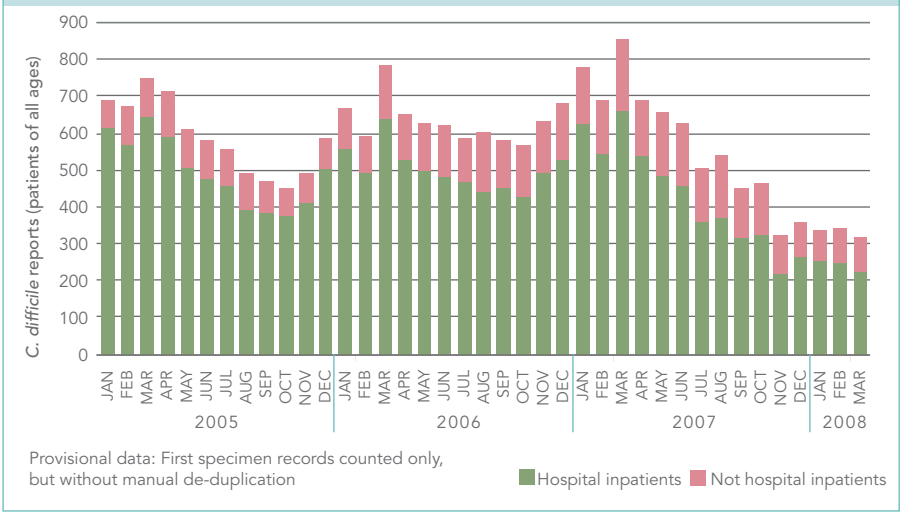
At that time, healthcare-associated infection data were only available to strategic health authorities many weeks retrospectively. It was agreed that unvalidated laboratory report data (CoSurv data) would be made available monthly to the strategic health authority and all Trusts in the East of England. This identified the overall size of the problem, and a significant variation in rates of *C. difficile* infection. The variation appeared to be related to implementation of full control measures based on the principles of outbreak control. With this evidence, the Regional Director of Public Health agreed with the strategic health authority to apply outbreak control principles across the region.

The subsequent approach has included:

- data monitoring and feedback on healthcare-associated infection for all Trusts, allowing them to compare their position with others
- prioritising reduction of healthcare-associated infection
- establishing an Intensive Support Team to visit Trusts to review all aspects of infection control and provide advice and support. The team, led by an experienced former Trust chief executive, includes experts in micro-biology, nursing and infection control
- establishing a Healthcare-associated Infection Task Group to engage clinicians and managers in overseeing control measures. The group is developing regional policies in support of national ones on areas including isolation; dress codes for staff; antibiotic prescribing; screening on admission; and other community-wide actions to tackle healthcare-associated infection
- encouraging a strong reporting system via commissioners, with monthly updates on cases, complications, and reports of audits of control measures. The information is collated into a balanced scorecard for acute and primary care trusts. Clear escalation procedures are in place, involving discussions with chairs and chief executives where rates are high
- creating incentives to reduce healthcare-associated infection. Trusts were challenged to use the funds made available in August 2007 to have no more than 12 inpatient cases per month in quarter 4 of 2007/08. Trusts achieving this, and their meticillin-resistant *Staphylococcus aureus* trajectory, will be financially rewarded by the strategic health authority. Initial reports show 10 of 18 Trusts having 36 or fewer *C. difficile cases* in quarter 4, and 15 having 40 or fewer.

All Trusts in the region rose to the challenge (see **Figure 1**) and laboratory *C. difficile* reports for January to March 2008 were 57% lower than the previous year. Much is still required to achieve the lowest possible rates, but the key to success so far has been open sharing of comparative data, applying outbreak control principles, and supportive and directive performance management approaches.

Figure 1: *Clostridium difficile* trends in East of England region (laboratory specimen data)



Source: Health Protection Agency (CoSurv)

Responding to the UK's first H5N1 avian influenza outbreak

At the time of last year's Annual Report, the NHS and Health Protection Agency in the East of England were reflecting on the lessons learned from the United Kingdom's first outbreak of H5N1. This occurred in January 2007 in a large poultry farm in Holton, Suffolk. The outbreak led to a large multi-agency response that dealt with both animal and human health aspects.

On 13 November 2007, the region put those lessons to use when a further outbreak of H5N1 was confirmed at a poultry farm near Diss in Norfolk. The Department for Environment, Food and Rural Affairs established a 3km protection zone and a 10km surveillance zone around the infected premises. Inside these zones, movements of poultry were restricted. All poultry were required to be housed or otherwise isolated from contact with wild birds. A second farm was identified as a 'dangerous contact' premises, as it was within the exclusion zone and in close proximity to the first farm. Confirmation that it, too, had birds infected with H5N1 was made on 19 November 2007.

Staff from Suffolk Primary Care Trust, working closely with local Health Protection Agency colleagues, led the public health response. Both premises involved were smaller than those in the Holton outbreak. Fewer staff required pre- and post-exposure prophylaxis. Suffolk Primary Care Trust had previously implemented guidance on offering seasonal influenza vaccination to all poultry workers, but a number of those who had worked on the affected farms, or who had been brought in to cull the

birds, had not been immunised. It was therefore necessary to ensure that all identified staff were assessed, given prophylaxis with antiviral drugs, given a seasonal influenza vaccination if needed and advised to report any suspicious symptoms. The primary care trust opened a clinic in a community hospital that was closed for refurbishment. It was staffed for 12 hours each day in the first few days following confirmation of the outbreaks in both premises. The response was scaled down over the following weekend.

The clinic saw all contacts, which included staff who had worked on the two premises as well as staff from the Department for Environment, Food and Rural Affairs who were involved in the investigation and cull, and those additional staff drafted in to cull the birds and transport the carcasses to a rendering plant in Staffordshire. All were assessed to identify any with suspicious symptoms, prophylaxis with oseltamivir was prescribed and a seasonal influenza vaccination was given to those who had not previously been immunised. Staffordshire rendering plant staff were also given pre-exposure prophylaxis and seasonal influenza vaccination locally. All contacts were followed up with daily telephone calls to ensure that none had developed symptoms that might suggest infection with H5N1. Fortunately, all remained asymptomatic.

The main lessons learned for the future were how complex this type of incident is, and the value of good communication between the different agencies involved. The NHS found it must be prepared to mobilise quickly a team that can clinically assess those who were exposed and provide them with prophylaxis. When needed, supplies of oseltamivir can be delivered to the more remote parts of the region within hours

Reducing London's infant mortality divide

Although infant mortality rates have been falling in London as they have nationally, there is still a 17% gap nationally between infant deaths in the routine and manual socioeconomic group and the population as a whole. The challenge for London is to reduce the gap in infant mortality between these groups by 10% by 2010, as stated in the Government's Public Service Agreement, and to deliver better maternal and infant health through the Department of Health's maternity strategy, *Maternity Matters: Choice, access and continuity of care in a safe service*.

The London Health Observatory investigated local inequalities in infant mortality in the capital during 2007. It found that 43% of all births to couples in more deprived areas, which included all but three London boroughs, were in the routine and manual group. At 6.7 deaths per 1,000 live births, this group had an infant mortality rate 29% higher than the general population, which is 5.2 deaths per 1,000 live births. Overall, 41 lives would be saved each year if babies born to this group had the same chance of survival as those born to the general population.

Infant deaths are too few in number to be reliably monitored at borough or primary care trust level. Therefore, the London Health Observatory analysed the distribution of risk factors known to impact negatively on infant death and produced a risk summary for each London primary care trust. The top five were:

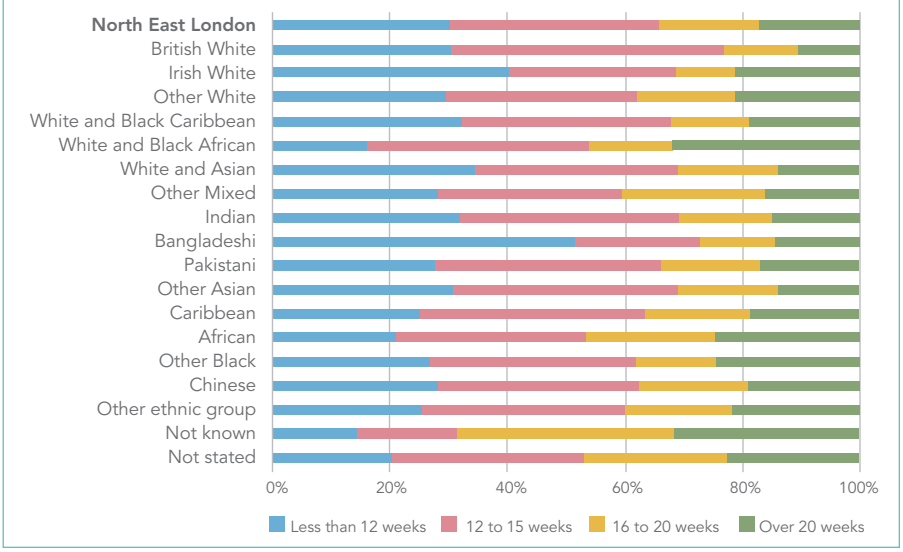
- low-birthweight babies
- mothers living in the most deprived parts of London
- mothers who register their babies alone
- mothers born in East or West Africa or the Caribbean
- babies born to couples in the routine and manual group.

Three interventions known to have a positive effect on infant and maternal outcomes – stopping smoking in pregnancy, initiation of breastfeeding and early antenatal booking looking at ethnic differentials – were selected for primary care trusts to monitor. Commissioners can use this information to identify more accurately which improvements will most benefit outcomes. It can also be used to highlight data quality and where improvements in data recording are needed.

A sample of data for one of these interventions, early antenatal booking, was analysed (see **Figure 1**). This shows that good ethnicity monitoring can help identify important inequities in access to antenatal care in relation to risk. For North East London – where trust recording of ethnicity and gestational age was robust enough to use – early access was poorest for African groups, whose risk of infant death is among the highest in London.

The findings from the London Health Observatory's work suggests that commissioners need to insist on better data, in particular focusing on better recording of gestation period at first antenatal appointment and ethnicity, if they are to make evidence-based decisions about reducing these health inequalities.

Figure 1: The proportion of all deliveries with gestation period at first antenatal booking by ethnic group, North East London primary care trusts, 2004/05



Source: Hospital Episode Statistics 2004/05, analysis by London Health Observatory

Reversing the rise in tuberculosis

Last year's Annual Report highlighted how London was addressing the rise in tuberculosis. From a high of 3,478 notifications in 2005, there was a decrease to 3,354 in 2006, with a further small decrease to 3,326 notifications in 2007. However, rates are still higher than elsewhere in England. Given the scale of the challenge, the strategic health authority has emphasised the importance of sustaining the current initiatives and the work to date. It selected tuberculosis as a priority in 2007/08 and for 2008/09.

In 2006, London tuberculosis metrics were developed based on actions outlined in *Stopping Tuberculosis in England: An action plan from the Chief Medical Officer*. In 2007/08, these metrics were used to monitor the performance of selected primary care trusts to ensure that adequate resources were in place to support the delivery of tuberculosis care. North East London is investing £2.1 million over three years across a range of tuberculosis services and support, while North Central London has restructured its commissioning practices and provided additional investment in tuberculosis services.

Outreach care for patients who are least likely to complete treatment has been enhanced with the Find and Treat Project. The Find and Treat team works closely with London's tuberculosis services and the mobile X-ray tuberculosis screening unit. It provides a variety of specialist social, housing, nursing and outreach assistance to vulnerable patients requiring support not usually provided by traditional hospital services.

The Health Protection Agency's evaluation report on the work of the mobile X-ray screening unit is complete, and primary care trusts will draw on its key findings to inform commissioning of tuberculosis services in 2009/10. Early findings suggest that the mobile X-ray unit has a role in early diagnosis and detection of tuberculosis in the homeless and problem drug users. The mobile X-ray unit's work in prisons has led to the introduction of static digital X-ray systems in five of London's prisons during 2008/09.

Addressing the health effects of climate change

There is clear evidence that the climate of England is changing. It is predicted that periods of cold weather will become less common, while periods of very hot weather will occur more frequently. These changes will have an impact on the health of the population, with heatwaves presenting a particular risk, especially to older people and those who are ill (see **Figure 1**).

A recent report, *Health Effects of Climate Change in the UK 2008*, commissioned by the Department of Health from a group of independent scientists, estimated that over the next decade there is a one in four risk of South East England experiencing a serious heatwave which will cause over 3,000 immediate deaths and more than 6,350 heat-related deaths throughout that summer. The *Heatwave Plan for England*, originally published in 2004 and updated annually, sets out a number of protective actions to reduce heatwave mortality. The 2008 heatwave plan also includes a number of actions to tackle the wider effects of climate change, such as encouraging the development of green spaces to reduce summer heat in urban areas and reduce the risk of flooding. Additionally, the heatwave risk ratings used to warn the public have been changed to an easier-to-understand traffic light system.

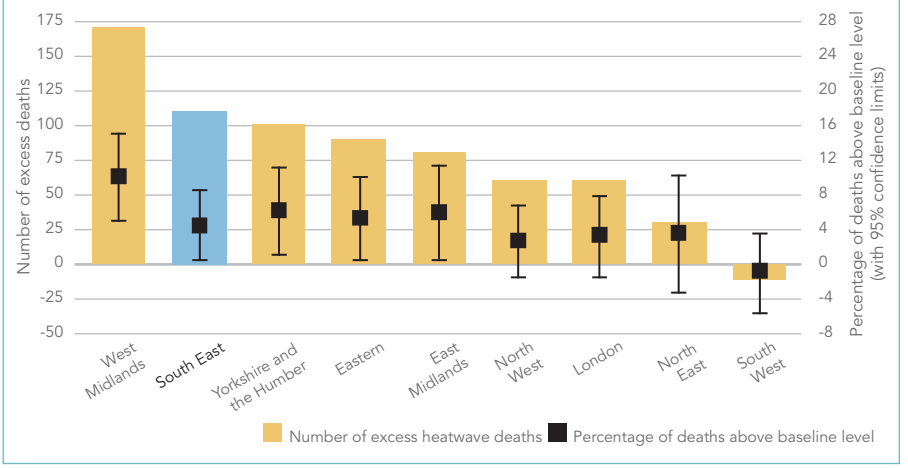
While climate change will mean milder winters, England generally experiences higher mortality in winter. In the South East, strong links have been made between the heatwave plan and work to address fuel poverty, which is a major cause of excess winter deaths. For example, promoting the uptake of Warm Front grants to improve housing insulation helps to reduce household CO_2 emissions and insulates against summer heat, both of which can reduce the risk of heatwave deaths.

Reducing the health impacts of climate change by promoting sustainable development is central to the *South East England Health Strategy*. The strategy – which aims to make the South East the healthiest place to live in the United Kingdom and one of the healthiest regions in Europe – sets out actions for regional and local organisations.

- Increase awareness of the health implications of climate change and the health benefits of sustainable development.
- Address climate change through actions such as promoting of community travel plans.
- Increase sustainable development in the public sector and maximise the potential for sustainable procurement.
- Create more safe green spaces.

The theme of 2008 World Health Day was 'protecting health from climate change', and the Department of Health has been working across government on developing an adaptation policy framework. The framework, part of the Climate Change Bill, sets out a common strategic approach to addressing the causes and responding to the consequences of climate change. To help increase the health sector's engagement, the South East Public Health Group has produced guidance, *Health Impacts of Climate Change: Promoting sustainable communities*. This sets out how health organisations can help tackle the causes of climate change, for example, by reducing CO_2 emissions through measures to increase energy efficiency.

Figure 1: Number and proportion of excess deaths in 2006 heatwave by region (16–28 July)



Source: Office for National Statistics

Health and deprivation in coastal cities and towns

Last year's Annual Report highlighted the generally poorer health of the South East's coastal cities and towns relative to the rest of the region. These cities and towns, though on the surface quite diverse, share many common characteristics that contribute to the disproportionate concentration of health inequalities in these areas. Geographic isolation, higher levels of deprivation, a less diverse economy and a larger proportion of lower-quality housing, among other factors, have all contributed to higher premature death rates from heart disease, stroke and cancer, as well as to other indicators of poor health such as high teenage pregnancy rates.

Tackling the many factors underlying the poorer health of the region's coastal cities and towns requires joint action by a wide range of organisations and groups. The *South East England Health Strategy*, launched in February 2008, seeks to do this by bringing together the work of all organisations and groups with a role to play in improving health and well-being in the region. One of its themes is tackling health inequalities. The strategy highlights the particular needs of the region's coastal cities and towns and includes a range of actions to help improve health in these areas, such as ensuring that local inequalities strategies target and support the most challenged communities and make best use of the health-promoting opportunities presented by the new NHS Operational Plan.

The South East England Development Agency has continued to build on the national recommendations of the House of Commons Communities and Local Government Committee report on coastal towns, published in early 2007, by promoting the economic regeneration of the region's coastal areas. The Development Agency published a coastal strategy in 2006, and in July 2007 followed this up with *A Framework for Action for the Coastal South East*, providing further detail on how the transformation of coastal areas will be achieved. For example, the framework highlights the importance of the cultural and creative industries to promoting economic growth in coastal cities such as Brighton and Hove.

Local Area Agreements covering the coastal areas of the South East have set out – with clear milestones – how local partners will work together to tackle deprivation and improve factors such as the quality of, and access to, health and social care services. Several Local Area Agreements have set specific targets to reduce the gap in early death rates between coastal areas and the regional average. The Department for Communities and Local Government published the updated Indices of Deprivation in December 2007. This information is being used locally to ensure that those parts of coastal cities and towns with the greatest needs are being targeted.

Road deaths: A heavy toll

The South West has the second highest fatality rate due to road traffic accidents in England, second only to the East Midlands. The vast majority of these collisions are preventable. This toll on the roads represents an unacceptable burden, accounting for one in 20 of all years of life lost before the age of 75 years, higher than suicide and also stroke (see **Figure 1**). To investigate potential areas for prevention, the South West Public Health Observatory analysed a wide range of data from NHS and non-NHS sources. Its findings were published in the 2007 report, *A Heavy Toll: Road traffic collisions in the South West*.

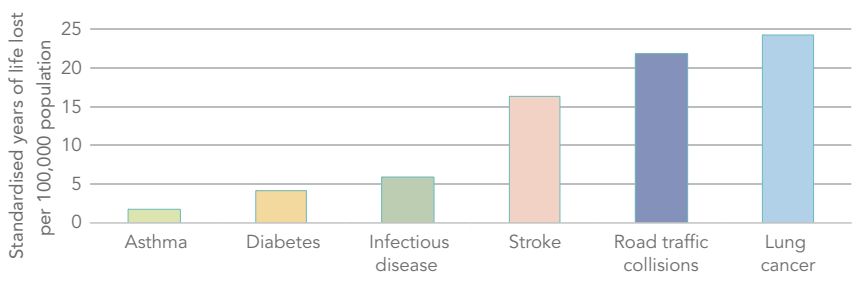
The report showed that 300 people die and 24,000 people are injured on South West roads per annum. The burden on the NHS is high, with an estimated 50,000 attendances at accident and emergency departments per annum, 18,000 ambulance call-outs per annum, and 77 beds occupied per night in South West hospitals as a result of road traffic collisions. Furthermore, official police statistics underestimate the true scale of road injury. Comparison of NHS data with police data suggests that around a third of serious road injuries are not reported to the police.

The most important risk factors identified for the high fatality rate in the South West region were as follows:

- Rural roads. The report found that the highest rates of admission to hospital due to road injury are among children from deprived, rural areas. Collisions are more frequent in urban areas, but the severity of injury sustained is greater in rural areas. In the South West, 86% of the main roads are rural and the highest death and serious injury rates are on rural A-roads. The fatality rate on South West rural A-roads is 23.4 deaths per 1,000 casualties compared with 9.4 deaths per 1,000 casualties on urban A-roads.
- Age. The South West has the highest percentage of residents over 65 years old in England. When involved in collisions they are between two and five times more likely to be killed or seriously injured than younger people.
- Tourism. As a major tourist destination, the numbers of road traffic collisions, casualties and deaths in the region are higher in the summer months, particularly in Devon and Cornwall. During August, tourists account for around 20% of road injury admissions to hospitals in Cornwall.
- Motorcycles. More motorcycles are registered in the South West than in any other region. These vehicles are the mode of transport with the highest fatality rate. Motorcycles make up just 5% of vehicle traffic, yet account for a quarter of all deaths and serious injury. There has been a significant reduction in motorcycle casualties among young people. The number of serious casualties in motorcyclists under 30 years of age has fallen in the last 15 years, from 1,622 in 1991 to 357 in 2005, but has increased among those between 30 and 49 years of age, from 493 in 1991 to 679 in 2005.

The findings provide useful evidence for targeting road injury prevention and identifying priority areas for action. Vehicle speed reduction is crucial, as lower speeds can reduce both the number and severity of collisions. It is also vital to view road injury in a wider public health context, particularly as danger on the road is a strong disincentive to using active transport such as walking and cycling, and can indirectly contribute to levels of obesity. People in the South West are currently extremely dependent on private transport, and transport planning should aim to create opportunities for people to travel actively and sustainably as well as safely. The urban–rural difference in injury risk is under-researched and an important topic for further investigation. Work is continuing with multi-agency partners across the region to use an evidence-based approach to road injury reduction.

Figure 1: Standardised years of life lost before the age of 75 due to road traffic collisions in the South West compared with selection of other causes, 2003–05



Source: Compendium of Clinical and Health Indicators 2007, The Information Centre for health and social care

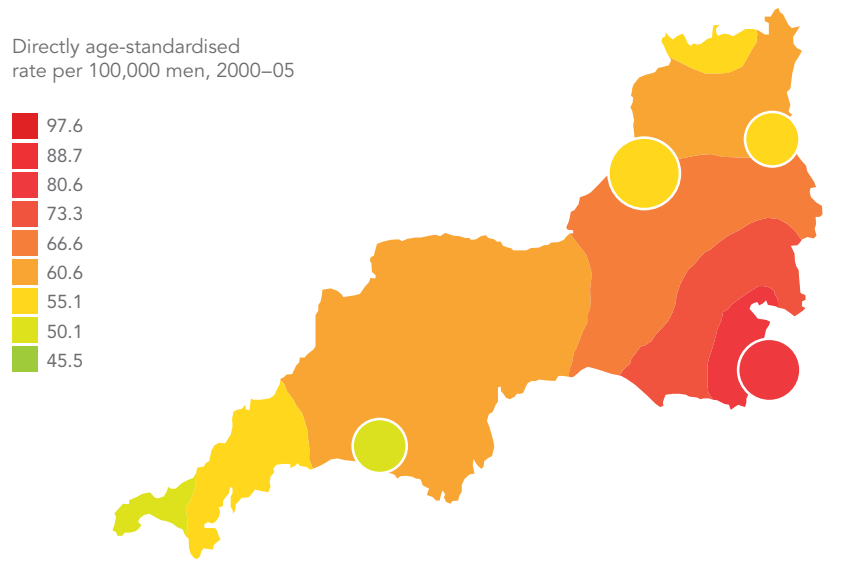
Changing trends in prostate cancer

Prostate cancer is the second most commonly diagnosed cancer and the second most common cause of cancer death in men. Last year's Annual Report highlighted the high incidence of prostate cancer in the South West and the rapid rise in the number of radical surgical treatments.

Since then, a number of significant trends have become apparent. Following the large increase in new cases between the years 2000 and 2001, the rise in incidence has slowed in the South West and now appears to be levelling off at an age-standardised rate of approximately 72 cases per 100,000 men. Within the region there is still significant geographic variation (see **Figure 2**), with incidence rates approximately 25% higher in Dorset than the rest of the South West. Incidence varies between local authorities in the South West by factors of up to 100%. This is thought to be a result of large differences in the uptake of prostate-specific antigen testing.

The 2002 guidance from the National Institute for Health and Clinical Excellence, *Improving Outcomes in Urological Cancer*, states that radical prostatectomies and cystectomies should only be carried out in acute Trusts or cancer centres performing at least 50 of these procedures annually. All primary care trusts in the region reported to the South West Strategic Health Authority, as part of their January 2008 cancer self assessment, that their services would be fully compliant with this guidance by the end of 2007/08. The latest available Hospital Episode Statistics (2006/07) showed that some centralisation had occurred, with nine acute Trusts performing fewer than 50 radical procedures per annum compared with 11 in 2005/06, indicating that compliance will need to be monitored. In both periods, three acute Trusts performed more than 50 procedures per year.

Figure 2: There is variation in prostate cancer detected after introduction of testing
(circles represent large urban centres of population)



Source: South West Public Health Observatory and Finnish Cancer Registry

An emerging and unexpected challenge to meeting the 50 radical procedures target is the reversal of the trend in rates of prostatectomy. In 2006/07, there was an 11% reduction in the total number of radical prostatectomies performed in the South West compared with 2005/06. This may be the result of increased awareness in the medical community and by the public of the uncertainties surrounding the benefits of this procedure. The reduction in prostatectomies was most apparent in Dorset, where the prostate cancer incidence is highest. The age-standardised rate was 29 per 100,000 men in 2005/06, significantly higher than the regional rate of 17 per 100,000 men. In 2006/07, the rate in Dorset had fallen to 21 per 100,000 men, which was consistent with the rest of the South West at 17 per 100,000 men. Regional variation in rates still existed, with Devon and Cornwall maintaining a significantly lower rate – 11 per 100,000 men – than that of the region as a whole.

Access to new treatments for prostate cancer, such as brachytherapy, has increased. This expansion in choice may partly explain the reduction in the number of prostatectomies, as patients choose alternative treatments and/or treatment providers. Further significant changes to patient care are expected due to implementation of the Department of Health's *Cancer Reform Strategy*, published in December 2007.