Wolverhampton Public Health Report 2011

Contents

Foreword	3
Targeting inequalities	4
Targeting lost life years	8
Targeting alcohol misuse	11
Targeting cardiovascular disease	16
Targeting infant mortality	20
Targeting suicide	22
Targeting improvement	24
Conclusion	26
Further information	27

Contributors and acknowledgments

Karla Bailey
Steve Barlow
Lynne Cox
Jason Gwinnett
Lucy Heath
Ros Jervis
Margaret Liburd
Sue Mckie
Nicola Murphy
Fatima Ndanusa
Wendy Page
Julie Smith
Michelle Smith
Hilary Williams
Smith Davis Press
Bromford Group
Getty Images
Royal Wolverhampton
Hospitals NHS Trust
Wolverhampton Wanderers
Football Club

Foreword

I previously examined how we could improve life expectancy in Wolverhampton. This was in response to the national target to reduce inequalities in the key health outcomes of infant mortality and life expectancy. The ambition was to close the gaps seen in 1995 by ten per cent by 2010.

This aim was particularly challenging for those parts of the country with considerable disadvantage. Wolverhampton is the 21st most deprived local authority and, unfortunately for its population, regularly in the bottom fifth of the country for socio-economic deprivation.

In Wolverhampton and similarly disadvantaged communities, the determinants of health such as skills, jobs and housing, are well below the national average. We know that these socio-economic factors affect life expectancy and differences in life expectancy.

Six conditions account for over half of the difference in life expectancy that exists between Wolverhampton and England. These are heart disease, stroke, infant mortality, lung cancer, suicide and alcohol.

Applying industrial scale efforts on these conditions is the fastest way to address the life expectancy gap. In this report I show how we have begun to apply industrial scale, evidence-based, interventions.

The most sobering fact in this report is that the greatest current threat to public health in the city is due to alcohol.

Dr Adrian Phillips
Director of Public Health

Targeting inequalities

Men in Wolverhampton currently live an average of 76.5 years, which compares with 78 years across England. Life expectancy for women in the city is 81 years whilst the national average is 82 years.

The historical position for men and women is shown below. We have compared Wolverhampton with its peer authorities – those that are similar in terms of population and socio-economic factors. *(See further information).*

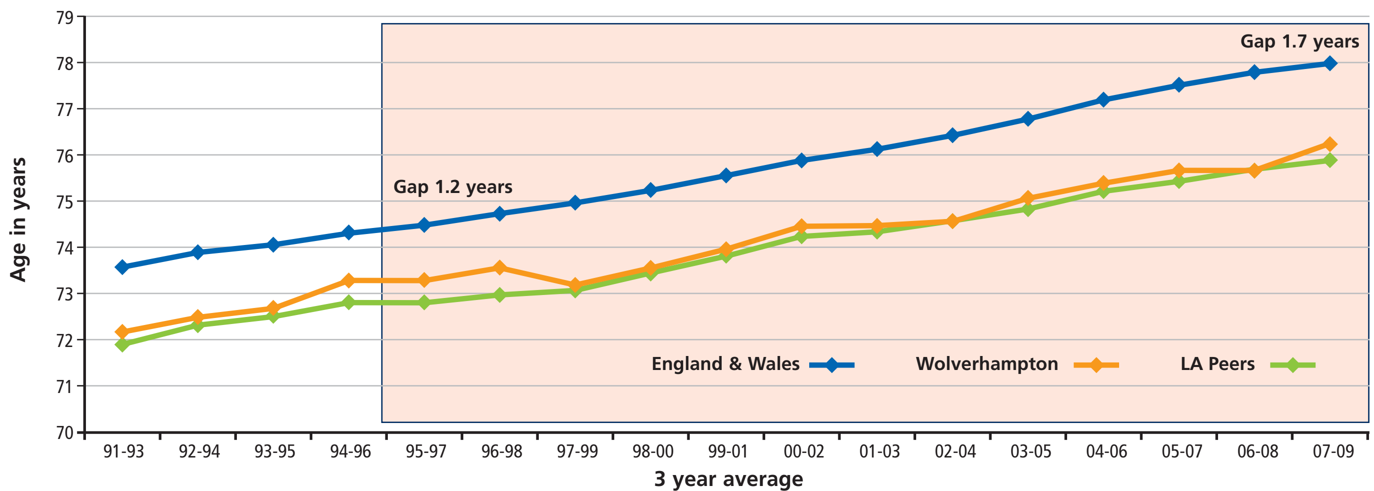
During the last decade the gap between men and women's life expectancy increased. However in recent years the gap appears to be closing.

Although life expectancy in Wolverhampton has improved in comparison with peer authorities,

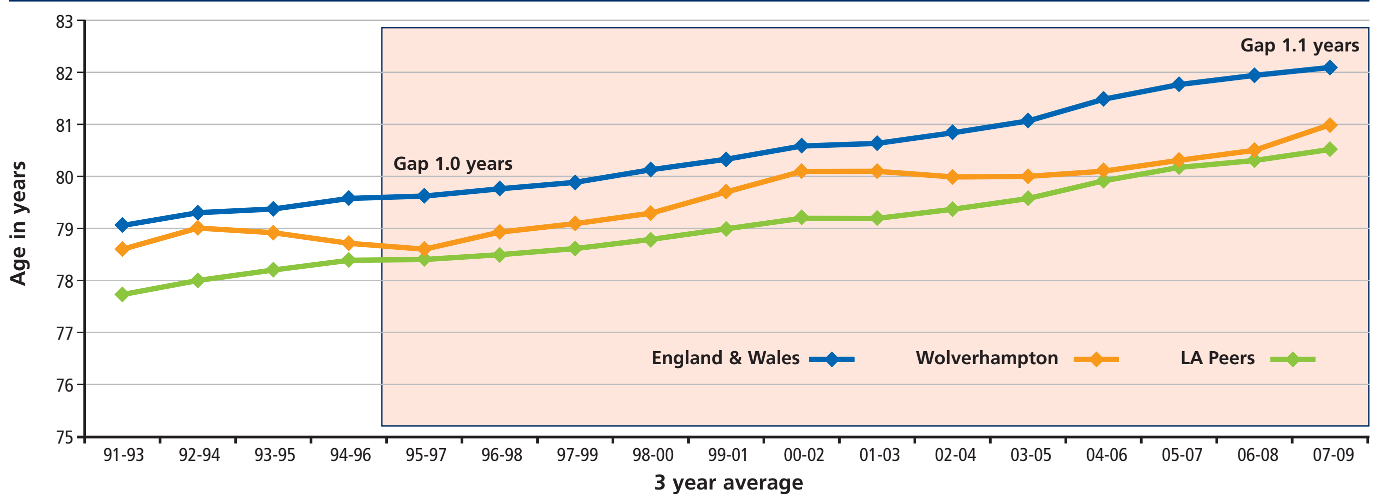
KEY FACTS

- **We are unlikely to hit the targets set in 2004 for life expectancy for either women or men in Wolverhampton**
- **We are on course to achieve our target for infant mortality if improvements continue**
- **Men in Tettenhall Wightwick live six years longer than those in East Park**
- **Women in Wednesfield South live five years longer than women in Blakenhall**
- **Most of the life expectancy improvement in men and women has been in those who belong to the more advantaged groups**

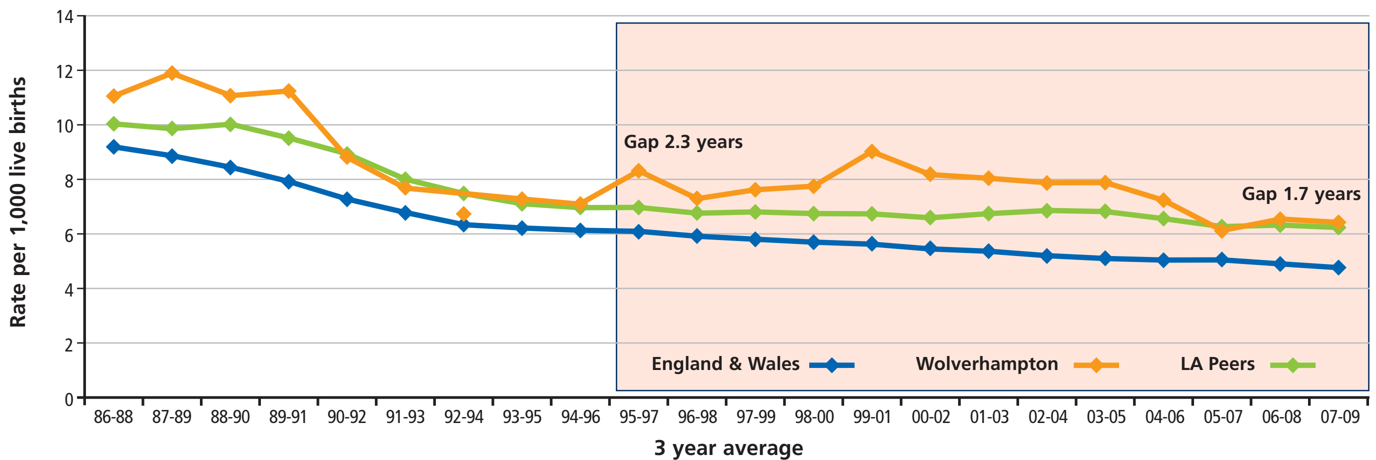
Male life expectancy at birth 1991 to 2009 (and national gap comparison for 1995 and 2009)



Female life expectancy at birth 1991 to 2009 (and national gap comparison for 1995 and 2009)



Trends in infant mortality rates 1986 to 2009 (and national gap comparison for 1995 and 2009)



it seems unlikely that the targets set in 2004 for improvements in life expectancy will be achieved.

Infant mortality in Wolverhampton has shown a considerable drop over the last few years. Whilst the drop is particularly pleasing, Wolverhampton remains significantly above the national rate.

We are on course to achieve our 2010 target if improvements continue.

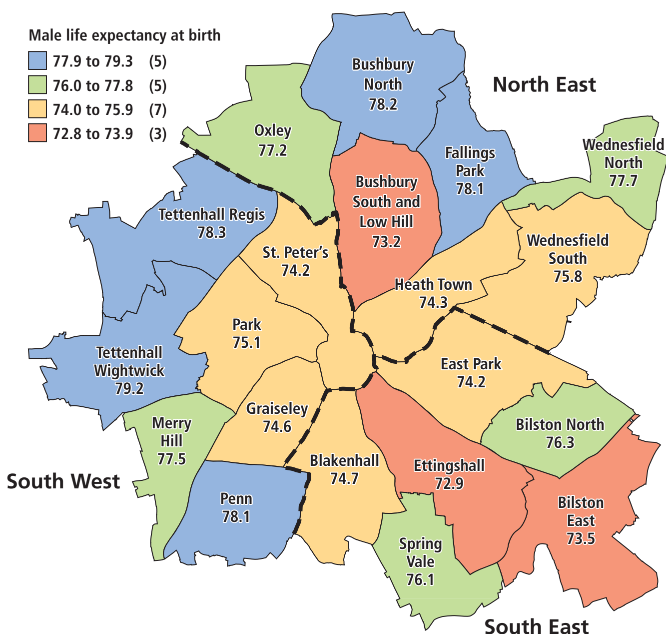
The position within Wolverhampton

Life expectancy varies across the city and has changed over the past five years. Male and female life expectancy across the city for 2007-09 is shown below. Men in Tettenhall Wightwick live six years longer than those in East Park, a distance of only a few miles. Men in only five of the 20 wards live as long as the average man in England.

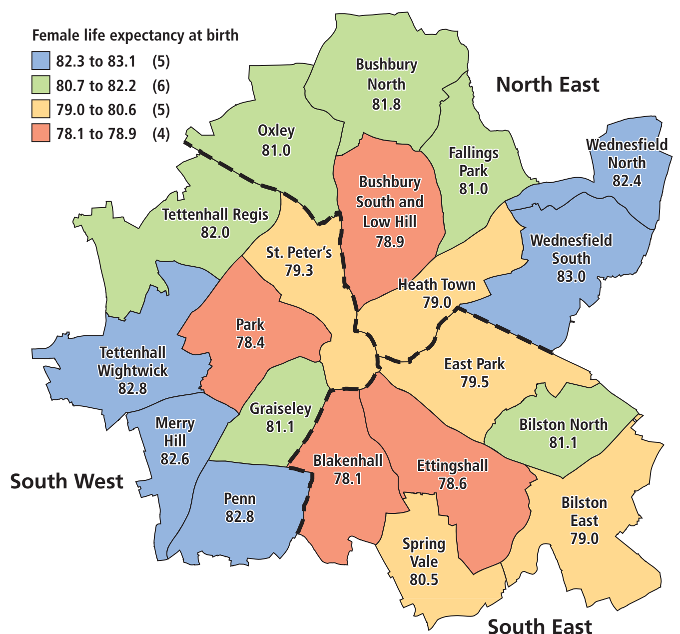
Women in Wednesfield South live five years longer than women in Blakenhall. As with men, women in only five wards live at least as long as women nationally.

Life expectancy for both men and women is at or above national averages in five wards – Penn, both Tettenhall wards, Bushbury North and Wednesfield North.

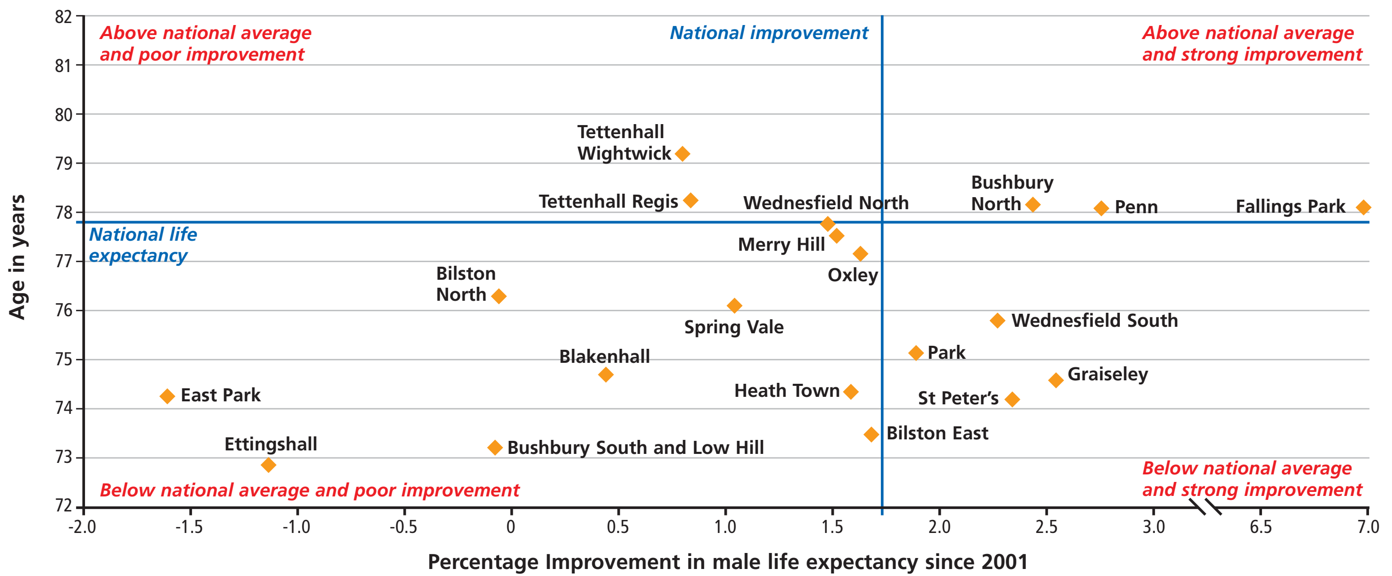
Male life expectancy by electoral ward, 2007-09



Female life expectancy by electoral ward, 2007-09



Improvement in male life expectancy by electoral ward compared to the national average since 2001



Improvement within Wolverhampton

We have identified those electoral wards which have improved more than the national average in the last five years and thus closed the gap, those that have only improved in line with the national average and maintained the gap and those that have not improved as fast as the national average and widened the gap.

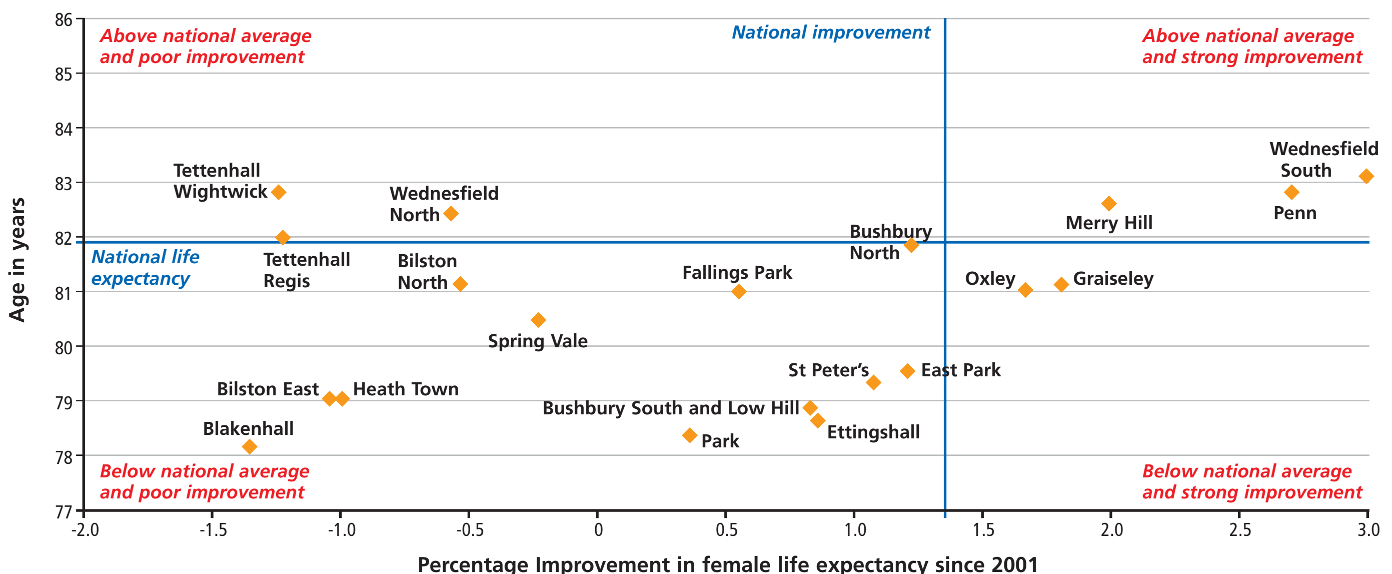
The analysis of male life expectancy as shown above demonstrates that seven wards improved at a faster rate than England. Of these, Wednesfield South, Park, Graiseley and St Peter's also managed to close the gap.

Men in East Park and Ettingshall wards reduced their life expectancy compared to 2001-05 by one year. Two wards showed no improvement – Bushbury South and Bilston North.

The position for women is shown below, and is slightly worse. Only four wards improved more than the national average. Oxley and Graiseley closed the gap whereas Penn and Merry Hill were already above the national average for life expectancy.

All the other wards did not keep up with the national improvements in life expectancy for women. Eight wards showed some deterioration in life expectancy. This drop approached one year in five wards; both

Improvement in female life expectancy by electoral ward compared to the national average since 2001



Tettenhall wards, Blakenhall, Bilston East and Heath Town.

This shows that more wards deteriorated than improved – so we are not closing the gap with the national average AND our local gap is widening.

There is a wealth of evidence, both in Wolverhampton as well as internationally, that socio-economic deprivation has a major effect on health and wellbeing and also ill health.

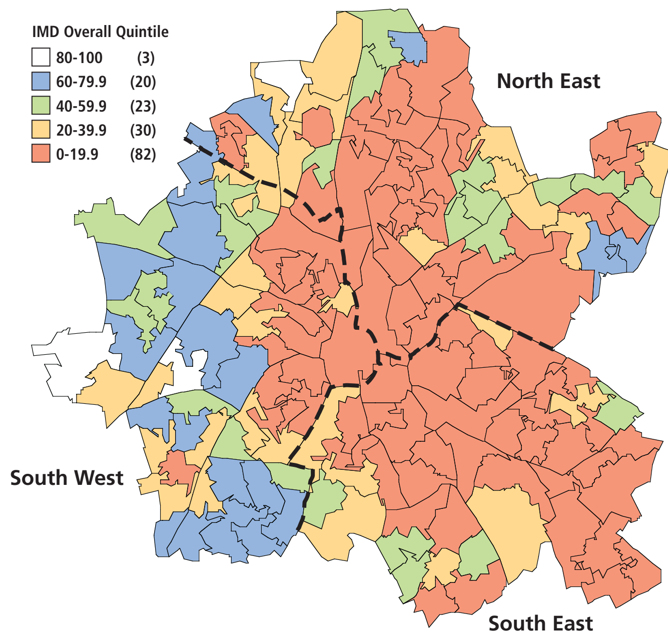
The socio-economic make up of Wolverhampton is shown in the map on the right using a composite measure called the Index of Multiple Deprivation (IMD) 2010. This is regularly used by the government and has the advantage that we can benchmark against a national index.

We have looked at life expectancy based on socio-economic deprivation. This has been done by looking at life expectancy using the five socio-economic groupings shown in the previous figure.

The five groups each represent a fifth, or quintile, of the national spread of socio-economic deprivation. Quintile one is the most deprived group and contains those with an IMD score of 0-19, about half of the Wolverhampton population are in this most disadvantaged group. Conversely, quintile five contains the most advantaged in our society with an IMD score of 80-100. Only about two per cent of Wolverhampton fits into this most advantaged group.

The charts below show the variation in life expectancy for men and women across those five quintiles in Wolverhampton and also that variation in 2001-03. Life expectancy for men, broken down by socio-economic quintile, actually widened. The men in the most deprived quintile only improved their life expectancy by 1.3 years in the last six years, whereas the most advantaged improved by 2.9 years. Most of the male life expectancy improvement has been in the more advantaged groups.

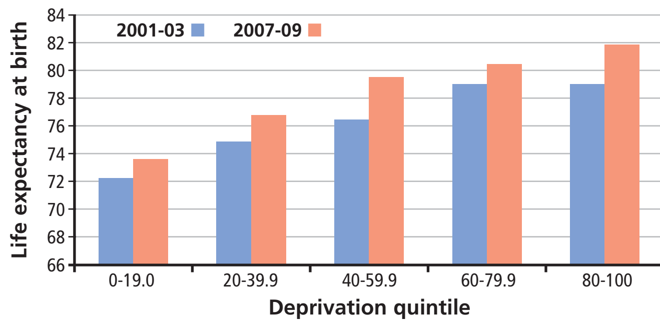
Index of multiple deprivation score 2010



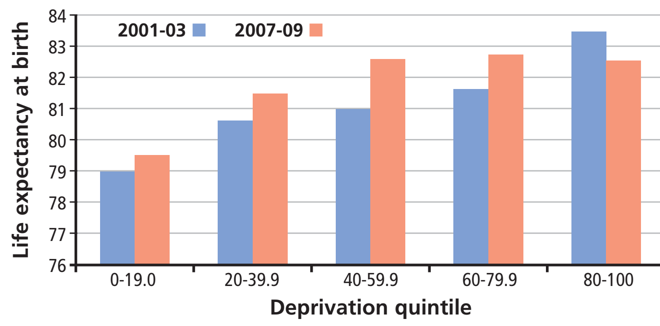
For women, the gap between the lowest quintile and the other 80 per cent has also widened. Whilst there has been a small improvement of six months in life expectancy for the lowest socio-economic groups, this is dwarfed by the improvements in the next three quintiles. Most of the female life expectancy improvement has been in the more advantaged groups.

Whilst the life expectancy gap across the top three quintiles has almost vanished, the gap between the lowest 20 per cent and the top 60 per cent has widened – from four years in 2001-03 to six years in 2007-09.

Male life expectancy by socio-economic deprivation quintile



Female life expectancy by socio-economic deprivation quintile



Targeting lost life years

Life expectancy is affected by the number of deaths and the age at which the deaths occur. A small number of 'young' deaths can cause significant deterioration in life expectancy. We cannot stop death, but we can aim to reduce early or premature deaths.

We have assumed that everybody should live to at least 75 years and looked at the causes of all deaths occurring under 75 years of age. We have then calculated how many premature years of life have been lost or 'Years of Life Lost' (YLL) for each major cause of death.

If a child unfortunately dies at the age of three, there will be 72 YLL, similarly if 12 people die at age 74, there will be 12 YLL.

We previously identified the 'Big 6' as the six biggest causes of avoidable lost life years in the under 75s. To judge this, we looked at how far we were from the national average for all the 'Big 6' areas. We found that the 'Big 6' conditions accounted for about 50 per cent of the variation in life expectancy in Wolverhampton compared to England.

The Big 6 conditions of avoidable life years

- **Infant mortality**
- **Coronary heart disease (CHD)**
- **Lung cancer**
- **Suicide**
- **Alcohol-related liver disease**
- **Stroke**

At least 1,500 extra life years each year would need to be saved in the under 75 age group to attain the life expectancy targets set in 2004. This could best be achieved by focusing on those conditions where we could improve the most, compared to national benchmarks.

This would be a hard challenge – any improvements would not be seen overnight. This is especially true for those conditions such as lung cancer which develop over a very long time. It is estimated that the risk of lung cancer only drops after many years of not smoking. However, there are other interventions which can have a more immediate impact.

KEY FACTS

- **Alcohol misuse is having a major impact on the city's health**
- **There are fewer avoidable life years lost for CHD, stroke and suicide since 2001-05**
- **Infant mortality remains a major cause of avoidable lost life years**
- **Avoidable lost life years due to alcohol-related liver disease are rising dramatically, especially in women**
- **The increase in avoidable deaths due to alcohol-related liver disease is the main reason why our life expectancy gaps for both men and women have not closed**

We previously identified that for both respiratory disease (not including lung cancer) and accidents, we did lose a significant number of years of life BUT for both of these conditions our performance was relatively good compared to England and the opportunity for improvement was low.

Diabetes is a special case. Few people die of diabetes yet many succumb to complications of diabetes, such as heart and kidney disease. Diabetes also affects the babies whose mothers have the condition. Excellent management of diabetes will reduce CHD and stroke as well as infant mortality.

Saving life years

Fast results are unlikely to be seen from interventions around the 'Big 6' conditions. We now have the mortality data up until the end of 2009. It is the right time to review progress to see whether we are beginning to see an impact of our changes.

The table on page nine shows the potential savings for under 75s in life years based on the latest available national benchmarks (2005-09) for those six conditions compared to 2001-05.

Comparison of lost life years and potential to improve for the 'Big 6' in the under 75s, 2001-05 compared to 2005-09				
	2001-05		2005-09	
	Actual YLL	Annual potential saving in life years	Actual YLL	Annual potential saving in life years
Infant mortality	8,700	615	8,025	444
CHD	9,408	328	7,541	189
Alcohol-related liver disease	4,293	285	5,456	588
Lung cancer	4,277	106	4,180	124
Suicide	4,455	279	3,990	80
Stroke	3,462	259	2,714	137
All Big 6	**34,595**	**1,872**	**31,906**	**1,562**
TOTAL all causes	**73,705**		**71,719**	

The data shows that life lost from suicide has dropped substantially and it is no longer within the top six conditions. Death from lung cancer has not materially changed.

Respiratory disease (not including lung cancer) is now in the top six with an annual potential saving of 157 life years compared to the national average. All of these savings are in men.

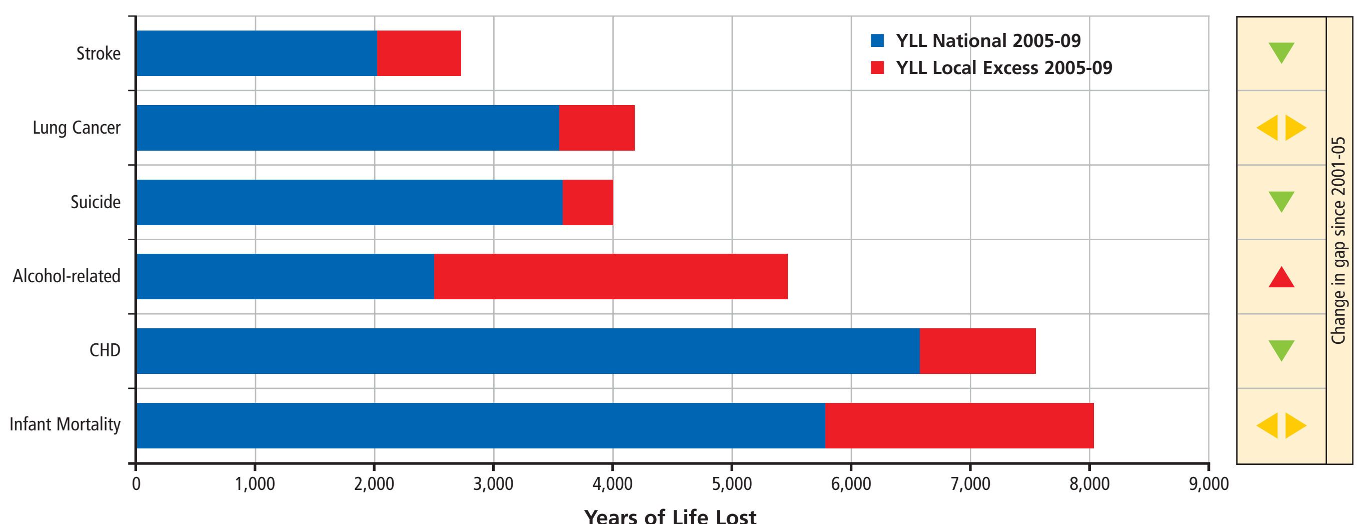
Years of life lost from accidents are increasing and the current annual improvement potential is 116 life years, evenly split between men and women. Wolverhampton has traditionally been below the national average for serious accidents. Whilst accidents aren't currently in the top six, more analytical work is needed to determine why there has been a recent rise.

The chart below shows the years of life lost expected for each of the 'Big 6' using national averages and that seen locally. It emphasises where we can still make realistic improvements compared to the national averages.

The biggest potential for improvement is in alcohol-related liver disease and infant mortality with the largest 'local excess' shaded red.

It is reasonable to define success as an improvement of at least a third on our 2001-05 position. This is

The 'Big 6' causes of excess life years lost in the under 75s, 2005-09 (and change from 2001-05)



because it is very difficult to achieve rapid change in mortality over a relatively small amount of time. The figure gives an indication of change since 2001-05.

Since 2001-05 we have made remarkable strides in CHD, stroke and suicide. We have seen a more modest improvement in infant mortality. Lung cancer has not changed.

Unfortunately, we have seen a dramatic rise in deaths from alcohol-related liver disease which has cancelled out all our improvements. More people are now dying from alcohol-related liver disease. Alcohol-related liver disease is the single biggest cause of avoidable loss of life in Wolverhampton.

We have shown the changes in excess years of life lost in the 'Big 6' over the last decade in the following figures.

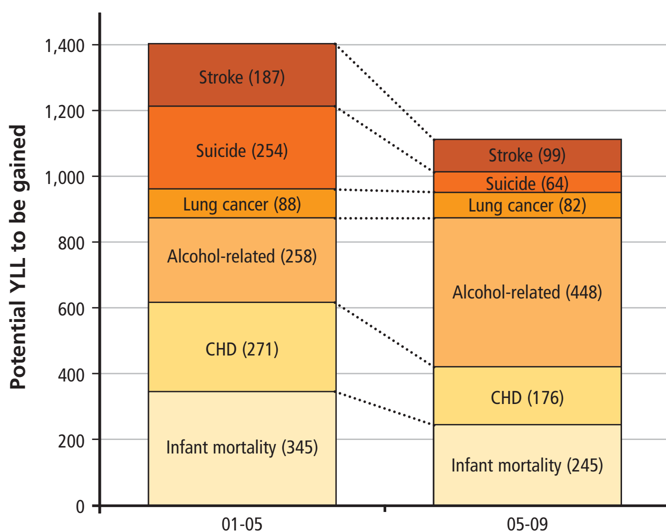
They show the effect of the dramatic rise in alcohol-related deaths for both men and women. This deterioration is almost the entire reason why our position on mortality has not improved as rapidly as we would like. It must be remembered that alcohol was already a major problem – it has now got worse.

Subsequent chapters will show in more detail how we have made some of the gains in CHD and stroke, together known as cardiovascular disease, suicide and

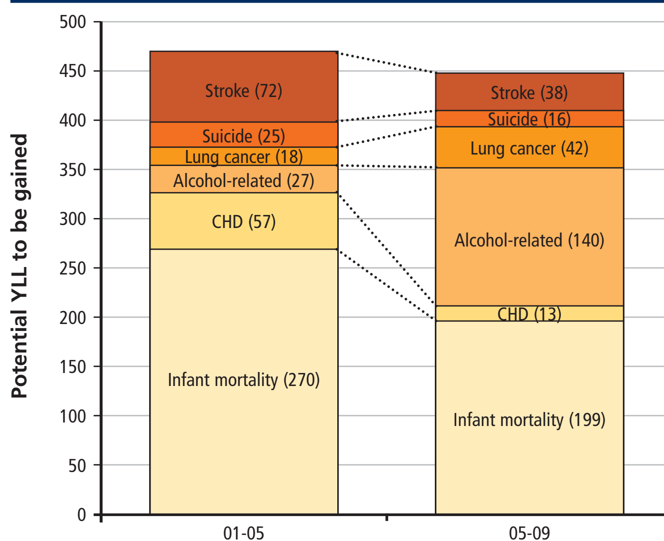
infant mortality. An analysis will also be given on the problems that we face regarding alcohol in this city.

The most important facts from this chapter are that alcohol-related deaths are now the biggest single avoidable threat to health in Wolverhampton and infant mortality and alcohol accounts for a significant proportion of the excess years of life lost in the city.

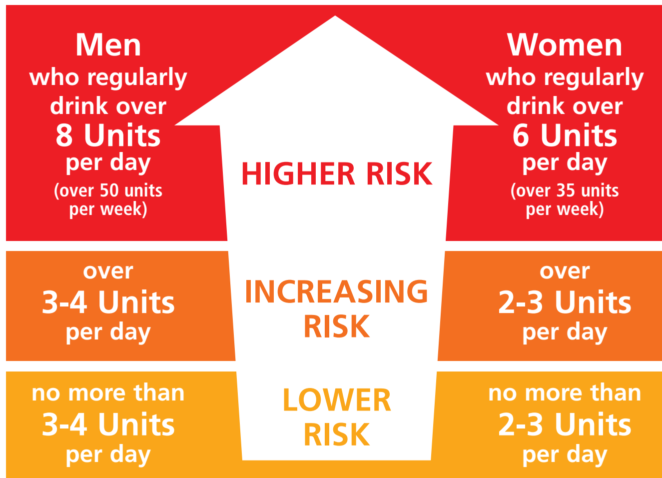
Changes in excess years of life lost for men for the Big 6, 2001-05 to 2005-09



Changes in excess years of life lost for women for the Big 6, 2001-05 to 2005-09



Targeting alcohol misuse



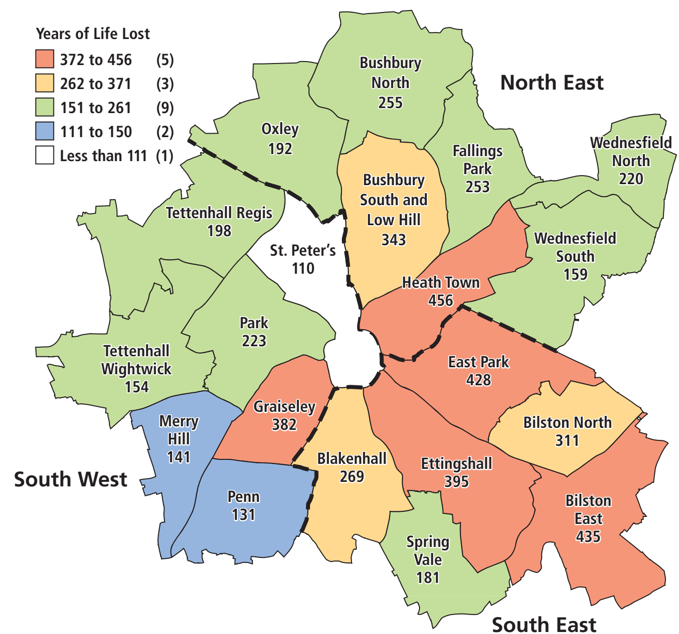
KEY FACTS

- Alcohol misuse is the single biggest threat to health in Wolverhampton
- Alcohol liver disease is killing people at a much younger age and is the main reason life expectancy has not improved in Wolverhampton
- The city has more than double the national death rate from alcoholic liver disease
- Years of life lost from alcoholic liver disease in women has risen fivefold in five years and has nearly doubled in men
- Alcohol use is strongly linked to its price

Excessive alcohol consumption does not just cause alcohol liver disease, it causes a range of health harms including injury due to alcohol-related assaults and increases the risk of developing hypertension, stroke, coronary heart disease and cancers. To reduce these risks it is recommended that men drink no more than 3-4 units and women 2-3 units of alcohol a day.

It is estimated that over 50,000 people in Wolverhampton drink to a level which increases their risk of ill health.

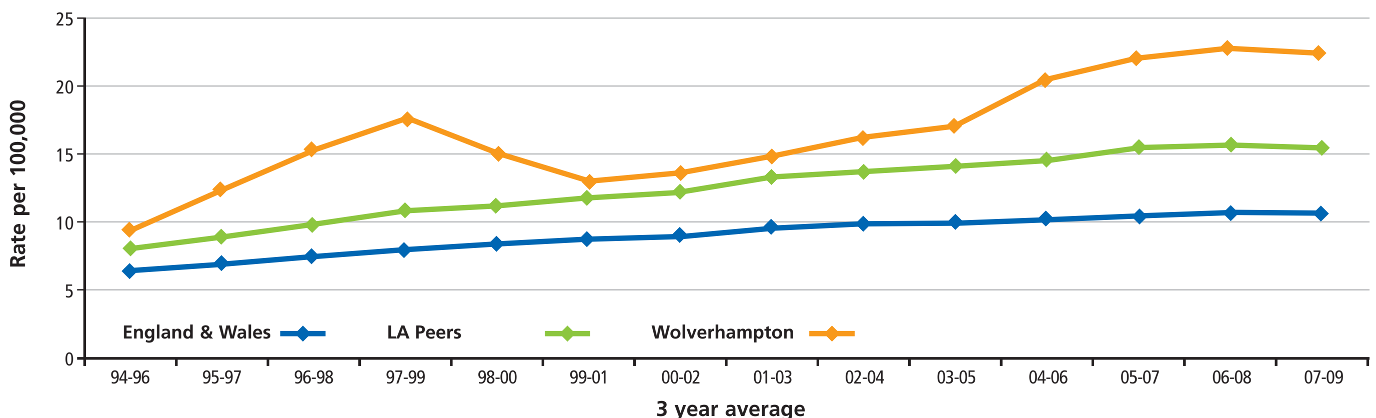
Years of Life Lost from alcohol misuse (2005-09)



Alcohol-related mortality

The city as a whole has more than double the national alcohol death rate, see figure below. Fifty people die each year directly from alcohol in the city. This is twice as many as the national average. Alcohol-related mortality is highest in the most deprived areas. Most life years lost are in the same areas especially in the south east.

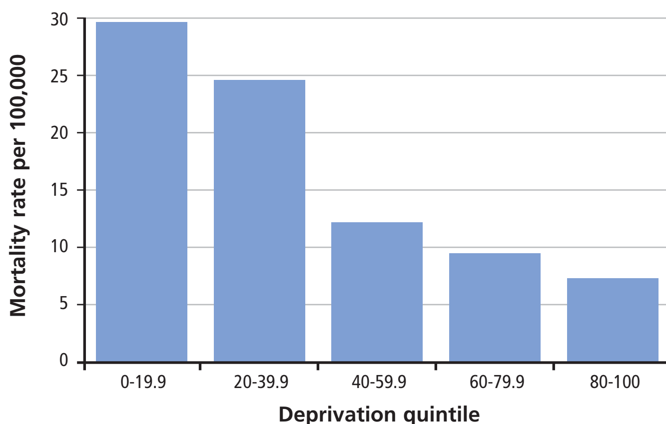
Age standardised alcohol-related mortality rate per 100,000 for persons all ages in Wolverhampton



Chapter 2 showed the terrible effects of alcohol-related liver disease on life expectancy in Wolverhampton. It kills at a young age – people who are in their 40s and 50s. Alcohol was a major cause of death in 2001-05. Since then the avoidable mortality has doubled in men and risen fivefold in women. It is now the single greatest cause of avoidable life lost in the city.

Alcohol takes its greatest toll in the most disadvantaged communities. The figure below shows alcoholic liver disease by deprivation quintile. The most disadvantaged quintile has a death rate four times greater than the most advantaged. The least advantaged 40 per cent have rates double that of the other 60 per cent. This is an extreme example of how health experience is strongly linked to socio-economic status.

Alcohol mortality by socio-economic quintile



> **Dr Ian Perry – Consultant Gastroenterologist, New Cross Hospital**
>
> *Severe medical problems due to alcohol excess continue to result in hospital admission.*
>
> *By and large, patients fall into two groups. The first group will stop drinking, and although it may take a few further admissions to hospital before their liver disease stabilises, they will often do very well in the long term. Sadly, the other group will continue to drink despite our advice, often with tragic results.*

Lisa's story

The physical consequences of alcohol misuse

Years of heavy drinking left mum-of-one Lisa at death's door – fighting to re-build her health and salvage her most important family relationships.

The 41-year-old slid from social drinker in her teens to a five-litre a day cider dependency by the time she was in her late 30s. Her weight plummeted as she stopped eating and she turned yellow as her liver struggled under the onslaught.

Warned that she would not live to see another Christmas, the turning point came when she suffered a catastrophic collapse on July 19, 2009. She has not touched a drop of alcohol since.

Lisa credits staff at New Cross Hospital with saving her life. She now volunteers on a ward there and at support organisation Aquarius, where she received much-needed counselling in the following months.

"The nurses went above and beyond the call of duty and Aquarius has been fantastic. I'm separated from my husband though we're good friends and have talked about getting back together. My son James is brilliant and I just live a day at a time.

"I'd always wanted to ride a motorbike but through my years of drinking I couldn't. Well I passed my test last year and now when I think I might want a drink I just get on my bike and forget about it."

Alcohol admissions account for nearly three per cent of the total bed stays across all admissions in New Cross Hospital. This means that every day of the year, there are at least five people in hospital due to alcohol-related diseases.

Most admissions for alcohol-related harm occur between the ages of 30-59 years old. Men, especially Asian men, have the highest number of admissions.

Alcohol-related admissions are an indication of future alcohol-related mortality. There is a strong correlation between alcohol-specific admissions and death. Those individuals who die of a specific alcohol condition will often have one or more alcohol-related admissions in the three years before death. Between 2004 and 2008, two thirds had an emergency admission in the three years before their death.

Dr Ian Perry – Consultant Gastroenterologist, New Cross Hospital

As well as treating the medical problems that resulted in admission, we should also be working to influence patient attitudes and behaviour.

Such a holistic approach is the only sensible way forward to reduce the terrible cost of alcohol by preventing readmission and death.

Why is tackling this problem so important?

With appropriate interventions and services, many of the health and social harms caused by alcohol are preventable, so addressing issues of alcohol abuse and misuse represents an opportunity to increase life expectancy and reduce health inequalities.

Taking action on alcohol-related harm in Wolverhampton provides the biggest potential to make savings in years of life lost. If we reduced the number of early alcohol-related deaths to match similar areas to Wolverhampton this would mean a reduction in terms of alcohol mortality of 34 per cent for men and 22 per cent for women.

Partner organisations in the city such as the police, Wolverhampton City Council, and the voluntary and community organisations have to work together to deal with the wider harms caused by alcohol, particularly the social harms.

The Wolverhampton Keep It Safe campaign

WOLVERHAMPTON KEEP IT SAFE

Keep it Safe started in December 2008 and subsequently received several national accolades.

Keep it Safe is a practical response to the health, crime and social problems caused by irresponsible drinking. Over the last three years Keep it Safe has established itself as a successful multi-agency safety campaign, over the Christmas and New Year period.

Partners have worked together to address issues such as sensible drinking, safe sex and getting home safely after a night out whilst promoting Wolverhampton as a fun but safe place to celebrate Christmas. It includes:

- *Additional police presence enhanced by street pastors*
- *A safe haven incorporating a taxi concierge facility and a minor injuries clinic with an on-site ambulance*
- *Several multi-agency enforcement initiatives including operations to detect unlicensed taxi activities*

It has been successful in reducing violent crime and antisocial behaviour linked to excessive alcohol consumption. It has reduced the number of ambulances called out and the number of people attending the A&E department.

See further information for a list of organisations involved in Keep It Safe.

Social harms of alcohol misuse

Alcohol misuse impacts on health and reduces the life expectancy of individuals, but it also has a range of social harms which impact on families, children and communities as a whole.

There is a link between problematic drinking and:

- domestic violence and child neglect
- violent crime and antisocial behaviour
- breakdowns in family relationships and divorce
- accidents, lost productivity and sickness in the workplace
- suicide and self-harming
- road traffic accidents and domestic fires
- foetal alcohol spectrum disorder
- risky sexual behaviour and unwanted pregnancies
- how the city centre looks and feels

Working together

The city has developed a multi-agency group to try and address the problems caused by alcohol – The Wolverhampton Alcohol Steering Group (WASG). This group aims to address the harms caused by alcohol and includes all the partners who can play a part in improving this terrible situation in the city.

For full membership see further information.

Inspector Steve Worker – Chair of WASG

Reducing harm caused by alcohol is a priority in Wolverhampton, due to the significant impact it has financially on statutory and voluntary partners. It causes a strain on services provided under the Social Care, Health and the Criminal Justice System, but can also have a detrimental effect on businesses and the economy.

The group aims to understand current service provision within Wolverhampton and move towards providing a 'whole systems approach' to address the underlying causes of alcohol jointly.

Dr Davinder Bagary, GP – Bradley Health Centre, Chair – SACG

Many people don't realise that the way they drink could put their health at risk. GPs should take every opportunity to reduce this preventable burden of self harm.

We can reduce consumption to lower risk levels for one in eight higher risk drinkers by using a tool called Alcohol Identification and Brief Advice (IBA).

GPs and health care workers are underestimating the impact of this tool. They don't realise that IBA for harmful drinkers is more effective than current interventions for smoking.

What are we going to do next?

We are going to introduce new alcohol treatment services which will completely change the face of alcohol services in Wolverhampton. This will help prevent people from dying and from having to go into hospital. Some of these services include:

Alcohol Identification & Brief Advice

We will expand the provision of the Alcohol Identification and Brief Advice (IBA) tool in the community. A programme of IBA training will also be provided to health and front line staff in statutory and voluntary organisations, as well as community groups.

Provision of motivational therapies

We know that motivational therapies, which are similar to our successful talking therapies, help people to reduce problem drinking. We will increase access to these motivational therapies including for those whose alcohol misuse has led to problems of domestic abuse or other forms of violence.

Hospital and community alcohol services

An integrated alcohol team will work in the community and at the hospital. Specialist nurses will screen, assess, manage and provide treatments to those admitted with severe alcohol problems.

In the A&E department, these nurses will screen to identify people with possible alcohol problems, offer brief, extended advice or onward referral to other alcohol services, either within the A&E department or at an outpatients clinic.

In the community, the team will provide services to those with alcohol dependency and complex needs, undertaking community detoxifications and on going support to ensure individuals do not relapse once they have successfully completed detoxification.

Improved access to high quality treatment services on their own will not tackle all the harms caused by alcohol in Wolverhampton.

We need national help to address this issue. There is substantial international evidence that alcohol misuse is strongly linked to price. One of the unforeseen effects of the economic downturn is likely to be that there is less heavy drinking. However, we can't rely on recession to help in the long term.

The National Institute for Health and Clinical Excellence (NICE) showed that a minimum pricing policy of 40 pence per unit would have a substantial effect on drinking and deaths from alcoholic liver disease. This would mean that an average pint of beer would be sold for no less than One Pound, and an average bottle of wine for at least Three Pounds Fifty.

We strongly support this minimum price as it would substantially reduce deaths from alcohol in the city.

Targeting cardiovascular disease

Cardiovascular disease (CVD) mortality has more than halved over the last 15 years. Data for 2007-09 suggests this trend is continuing. Wolverhampton still has higher mortality rates than the national average but this gap is closing. Wolverhampton has a lower mortality rate than peer authorities.

In Wolverhampton, women have half the mortality rate of men, and the local mortality rate for women is also closer to the national average than the corresponding figure for men.

Mortality rates are not equal across the city, as shown in the map. Some wards have three times the mortality of other wards.

Everyone is at risk of developing CVD. However, there are certain things that put people at greater risk. These are: high blood pressure, high cholesterol, being overweight, lack of exercise, and smoking.

Having had one episode of CVD, such as heart attack or stroke, puts people at greater risk of having another CVD event in the future.

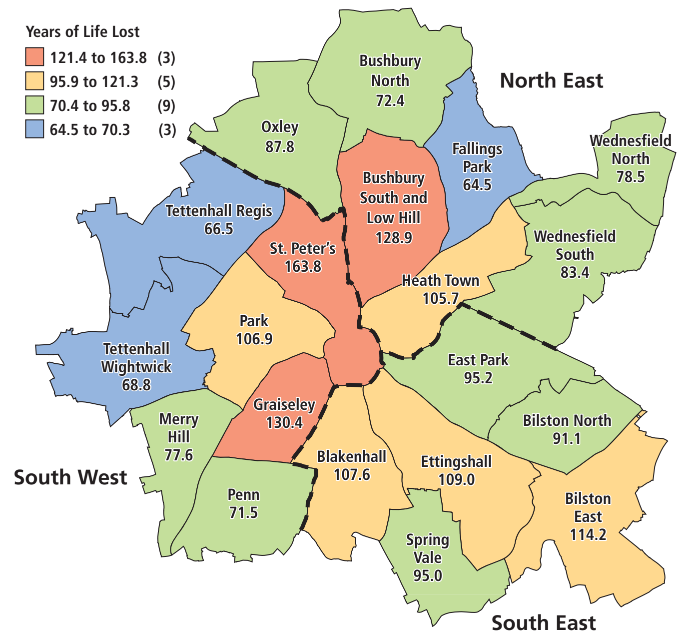
What have we done?

We have put in to place industrial-scale programmes to reduce the risk of developing CVD disease and also preventing further CVD events in the future. These are described in more detail in this chapter and complement the excellent facilities at New Cross Hospital for treating heart disease and stroke. We believe these have had a significant impact in the city.

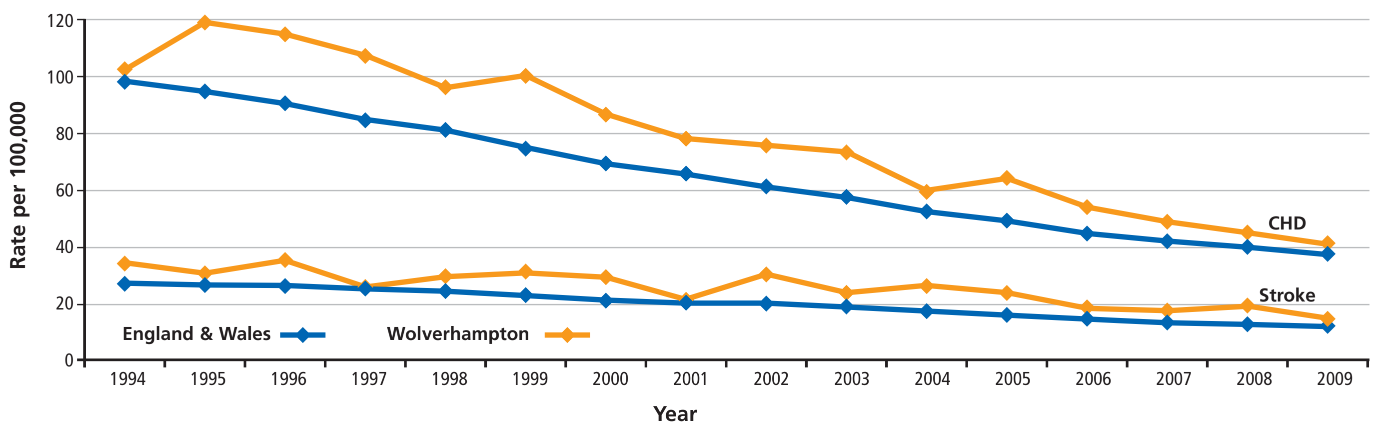
KEY FACTS

- Cardiovascular disease includes coronary heart disease and stroke
- 143 people under the age of 75 died from CHD and stroke in 2009. This compares to 224 in 2005
- Early deaths from CVD are in the main preventable
- Despite excellent progress there is still more that can be done

Age standardised CVD mortality for persons aged under 75 (2005-09)



Age standardised CHD and stroke mortality rates per 100,000 for persons under 75 in Wolverhampton



Healthy Lifestyles Services

Healthy Lifestyle Services support people to reduce their risk of CVD and other health problems through helping people to change their behaviour in relation to smoking, alcohol consumption, diet or physical activity.

Health Trainers

Health Trainers are a new team that provide motivation for people to change their lifestyle. Since January 2010, more than 1,500 people have been supported to make behaviour changes.

Stop Smoking Service

1,800 people each year have been supported to quit smoking, including 80 pregnant women. This benefits both their own and their unborn child's health.

Food Health

The Food Health Team has supported more than 400 pregnant women and new mothers to lose weight and give their baby a healthy start to life in the last two years.

Adult Weight Management

Since June 2009, 3,200 people have accessed Weight Watchers or Fitbug and more than 1,700 have lost more than 5 per cent of their weight.

Barry's story

Health Trainer really helped

When 82-year-old Barry began struggling to enjoy his favourite pastime of walking about 20 years ago, a trip to the doctor soon revealed cardiovascular problems.

Over the following years the former sales manager from Wolverhampton had five stents inserted in his legs and heart to keep his clogged arteries clear.

But a further deterioration in his condition at the end of last year meant further angioplasty and Barry was referred to the Health Trainers programme to help improve his fitness ahead of the procedure.

Health Trainer John Russell saw him at home and Barry soon had an exercise and diet programme to prepare him.

Barry said: "It wasn't stringent, just advice to avoid saturated fats and sugar. I was told no cakes and no biscuits. John was very good. He set me goals. There's no use kidding yourself, you have to stick to the programme.

"I lost about half a stone and had two more stents inserted. Now I feel fine. When I started the programme I was down to about 150 metres when I walked. Now I use a pedometer and it's up to 532 metres a day. I'd recommend the Health Trainer programme – it certainly does help."

Physical Activity

Nearly 1,500 people were supported to undertake regular walks by the Walking for Health service. An exercise on referral pilot has commenced in one GP practice.

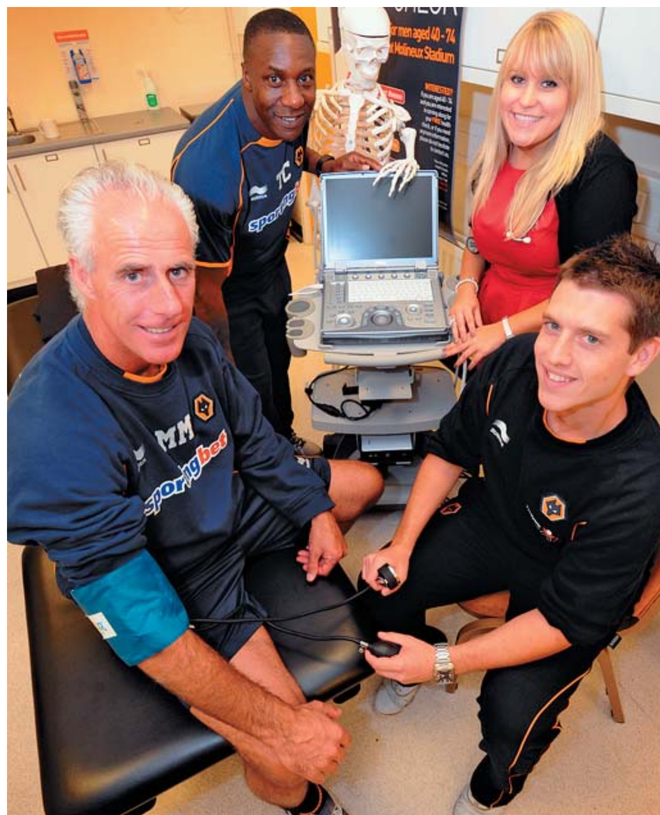
NHS Health Checks

NHS Health Checks are for adults aged 40 to 74 who have not already been diagnosed with heart disease, diabetes, kidney disease, or had a stroke. The check assesses the risk of developing CVD. Medication may be prescribed to reduce risk or referral to the Healthy Lifestyle Services.

GPs have provided 11,000 Health Checks in the last two years:

- 3,000 people have been identified as high risk (20 per cent chance of having a CVD event in the next 10 years).
- 1,500 additional people have been prescribed a statin to lower their cholesterol.
- 3,000 additional people have been prescribed an antihypertensive to lower their blood pressure.

Since March 2010, 800 people from high need communities (Black population, Asian population, people with mental health problems, people with learning disabilities and men from deprived areas) have been provided with a Health Check.



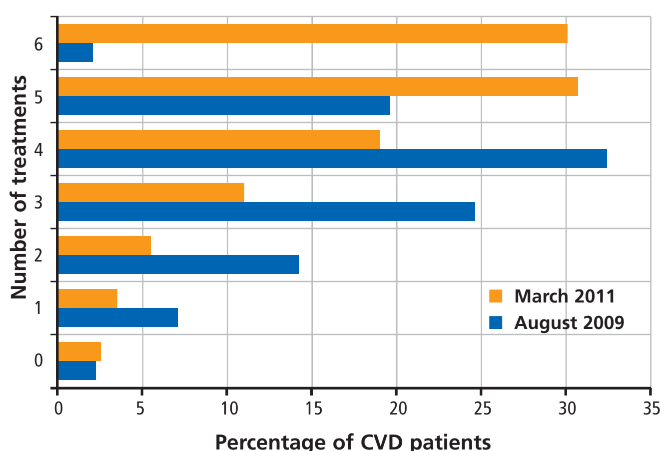
Mick McCarthy receives a Health Check as part of the community Health Check programme.

Preventing repeat CVD

People who have had one CVD event, such as heart attack or stroke, are at the highest risk of having another in the future. There is good evidence that some long-term treatments including flu vaccination and aspirin reduce the chance of further CVD. We also know that excellent management of blood pressure, blood fats (cholesterol), as well as stopping smoking, help people who have CVD to live longer.

> **Dr Kainth, GP – Primrose Lane Clinic**
>
> *It is a good idea to have a pharmacist working in the surgery. The patients like to see a different person reviewing their medication who may have more time than the GP. Also the pharmacist is able to action the management of the patient.*

Percentage of CVD patients on best treatments

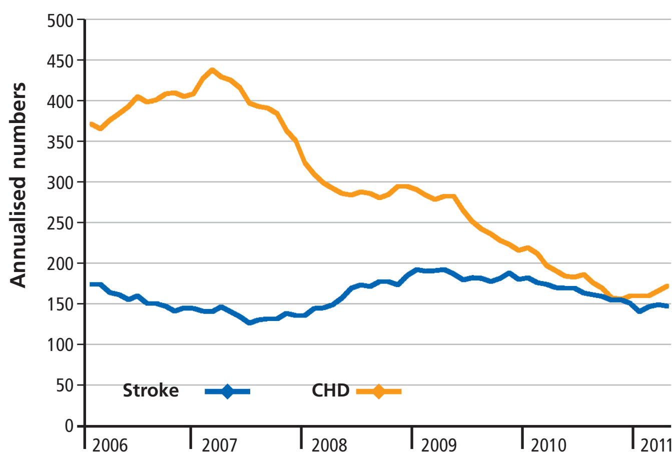


We have looked at all 12,000 people who have CVD who live in Wolverhampton and whether they are receiving 'the six best treatments'.

We have supported local GPs to provide best management to their CVD patients through a team of specially trained pharmacists. This team helps in identifying the right patients and ensuring that they receive the right treatments.

The graph on the left shows the change in people receiving 'best treatments'. It is known that some patients will not be able to have all six.

Annualised emergency admissions trend numbers for CHD and stroke in under 75 year olds



Between August 2009 and March 2011, the proportion receiving 'best management' of all six factors rose from under five per cent to over 30 per cent. The number of patients with management of 1-4 factors reduced dramatically as more received better care.

We believe that this has had an effect on the number of emergency admissions for CHD. The graph above shows that the number of emergency admissions for CHD has declined quite rapidly in the last 18 months. There has not been a similar drop for stroke.

Using new technology to support cardiac surgery at New Cross Hospital.

Treating CHD and stroke

Whilst we aim to prevent as many CVD events as possible, we also need to have high quality services to treat emergency, life-threatening problems such as heart attacks and strokes to reduce the risk of death and disability.

We are lucky that the Wolverhampton Heart and Lung Centre is one of the best facilities in the country and provides excellent services to manage cardiovascular problems. It has very fast treatments for stroke, especially those that break blood clots in the brain. It also offers the latest treatments for emergency heart problems.

What are we going to do next?

We will develop our lifestyle services in a number of ways. We want to bring all our various services together so that they can pool expertise and resources in changing lifestyle. We will also roll out the Health Check programme so that all adults aged between 40 and 74 years are offered a check every five years.

We aim to build on the success of our Walking for Health service and train community champions to deliver information and support. We believe that there is a vast untapped potential in all health staff to help prompt individuals to change behaviour and reduce their risk of dying early from CVD. We want to 'make every contact count' in the NHS.

We will build on our successful model of ensuring as many people with CVD get the best long term treatment. We will include other evidence-based factors, for example how those with an irregular heartbeat are best managed to reduce their chance of a stroke. This is likely to lead to fewer emergency admissions from stroke.

We want to explore how we can also include diabetes in this programme – in itself a significant risk factor for CVD.

Targeting infant mortality

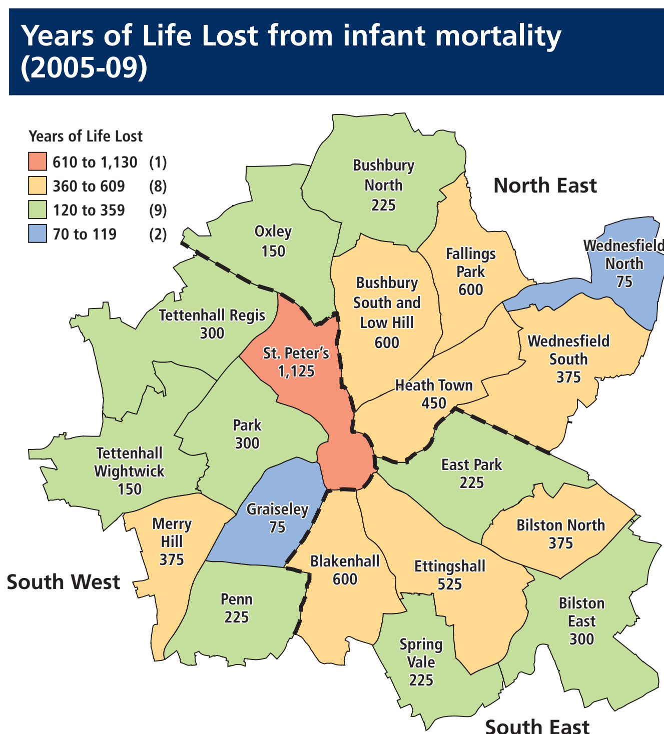
Local evidence shows that the majority of infant deaths occur around birth and the first few days afterwards. Babies born before 29 weeks are considered to be extremely premature and survival for babies born before 24 weeks is very low.

Risk Factors	Protective Factors
Low birth weight and prematurity	Early ante-natal booking with a midwife
Parental smoking	Breastfeeding
Teenage pregnancy	
Deprivation	
Maternal overweight and obesity	

Unfortunately there are around 22 infant deaths in the city every year. We need to save an extra six babies to achieve the national average.

Infant mortality has a very strong link to socio-economic disadvantage. The largest number of lost life years are seen in our disadvantaged wards, as shown below.

Years of Life Lost from infant mortality (2005-09)



KEY FACTS

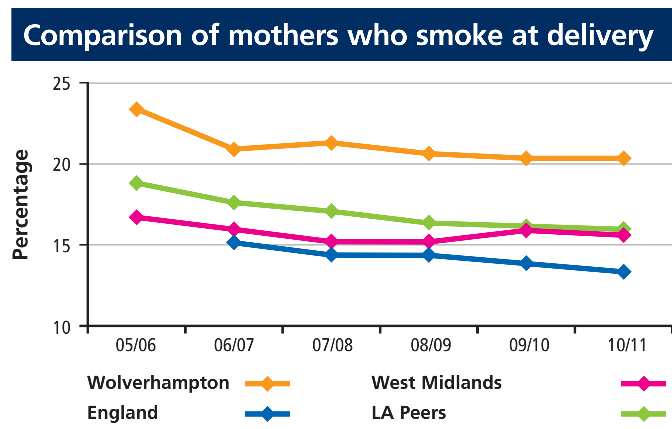
- **Infant mortality is consistently one of the biggest cause of years of life lost**
- **Reducing infant mortality has the biggest potential to increase life expectancy**
- **The highest rates are in the most deprived areas of Wolverhampton**
- **The rate of smoking during pregnancy in Wolverhampton is 50 per cent higher than the national average**
- **We need to save an extra six babies a year to achieve the national average**

Smoking in pregnancy is a key risk factor – babies don't grow as well if their mothers smoke.

There is much that can still be done to support women and their families to stop smoking during pregnancy. This dramatically helps the baby, improves the mothers health and also the families finances.

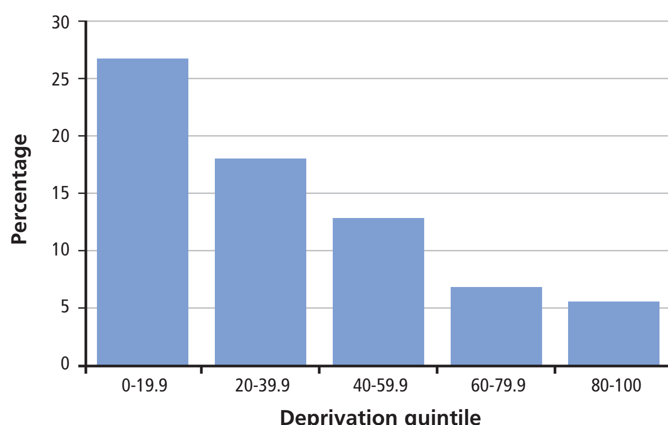
Unfortunately more women in Wolverhampton smoke at delivery than either our LA peers or in the West Midlands, see figure below.

Comparison of mothers who smoke at delivery



Smoking in pregnancy is closely linked to socio-economic disadvantage. The figure on page 21 shows local smoking in pregnancy data broken down by the socio-economic quintile of the mother. The most deprived quintile are five times more likely to smoke than the most advantaged group.

Smoking in pregnancy rates by socio-economic quintile, 2005-09



What have we done?

Smoking cessation

All women who smoke are referred to the Wolverhampton Stop Smoking in Pregnancy team unless they choose to opt out, which means that the majority of smokers are contacted by the team.

As a minimum, all women receive brief intervention but for those who choose to quit, one-to-one tailored support is given and extended to other family members.

The number of women smoking in pregnancy is declining but there are still too many women who smoke throughout pregnancy and afterwards.

We are asking these women why they choose not to engage with the stop-smoking service and will use this to improve the service.

Access to health professionals

We have increased Midwifery and Health Visitor services. We will improve access to these services especially in higher risk communities.

We aim to ensure that women are given good, early, advice both in pregnancy and the first year of life.

A specific development is underway to increase the numbers of women who book with a midwife before 12 completed weeks so that lifestyle support and relevant screening can be made available.

Maternal and infant nutrition

There is support for families through partnership working between midwives, health visitors and Sure Start Children's centres. This is complemented by staff training and breastfeeding peer supporters.

A city-wide approach to infant nutrition has been successful in increasing the uptake of Healthy Start Vitamins and achieving the UNICEF Baby Friendly Initiative:

- New Cross Hospital has level 2 accreditation for the UNICEF standard with an action plan to achieve level 3 during 2011/12.
- Community services including children centres has level 1 accreditation and a plan to achieve level 2.

Overweight and obesity

We have commenced a new health improvement service called 'Maternal and Early Years Healthy Weight Service' (MAEYS). This offers support to mums who are overweight or obese to help them achieve positive lifestyle changes. The service is targeted in the most disadvantaged communities. Women are usually referred by their community midwife where they will receive support to:

- Minimise excessive weight gain during pregnancy
- Support weight loss after pregnancy
- Prevent the development of obesity in infants
- Reduce health inequalities

What are we going to do next?

We need to ensure that high risk pregnancies are identified as early as possible to improve the chances of all babies being born as healthy as possible. We will investigate whether the use of a really good information system will help to ensure that women who have the highest risk are managed by those with the most specialist skills.

Mothers should be able to access antenatal services in a timely manner particularly those new entrants to this country. We will ensure that information on services for pregnant mums is readily accessible. We aim to explore how the mental wellbeing of mums, and also the lifestyle decisions they take, affects their babies as well as themselves.

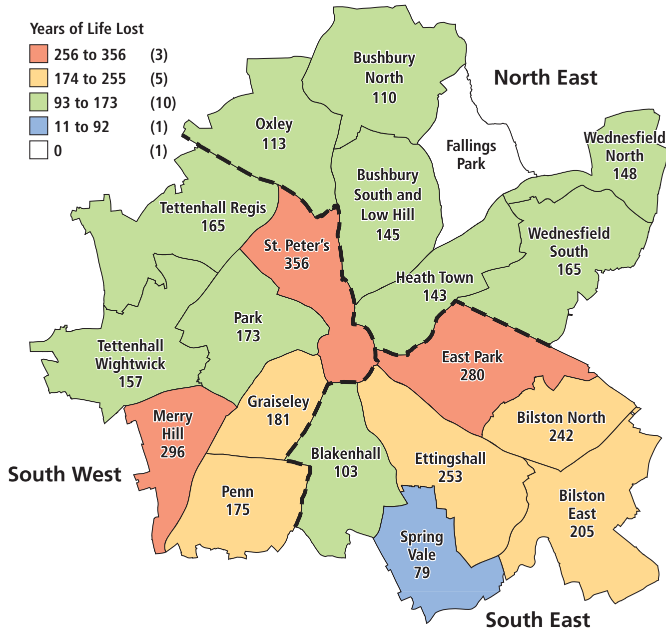
Targeting suicide

The local suicide rate has dropped and is now just over the national average. Since 1997, the highest rate has been in men aged 15-44. From 2005, the highest suicide rate among women has been in those aged 45-74.

Most life years that are lost from suicide are from the inner city areas of St Peter's, Ettingshall, East Park, Bilston and also, surprisingly, Merry Hill. Apart from Merry Hill, rates of suicide are lowest in the western and northern suburban areas, and also in Blakenhall and Fallings Park.

Improving access to mental health services and promoting mental wellbeing are key in preventing suicides.

Years of Life Lost from suicide (2005-09)



KEY FACTS

- **Suicides have reduced in recent years. In the last three years there were 60 suicides. This compares to 96 suicides in the previous three years (2005-07)**
- **Psychological issues are noted in the coroner reports on the majority of suicides**
- **The majority of people who commit suicide are not known to mental health services**

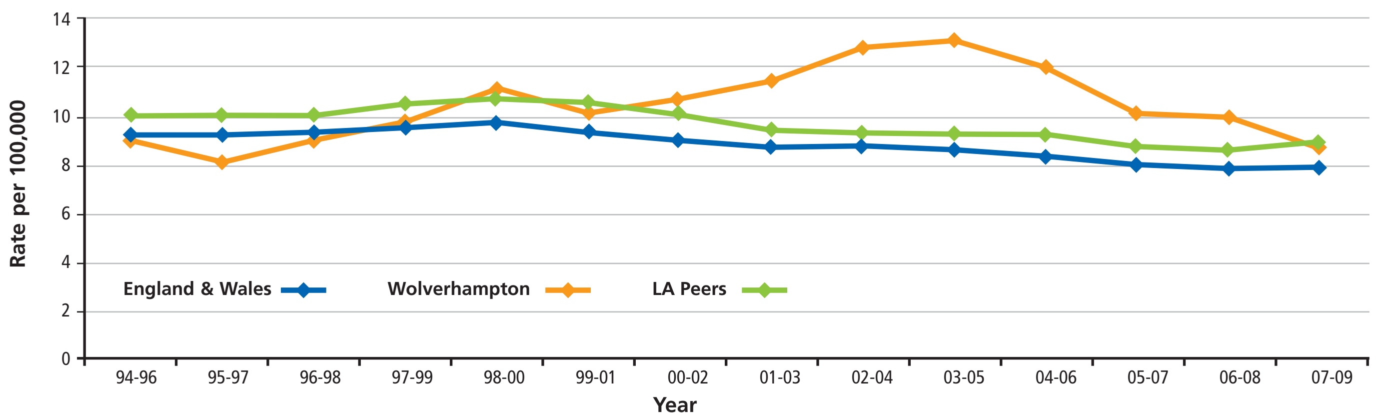
What have we done?

Wolverhampton Healthy Minds

Wolverhampton Healthy Minds is a psychological therapies service for people who are experiencing common mental health problems.

This new industrial-scale service started in January 2009. Since then nearly 3,000 people have completed treatment. The service has been used by people across the city and by different groups including all ethnic groups.

Age standardised suicide mortality rate per 100,000 for persons all ages in Wolverhampton



Interventions include:

- Face-to-Face Cognitive Behavioural Therapy
- Stepping Forward – a psycho-educational group
- Computerised Cognitive Behavioural Therapy
- Guided Self Help

Progress is monitored using national tools which measure severity of anxiety and depression. A client is defined as 'Moving to Recovery' if they have no or only mild anxiety or depression following intervention. 700 people 'Moved to Recovery' and 127 were helped back to work in 2010.

Mental wellbeing

Good mental health and resilience are fundamental to our physical health, relationships, education, training, work and to achieving our potential. The 'Five Ways to Wellbeing' suggests that people: connect, be active, take notice, keep learning and give.

In the last year we have developed a number of projects which provide opportunities for specific groups to improve their mental wellbeing including:

- Sankofa Sesa – a project in partnership with the African Caribbean Community Initiative (ACCI) promoting the mental wellbeing of young black men
- Head for Health – a project in partnership with Wolves Community Trust to provide physical activity opportunities for people with mental health needs

We have also developed mental wellbeing resources including posters, a workbook and a website.

Jo's story

Help with stress and anxiety

Breaking point for retail manager Jo came when her dad died after a five-year struggle with alcohol and she lost her job even though she had an unblemished 10-year work record.

The stress and anxiety of it all became too much for the 41-year-old, who is married with a daughter aged 15, and her doctor referred her to the Wolverhampton Healthy Minds programme for support.

Counselling sessions were organised and after six months she was well enough to contemplate a return to work. That was 18 months ago and Jo is now back in employment.

She said: "It was a big shock when my dad died. I went back to work after three weeks but lost my job in 2009 and I suppose everything suffered and I stopped going out.

"When I first went for therapy I felt terrible, I hadn't really had time to grieve. But after about five months I started feeling much better.

"Now I feel like my old self. I have my good days and bad days but I don't get so stressed. Healthy Minds has been fantastic, I couldn't have asked for better and it's nice to know that support is just a phone call away if I ever need it."

What are we going to do next?

Wolverhampton Healthy Minds will continue to grow with 6,000 interventions a year being provided by 2013.

The mental wellbeing resources will be launched and a programme will be developed to target the wider population.

Both these pieces of work will be implemented within the context of a new strategy to improve access to and quality of all mental health services in Wolverhampton.

Targeting improvement

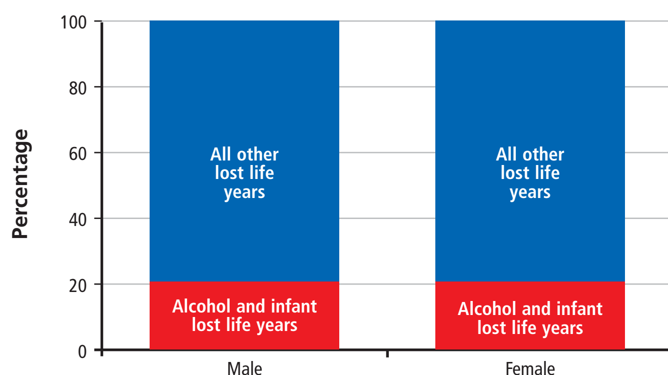
Life expectancy for both men and women in Wolverhampton has not improved enough to close the national gap. However, we should not be despondent – we have shown that applying evidence-based programmes on an industrial scale can have a real effect on reducing early mortality.

We believe that the improvements in CHD, stroke and suicide are in no small part due to such programmes. Our successes have occurred by improving pre-existing services supplemented by new services. Ensuring city-wide high quality services will reduce the national life expectancy gap.

Saving life years

The two specific areas which require considerable attention are alcohol-related liver disease and the continuing burden of infant mortality in the city. Together they account for over 21 per cent of our life expectancy gap with England.

Avoidable lost life years due to alcohol and infant mortality (2006-08)



We need to ensure that all 3,200 women who have a baby each year get high quality support from the health service, other services such as Children's Centres, voluntary organisations as well as family and friends. Only then will we save the six extra babies a year needed to get to the national average.

We are significantly different to our local authority peers for alcohol-related liver disease. This implies that our problem is peculiar to Wolverhampton and can't simply be due to socio-economic disadvantage otherwise the effect would be seen in similar places.

KEY FACTS

- **Applying industrial-scale, evidence based interventions can have a real impact on reducing mortality**
- **High quality services help to reduce inequalities and need to be consistently delivered**
- **Alcohol related liver disease and infant mortality account for 21 per cent of our life expectancy gap to England**
- **The life expectancy gap is growing within the city**
- **Long term improvement in life expectancy will only be achieved by tackling the key determinants of health**

We need to make certain that people who already have significant health problems due to alcohol are identified and offered high quality support. This will involve not just the health service but also other agencies including the police, probation and voluntary sector. To get to the average of our peers we will have to save 18 extra lives a year, a drop of over a third. We also need to lobby for national action to help us tackle the harm caused by alcohol.

Closing the gap

In this report we have highlighted differences within Wolverhampton, in terms of location as well as socio-economic circumstance. There is evidence to show widening of the gaps in life expectancy between the most and least advantaged. The prime reason is the rising mortality from alcohol. Life expectancy in some wards actually reduced in the past five years.

High quality services need to be available across the city and not just in our more affluent areas. Research informs us that we will have to target the communities with lowest life expectancy with more services to ensure that their improvement

accelerates more quickly and the gap closes. But the targeting of resource must be evidence-based and deliver the intended improvements.

Improving the determinants of health

This report has deliberately focused on industrial-scale change which has mainly occurred within the health service. This is for the simple reason that services are already operating in these areas and there is a very strong evidence base regarding improvement (especially CVD).

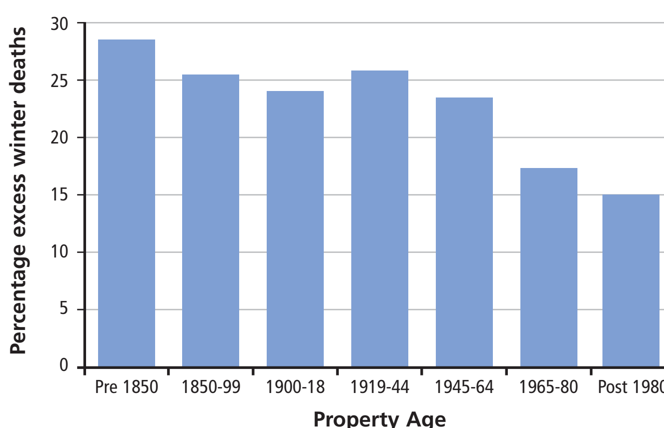
Long term improvements in public health outcomes such as life expectancy will only occur through changes in those determinants of health, such as education, employment, skills and housing.

Fair Society, Healthy Lives is a recent review of interventions to address health inequalities undertaken by Marmot. The current government has responded to this report by producing a new strategy called *Healthy Lives, Healthy People*. The evidence contained in these reports is compelling. Marmot showed that life chances can be improved dramatically by addressing these determinants.

A specific example is how housing affects health and inequalities in health. Marmot has shown evidence that the extra deaths occurring in winter are strongly linked to housing.

People living in houses with poorer insulation, less double glazing and no central heating have a greater risk of dying in winter. He identified that the age of the property strongly predicts winter mortality risk (see table). Living in a new, well insulated and centrally heated home really does help you live longer.

Excess winter deaths by property age



Warm housing built by Bromford Group in Cross Street South.

Conclusion

This document reinforces that we have a problem with life expectancy in the city. Too many people die too young – and this is seen disproportionally in the most disadvantaged communities.

Deaths due to alcohol and those occurring in infancy are the major reasons why life expectancy has not improved. We have to implement large scale evidence based programmes to tackle the terrible effects of alcohol and redouble efforts to prevent infant deaths. We have evidence of real successes where we have implemented such industrial scale actions.

But the widening gap in life expectancy across the city is a great concern. We have to re-examine our approach to tackling the determinants of health as well as the immediate health problems.

I have previously argued that our health inequalities will not disappear if we continue to do things the way we have always done. We need a fresh approach to look at how we support communities and individuals, how individuals and communities support themselves and how we work together to deliver much more for Wolverhampton.

We need to be brave in how we implement evidence, we need to innovate and we need to be honest when things don't work. Then, when we have truly changed the way that we work with our community, we are likely to see real changes in our health inequalities.

Trudi Greenway, right, who lost weight with the innovative MAEYS service after giving birth to son Luke.

Further information

Peer local authorities – centres with industry

Barking & Dagenham
Blackburn
Bradford
Calderdale
Derby
Kirklees
Manchester
Oldham
Preston
Sandwell
Birmingham
Bolton
Burnley
Coventry
Hyndburn
Leicester
Nottingham
Pendle
Rochdale
Walsall

Partners involved in Wolverhampton Alcohol Steering Group and Keep It Safe campaign

BBP Security
British Beer and Pub Association
British Red Cross
Kerrang Radio
Local Neighbourhood Partnership
Local Strategic Partnership
Private Hire & Hackney Carriage Association
Pub Watch
Royal Wolverhampton Hospital Trust
Safer Wolverhampton Partnership
The Haven
West Midlands Ambulance Service
West Midlands Domestic Violence Unit
West Midlands Fire Service
West Midlands Police
West Midlands Probation Service
Wolverhampton City Centre Company
Wolverhampton City Council
Wolverhampton Magistrates Court
Wolverhampton Street Pastors
Wolverhampton Primary Care Trust
Wolverhampton Voluntary Sector Council

Other sources of information

General health and health inequalities:

NHS Direct
www.nhsdirect.nhs.uk

Department of Health
www.dh.gov.uk

Office of National Statistics
www.statistics.gov.uk

Association of Public Health Observatories
www.apho.org.uk

London Health Observatory Inequality Profiles
www.lho.org.uk/health_inequalities/health_inequalities_tool.aspx

Marmot Review of Health Inequalities
www.marmotreview.org/reviews/english-review-of-hi

Review of Housing and Health
www.marmotreview.org/reviews/cold-homes-and-health-report.aspx

Public Health White Paper
www.dh.gov.uk/en/Publichealth/Healthyliveshealthypeople/index.htm

Alcohol:

Local Alcohol Profiles for England
www.nwph.net/alcohol/lape

Alcohol Use Disorders Identification Test (AUDIT)
www.patient.co.uk/doctor/Alcohol-Use-Disorders-Identification-Test-(AUDIT).htm

Alcohol Learning Centre
www.alcohollearningcentre.org.uk

Drinkaware
www.drinkaware.co.uk

Aquarius
www.aquarius.org.uk

Suicide and mental wellbeing:

Mental health observatory
www.nepho.org.uk/mho/

Assess your wellbeing online (Warwick and Edinburgh Mental Wellbeing Scale)
www.5w2w.org

Wolverhampton Wellbeing
www.wolverhamptonwellbeing.nhs.uk

MIND
www.mind.org.uk

The Samaritans
www.samaritans.org.uk

Cardiovascular disease:

Cardiovascular Disease Profiles
www.sepho.org.uk/CVDprofiles.aspx

Cardiovascular Disease Risk Calculator
www.qrisk.org

British Heart Foundation
www.bhf.org.uk

The Stroke Association
www.stroke.org.uk

NHS LiveWell
www.nhs.uk/LiveWell

Infant mortality:

Child Health Profiles
www.chimat.org.uk

ISBN-13: 978-0-9541193-3-1

PUBLISHED BY WOLVERHAMPTON CITY PRIMARY CARE TRUST. DESIGN BY SMITH DAVIS PRESS. PRINTED BY WYNDEHAM GAIT.