Review of evidence for the Mayor’s Health Inequalities Strategy

August 2009
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1. Introduction

‘Stop people smoking, substitute some lettuce and tomatoes for the fries and hamburgers and everybody would be healthy. The job would be done. Indeed, some people think that is all there is to it. Rid the world of smoking and concerns about people’s place in the social hierarchy would have little to do with health. The problem with this approach is that the evidence is against it … These differences in lifestyle provide only a modest explanation of the social gradient in health.’

Professor Sir Michael Marmot, Status Syndrome, Bloomsbury 2004

This report provides a preliminary evidence base to underpin the Mayor’s Health Inequalities Strategy for London. However developing the evidence base will be an ongoing exercise and, indeed, one of the key actions in the Strategy will be to add to, and extend, the evidence base as new and updated information becomes available.

The paper highlights findings from reports on health inequalities, from papers on social epidemiology, and from a range of reports on the wider determinants of health. As well as providing information on the key issues and dimensions of inequality, the evidence base also attempts to document ‘what works to reduce inequalities’ and to highlight highlights gaps in the evidence base. What it does not capture, however, is the extent to which government policies affect inequalities in health determinants. That has been the subject of a separate exercise.
2. Health in London

Life expectancy at birth

Life expectancy at birth for an area is determined by mortality at all ages. As the range of influences on life expectancy is vast, including as it does all those influences on health at each age, average life expectancy is generally considered to be a good summary indicator of the health status of the population. Life expectancy has been increasing for many years, both in London and nationally. This has been more rapid among males than females. Life expectancy for females in London in 2005-07 was 82.4 years, higher than the England average of 81.8 years. Male life expectancy was 77.9 years in London in 2005-07, compared to the national figure of 77.7 years. At local authority level the highest life expectancy in London was in Kensington and Chelsea for both sexes. In 2005-07, male life expectancy at birth there was 83.7 years and female life expectancy was 87.8 years. The lowest life expectancies were in Greenwich for males (74.9 years) and Newham for females (79.8 years). Even larger inequalities exist between electoral wards in London. For example, among males, the gap between the wards with the highest and lowest life expectancies is around 17 years (Table 1).
**Life expectancy in London, ward level, 2002–06**

<table>
<thead>
<tr>
<th>MALES</th>
<th>FEMALES</th>
</tr>
</thead>
<tbody>
<tr>
<td>London ward (borough)</td>
<td>London ward (borough)</td>
</tr>
</tbody>
</table>

**Lowest five**  
Tottenham Green (Haringey) 70.6  
Northumberland Park (Haringey) 70.7  
Nunhead (Southwark) 71.0  
Lewisham Central (Lewisham) 71.1  
Gascoigne (Barking & Dagenham) 71.1

**Highest five**  
Courtfield (Kensington & Chelsea) 85.2  
Holland (Kensington & Chelsea) 86.4  
Hans Town (Kensington & Chelsea) 86.9  
Surrey Docks (Southwark) 87.9  
Queen's Gate (Kensington & Chelsea) 88.3

In 2001 the Government set national targets to reduce health inequalities by 2010. One of these is to reduce by at least ten per cent the gap in life expectancy at birth between the fifth of local authorities with the worst health and deprivation indicators – the Spearhead Group – and the population of England as a whole. The 2008 progress report notes that there has been little change in the gap in male life expectancy and a widening of the gap in female life expectancy. The differences between life expectancy by deprivation quintile demonstrate a clear gradient, as shown in the following chart. For England in 2002-04, the quintile with the least deprivation had an estimated life expectancy of 4.2 years (male) and 3 years (female) more than the most deprived quintile. Eleven London boroughs are in the Spearhead Group. Seven of these are now on-track to meet the life expectancy target for both sexes by 2010. A further three are on-track to meet the target for either males or females, while only one (Islington) is currently not on-track to meet the target for either sex.

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**Life expectancy at birth by deprivation quintile, England, 2002–04**

![Life expectancy chart](chart.png)

**Source:** DH analysis using data from the Office for National Statistics (ONS)  

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*1 Barking and Dagenham; Greenwich; Hackney; Hammersmith and Fulham; Haringey; Islington; Lambeth; Lewisham; Newham; Southwark; and Tower Hamlets.*
Infant mortality
Infant mortality rates are a commonly used indicator of the health status of the population and are influenced by a range of factors including health during pregnancy, quality of health care during delivery, and postnatal care. The national health inequalities PSA target for infant mortality aims for a 10 per cent reduction of the gap in mortality between babies born to fathers in the ‘routine and manual groups’, and all births born within marriage or registered jointly by couples (i.e. excluding births registered by the mother alone). The 2008 progress report notes that there has been a further slight narrowing of the infant mortality gap.

The infant mortality rate in London has been declining since the baseline year of the PSA target (1997–1999). The rate in 1997–1999 was 5.9 per 1,000 live births, compared with the most recent rate of 4.8 for 2005–07. This is similar to the rate in England as a whole (4.9). There are wide inequalities in infant mortality between London boroughs. The following map shows infant mortality rates by London borough for 2005–07. The highest rates are found in Enfield, Harrow, Southwark and Croydon – at over six per cent these boroughs have more than double the rates experienced in more affluent Richmond upon Thames, Kensington and Chelsea, Kingston upon Thames and Bromley.

The five most important factors associated with infant death in London are: low birth weight babies, mothers who live in the most deprived parts of London, mothers who register their babies alone, mothers born in east or west Africa and the Caribbean, and babies born to couples in the routine and manual groups. Births to teenage mothers also have higher than average mortality rates.

A major cause of infant mortality is low birth weight. A report by the Fabian Society revealed that the UK has the second highest rate of low birth weights in Western Europe, after Greece, and identified an increased prevalence of underweight babies born to mothers of Indian, Pakistani and Bangladeshi origin, as well as single parents and working class women. Differences in birth weight, associated with socioeconomic gradients, influence subsequent cognitive and physical development and a range of adult diseases. For example, research based on a survey of 1,420 children aged 9–16, half of whom were girls, showed that almost two-fifths of girls who weighed less than 2.5kg at birth developed depression between the ages of...
13 and 16, compared with eight per cent born at average weights. However low birth weight was not significantly associated with depression among the boys.¹⁰

A study which looked at area deprivation, individual factors and low birth weight concluded that, for all but very young mothers, there seems to be a negative effect on birth weight from living in areas of income deprivation, whatever the individual circumstances.¹¹ A further study on deprivation and infant mortality found that around 28 per cent of post-neonatal deaths (45 per year) among non-low birth weight babies, and 24 per cent of post-neonatal deaths (131 per year) among babies born at term, would potentially be avoided if all levels of deprivation were reduced to that of the least deprived group.¹²

**Self-assessed health**

Self-assessed health status is a simple way to describe the health of the population. There is evidence that people’s own assessment of their health is a good indicator of their health status, and among older people can be a good predictor of mortality. People with poor health are more likely to have no qualifications, live in social rented accommodation, be unemployed, be a lone parent and live in overcrowded accommodation.

In the 2001 Census eight per cent of Londoners reported that their health was ‘not good’ compared with nine per cent for England overall. Across the London boroughs there were inequalities in the percentage of the population who reported their health as ‘not good’. For males, Richmond, Kensington & Chelsea and Bromley had the highest levels of self-reported good health; Tower Hamlets and Newham had the lowest levels. For females, Richmond, Kensington & Chelsea, Bromley and City of London had the highest levels of self-reported good health; Tower Hamlets, Hackney, Islington, Newham and Barking and Dagenham had the lowest levels (see maps below). However, below borough level there were small pockets of areas, not confined to inner east London, where a lower than average percentage of the population reported good health.

Lone parents are twice as likely to describe their health as ‘not good’ compared with mothers in couple families, and children living in lone parent families are more likely to have poor health and have a long-standing illness than children living in couple families.¹³ Among ethnic groups, the percentage who reported their health as ‘not good’ was highest in the Bangladeshi and Pakistani groups. The White British group, mixed white and Asian, Black African and Chinese groups had the lowest percentages reporting ‘not good’ health.¹⁴ Research from the USA has shown that inequalities in the state-wide distribution of income are associated with self-rated poor health, even after individual income and other risk factors are accounted for. The effects are not limited only to those in the lowest income groups; people in middle income groups in states with the greatest inequalities in income rated themselves as having poorer health than people in middle income groups in states with the smallest inequalities.¹⁵
Age-standardised ratio of reported good health by London borough, 2001

Males

Females

Age standardised rates of ‘not good’ health for all people by ethnic group and sex, 2001

<table>
<thead>
<tr>
<th>Ethnic Group</th>
<th>All people</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>London</td>
<td>Rest of E&amp;W</td>
<td>London</td>
</tr>
<tr>
<td>All people</td>
<td>100</td>
<td>99</td>
<td>100</td>
</tr>
<tr>
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<td>95</td>
<td>99</td>
</tr>
<tr>
<td>White Irish</td>
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<td>135</td>
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<td>107</td>
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<td>Other Mixed</td>
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<td>119</td>
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</tr>
<tr>
<td>Indian</td>
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<td>Bangladeshi</td>
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<td>163</td>
</tr>
<tr>
<td>Other Asian</td>
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<tr>
<td>Chinese</td>
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<td>55</td>
</tr>
<tr>
<td>Other Ethnic Group</td>
<td>104</td>
<td>108</td>
<td>76</td>
</tr>
</tbody>
</table>

Source: 2001 Census, Standard Table ST107

Note: A standardised ratio of 100 indicates that the area has average levels of good health, equal to the population of England as a whole. Levels higher than 100 indicate higher than average good health, and levels lower than 100 indicate lower than average good health.

Limiting long-term illness

In the 2001 Census, the percentage of people with limiting-long term illness (LLTI) was lower in London at 16 per cent than it was in England & Wales as a whole (18 per cent). Within the capital, the worst performing boroughs for LLTI were in north and east London. At the other end of the scale the top ranking boroughs - Richmond-Upon-Thames, Kingston-Upon-Thames, Wandsworth, Kensington and Chelsea and Merton - form a cluster in southwest London.
Among ethnic groups, age-standardised rates of LLTI ranged from a low of 63 among Chinese to a high of 136 in the Bangladeshi population. The Bangladeshi and Black African groups had considerably better health outside London whereas the Pakistani, Black Caribbean and White British groups were healthier within London. The figure below shows the differences between London and the rest of England and Wales ranked in order of groups that were healthier in London on the left, to groups that were less healthy on the right.

![Figure showing age-standardised rates of limiting long-term illness by ethnic group, 2001](image)

Initial analysis of the recent London Boost of the Health Survey for England (HSE) reveals that the percentage of those with a LLTI is slightly lower than the London figure from the 2001 census. The percentage of those with a LLTI was highest in areas classified as the most deprived (22%), though there was no significant difference between this and areas which are less deprived. Work by the London Health Observatory to develop a measure of mortality by ethnicity which can be used at local authority or PCT level suggests that Bangladeshi, Black African and Black Caribbean ethnic groups have significantly greater Standardised Mortality Rates (SMRs) than the overall population in London.

Significant health inequalities exist between the Gypsy and Traveller population in England and their non-Gypsy counterparts. They are more likely to have a long-term illness, health problem or disability, which limits daily activities or work, a higher overall prevalence of reported chest pain, respiratory problems, arthritis, miscarriage and premature death of offspring. They are also more likely to suffer from anxiety or depression.
The ‘Big Killers’
Circulatory disease and cancer account for around two-thirds of all deaths and are also major
causes of ill health. The national health inequalities targets for circulatory disease and cancer
are to substantially reduce mortality rates by 2010 (from the Our Healthier Nation baseline,
1995–97):

- From heart disease and stroke and related diseases by at least 40 per cent in people
  under 75, with a 40 per cent reduction in the inequalities gap between the fifth of areas
  with the worst health and deprivation indicators and the population as a whole

- From cancers by at least 20 per cent in people under 75, with a reduction in the
  inequalities gap of at least six per cent between the fifth of areas with the worst health
  and deprivation indicators and the population as a whole.

Not all social groups have benefited equally from improvements in understanding of the causes
of disease and in its treatment over the past 40 years. For example, people from deprived
communities are both more likely to be diagnosed with cancer and less likely to survive it.
Analysis by ONS of patients diagnosed with cancers during 1998–2003 found that one-year
and five-year survival rates were significantly lower for people living in the most deprived Primary
Care Trust, or ‘Spearhead’, areas. Tobacco consumption is a major contributor alongside other
lifestyle factors such as poor diet and insufficient physical activity.

Deaths from diabetes are expected to increase 25% by the middle of the next decade, with the
most deprived in the UK 2.5 times more likely to have the disease. Obesity, physical inactivity,
smoking, unhealthy diet and poor blood pressure control are the major contributors. Around
half the estimated three million diagnoses expected by 2010 will be from disadvantaged
communities.

For some conditions there is higher risk of disease among ethnic minorities. For example,
people born in South Asia have the highest mortality rates from circulatory disease. This is due
in part to raised prevalence of diabetes together with other factors such as rates of smoking
and obesity. In London there are particularly high mortality rates for coronary heart disease (30–
40 per cent higher than national averages) amongst people born in South Asia. The HSE
suggests that Pakistani men are significantly more likely to suffer coronary heart disease or
stroke than the general population. On the other hand, corresponding rates for Black African
men and women are significantly lower than for the general population. Successive studies
have shown that people of Irish origin living in the UK have significantly higher rates of heart
disease than almost any other ethnic group. One of the key risk factors for stroke is
hypertension, and past London data has revealed significantly higher mortality rates from
stroke amongst people born in the Caribbean and West Indies, as well as Bangladesh and other
parts of South Asia.

There is a social gradient in deaths from CHD and lung cancer, with death rates three and four
times higher respectively among unskilled manual men of working age than among professional
men. A systematic review found that low control in the workplace, low social support,
hostility, depression and anxiety were all related to CHD.

People with serious mental health problems are more likely than others to get illnesses like
stroke, coronary heart disease or respiratory disease before the age of 55. Once they have them
they are less likely to survive for more than five years. People with schizophrenia are almost
twice as likely to have bowel cancer as other citizens, while women with schizophrenia are 42
per cent more likely to get breast cancer than other women. People with depression also have
higher risks of key physical illnesses. Almost half of all people with Down’s syndrome have congenital heart problems. CHD is the second highest cause of death for this group after respiratory disease, and it is increasing as life expectancy improves and more people live in the community.

Premature deaths from circulatory diseases are higher in London than in England overall (103 compared with 97 per 100,000) with a 2.5 times difference between the boroughs with the highest and lowest rates (Tower Hamlets 161 and Bromley 66). The following map shows that the highest (directly standardised) mortality rates for heart disease and stroke tend to be found in the Spearhead areas, particularly east London. The inequalities gap in deaths from heart disease and stroke between the London Spearhead Group and England continues to widen, and the 2010 target is unlikely to be met unless reducing inequalities are made a top priority. There is a similar pattern in the under 75s rates for cancers across London.

Directly standardised heart disease and stroke mortality rates, 2002-2004, ages under 75, persons, by local authority
Child health
Breastfeeding is linked to improved immunity, digestive health and better neurological development, but a number of studies have shown that infants born into low-income households are less likely to be breastfed. A recent Joseph Rowntree Foundation report identified lower rates of breastfeeding and higher rates of postnatal depression amongst low-income mothers as leading to problems for their infants.

Asthma is the most common chronic disease of childhood. Recent evidence has shown a socio-economic gradient in the distribution of childhood asthma in three respiratory conditions: persistent wheeze between birth and 42 months, asthma at 81 months and persistent wheeze between birth and 81 months. Child’s diet, local deprivation and maternal smoking are the mediating factors that tend to account for most inequality.

On average, refugee children have greater health needs than British-born children. This may be for several reasons, including having come from areas where diseases such as TB, malaria or HIV/AIDS are common. They may not have had their conditions diagnosed and treated. They may not have received the normal immunisations because of lack of healthcare or the disruption of healthcare systems due to conflict. Those who have experienced violence might have particular injuries, while girls from some countries may have undergone genital mutilation, which can have severe effects on their mental and physical health.

Oral health
There are stark inequalities in oral health in London. Socio-economic deprivation is the key determinant for poor oral health, which means that inner London boroughs have some of the worst levels of tooth decay among children in the country. People from deprived communities tend to attend a dentist less regularly than other people, and are therefore more likely to have untreated dental problems.

Sexually transmitted diseases
Sexually transmitted infections (STIs) can cause permanent damage, such as infertility and even death. In London there are stark inequalities in STIs, with some minority ethnic communities, young people and gay and bisexual men experiencing high levels of need for advice and care services.

London has the highest rates of new diagnoses for chlamydia, gonorrhoea and syphilis compared to other regions. First intercourse is happening at a younger age, there is a higher acquisition of new partners, and a greater proportion of people having multiple partners. Young people aged 16-19 have experienced the highest rises in STIs, especially chlamydia, diagnoses of which have more than doubled since 1995. Young people are the group least likely to use a contraceptive or a condom or access sexual health advice, putting them at high risk of a sexually transmitted infection or becoming pregnant. Evidence suggests that prevention and contraceptive services are relatively less accessible and available in areas of high need and sexual and reproductive health services targeted at young people are failing to adequately reach boys and young men. However, there is also evidence that young Londoners can be reached successfully through sexual health promotion initiatives conducted in social and entertainment settings.
Less than half of lesbian and bisexual women have ever been screened for sexually transmitted infections. Half of those who have been screened had an STI and a quarter of those with STIs have only had sex with women in the last five years.44

New HIV diagnoses among men who have sex with men continue to increase and over four-fifths of these infections were probably acquired in the UK. While men who have sex with men are disproportionately affected by STIs and HIV, the biggest rise in HIV in recent years has been through heterosexual intercourse. The estimated number of persons infected through heterosexual contact within the UK has increased from 540 new diagnoses in 2003 to 960 in 2007, and has doubled, from 11% to 23%, as a proportion of all heterosexual diagnoses during this period. Of the estimated 4,260 heterosexually acquired new diagnoses of HIV, 77% (3,300) were probably infected abroad. An estimated two thirds (2,850) were of black-African ethnicity, of whom the majority (90%) acquired their infection abroad, mainly in sub-Saharan Africa. In contrast, among HIV-infected MSM diagnosed in 2007, 82% (2,580) probably acquired their infection in the UK.45

Sexual health problems also disproportionately affect those experiencing poverty and social exclusion.46 HIV infection of adult male prisoners is 15 times higher than in the general population. Hepatitis B and C infection in female prisoners is 40 and 28 times higher than in the general population respectively.47

London has by far the highest rate of new HIV diagnoses in the country, accounting for just over half of all new cases, and the highest prevalence. Department of Health statistics show that the number of HIV cases reported in London increased by 58 per cent between 2001 and 2005 to reach more than 40,000. The boroughs reporting the highest number of cases (>1,700) in 2005 were Lambeth, Southwark, Newham, Camden, Westminster, Islington, Haringey, Lewisham, Hammersmith & Fulham and Kensington & Chelsea.48 However, at 65 per cent, London has a significantly lower uptake of HIV testing compared to the rest of England.
Tuberculosis

Tuberculosis (TB) is not simply a health problem; it is a complex social issue, which has a negative impact on the well-being of both recent migrants and the wider community. There is a stigma associated with TB, which can discourage those who may be infected from seeking clinical advice. Factors that lead to infectious TB include poverty, poor housing, overcrowding and poor nutrition, and any other factors that weaken patients’ resistance to acquiring infections.

The incidence of TB in London has increased steadily since the late 1980s and there were 3,265 cases reported in 2007, a rate of 43 per 100,000 population. London TB cases accounted for 39 per cent of all tuberculosis diagnosed in England & Wales. The majority of cases were young adults and male. TB is concentrated in particular areas of London, with 17 ‘hot spots’ (areas with an incidence of greater than 40/100,000 population). In 2007, 79 per cent of all cases were non-UK born, predominantly from the Indian subcontinent (ISC) and sub-Saharan Africa, but these proportions vary across London. More than half of childhood TB cases are in UK-born children. The highest rate of TB were seen among the Black African and ISC ethnic groups; the majority of UK-born cases occurred in the White ethnic group.

Most cases of TB are relatively easy to identify, and treatment is usually completed without any problems. However, around 1 in 5 cases are more complex. They occur in socially excluded groups, who may be homeless or in prison, and who find it difficult to complete their treatment. At nearly 800 cases per 100,000, prevalence rates of TB among homeless people living on the streets or in hostels are extremely high. Rates are also high among problem drug users (350/100,000) and prisoners (200/100,000).
Mental illness
London’s unique characteristics mean that mental health needs in the capital differ from those in other regions and needs indicators suggest that London has higher than the national average rates of both common mental health problems and severe mental illness. London’s population is younger than that of the rest of the UK and the capital has high levels of homelessness and single person households, both of which are associated with higher levels of mental illness. The capital also faces far greater challenges than elsewhere in dealing with high rates of dual diagnosis of mental health with alcohol and/or substance misuse problems. Findings from the London Boost of the HSE reveal that although generally the 16-34 age group have the highest percentage of those with poorer mental health, in Inner London and in Spearhead areas it is the 55+ age group that have the highest percentage. The percentage of those with poorer mental health is higher in deprived areas. The patient mix in London’s mental health services includes much higher numbers of patients from more deprived areas than the rest of England.

The association between rates of mental illness and population characteristics such as poverty, unemployment and social isolation is well established. For example, people living in households with the lowest levels of income are more likely to have a common mental disorder (CMD) than those living in the highest income households. Research has consistently shown that between 30 and 50 per cent of rough sleepers have mental health needs. Around 70 per cent of prisoners have mental health problems, some of which are linked to their offending behaviour and which can reduce an offender’s likelihood of successful resettlement back into the community.
People with severe and enduring mental illnesses such as schizophrenia and bi-polar disorder are at increased risk of a range of diseases, including coronary heart disease, diabetes, infections and respiratory disease and greater levels of obesity. They are almost twice as likely to die from coronary heart disease as the general population and four times more likely to die from respiratory disease.\textsuperscript{59} Research from the USA suggests that anything less than complete mental health results in increased impairment and disability.\textsuperscript{60} Completely mentally healthy adults reported the fewest missed days of work, the healthiest psychosocial functioning, the lowest risk of cardiovascular disease, the lowest number of chronic physical diseases with age, the fewest health limitations of activities of daily living, and lower health care utilisation. On the other hand, ‘languishing,’ with or without a mental illness, was associated with increasingly larger amounts of chronic physical disease with age. Recent US research suggests that people with serious mental illness lose 25 years of life expectancy compared to the general population, and this loss is due primarily to an increased risk of cardiovascular disease.\textsuperscript{61}
The most common cause of death of young men under 35 is suicide and London is not on track to meet the suicide target of a 20 per cent reduction in overall suicide rates by 2010. An investigation into self-harm among 18- to 20-year-olds found young people most at risk were those who were currently unemployed, sick or outside the labour market.

The British Medical Association found that two-thirds of refugees had experienced significant anxiety or depression. The inability to have control over one’s life has been cited as a major contributing factor to mental health issues, compounded by a lack of representation of refugees in decision-making roles in local authorities and health authorities. Up to two-fifths of refugee children are thought to have psychiatric and psychological problems such as post-traumatic stress disorder and depression. Other children may suffer from anxiety and emotional problems related to their isolation.

Parental unemployment, living with step-siblings, being in a lone parent and/or low income household and having a parent with emotional well-being and mental health problems have all been found to be significantly associated with emotional well-being and mental health problems among children and young people. The 1999 ONS survey found that lower household income was associated with a greater degree of emotional, behavioural and hyperkinetic problems. There is an increased likelihood of the onset of an emotional disorder among children and young people:
- where no parent in the household is working
- living in rented accommodation
- where the weekly gross household income is less than £400.

Nearly two thirds of children with emotional disorders are living in poverty and over half are supported by a mother who is likely to have mental health needs herself. The most recent estimates suggest that there is a child mental disorder prevalence of ten per cent in Great Britain although it is unclear whether there are any differences between children and young people in London and those elsewhere in the country. Black African and Indian children appear to enjoy better mental health than White British children, while Black Caribbean, Pakistani, Bangladeshi and mixed race children have similar mental health.

Levels of mental distress among communities need to be understood as a response to relative deprivation and social injustice. Greater inequality heightens status competition and status insecurity across all income groups and among both adults and children. Health-damaging behaviours and violence may be survival strategies in the face of multiple problems, anger and despair related to occupational insecurity, poverty, debt, poor housing, exclusion and other indicators of low status. Emerging evidence suggests that the same pattern may be true for resilient localities: high levels of social capital may help to explain why one poor neighbourhood has lower mortality than other equally deprived areas, but these poorer, resilient communities still tend to have higher mortality than affluent areas.
3. Access to health-related services

Access to primary and community healthcare
Improving access to primary care is essential for identifying risk factors and untreated disease. Compared to 2004, there is less of an east-west divide in the number of GPs per head of weighted population, with improvement particularly in inner-east London. However, there are still fewer GPs in the northeast of London where health need is relatively high.74

Number of GPs per 100,000 population, by PCT, September 2007

Source: London Health Observatory

A report by the BME Health Forum on GP access75 suggested that communication problems caused by language and cultural barriers impede the doctor-patient relationship, and that interpreting services are not widely available. GP practices need to become more aware and flexible in responding to different patient needs in order to provide an equitable service and that the consequences of not doing so is poorer quality of services and poor health outcomes.

Health visitor numbers vary enormously across London. Latest survey figures reveal that in Lambeth there are 11 health visitors per 10,000 children under five, while in Southwark there are 49 health visitors per 10,000 children. Of the ten PCTs in England with the fewest health visitors per head of children under five, seven are in London. In recent years there has been a shift away from a universal service towards a system targeted at parents identified as ‘at risk’ and where health visitors lead teams of other practitioners, such as nursery nurses and community nurses.76

Immunisation
London has a lower proportion of immunised children than anywhere else in the country, and is also far behind other world cities such as New York and Paris. Just 52 per cent of the capital’s children are fully immunised against measles, mumps and rubella (MMR), compared to 74 per cent nationally.77 London’s immunisation levels are low enough for the Health Protection Agency (HPA) to believe that a serious outbreak of a disease such as measles is increasingly
likely. Children from low-income families are less likely to be fully immunised than other children, although the relationship between deprivation and immunisation take-up is not a simple one. London’s high population mobility is cited as a reason for low take-up.

**Prescription charges**

A CAB survey from 2001 found that 50 per cent of clients reported difficulties in affording prescription charges and 28 per cent had failed to get all or part of a prescription dispensed during the previous year because of the cost.78 The evidence suggested that, for some people, prescription charges could be damaging to their health. For example, people with asthma were choosing to take some, rather than all, of their prescribed items; others were restricting dosages of medication below the level prescribed by their GP. Only five per cent of respondents who had paid for prescriptions in the past year had purchased pre-payment prescription certificates. Of those who had difficulty in affording prescription charges, 27 per cent said they had not bought a pre-payment prescription certificate because they could not afford it.

**Older people**

Older people are exposed to a number of inequalities relating to ill health, poverty and social exclusion, barriers to joining the labour market, responsibilities as carers, and ageism. Older people also experience inequalities in services. For example, with regard to healthcare, although older people have benefited from recent investment, several key areas have been neglected – including chiropody, dementia care, mental health services, and palliative care. Health services are rarely designed to meet the complex health needs of older people suffering from multiple physical and/or mental health problems.79 Older women have lower levels of awareness of breast cancer symptoms and screening and uptake of the London NHS screening programme among older women in north and west London is particularly low.80

**Uptake by women age 53-64 by London screening programme, March 2006**

Recent research by Age Concern England (ACE) concluded that ‘inbuilt discriminatory regulations, unfair practices and ageist attitudes’ mean that older people are often denied life saving treatment and have poorer access to cancer tests and other health, social care and mental health services, with 23 per cent of older people having experienced some form of
discrimination. Other research points to discrimination towards Black, Asian and minority ethnic elders as a major concern, while GLADD reports that ‘Older lesbians, gay men and bisexuals are five times less likely to access services for older people than is the case in the general older population, because they fear discrimination, homophobia and ignorance and that they will have to hide their sexuality.’

People with mental health problems
The Disability Rights Commission conducted a formal investigation into the health inequalities experienced by people with mental health problems or learning disabilities. This found that many people reported problems with gaining access to services, with staff attitudes, and with getting the necessary treatment and support. An analysis of more than eight million primary care patient records found that a person with a mental health condition or a learning disability was at greater risk of succumbing early to a medical condition than another person with the same condition, who did not have mental health problems or learning difficulties, suggesting that this group has poor access to timely and appropriate healthcare.

People with mental illness from BME communities in London face a number of barriers and challenges in accessing mental health services. For example, Black people are less likely to be offered talking therapies than the White population. BME groups are those most commonly cited as finding mental health services difficult to access because of either language problems or cultural issues. At the other end of the spectrum, among all minority ethnic groups there are greater proportions experiencing coercive care pathways (such as via the police and courts) into inpatient services compared to the White British group. Such coercive care-pathways are associated with the use of compulsory detention.

Research by Thomas Coram found that between one fifth and a quarter of children and young people with a diagnosable mental disorder had not been seen by CAMHS 18 months and three years on. Furthermore, between 40 and 50 per cent of these children or young people had not been seen by any other services for these specific needs. Barriers identified by parents to accessing support for their children include: the fear of being blamed, not knowing where to go, and concerns that the support would make no difference.

Homeless people
Hostel clients have a history of rough sleeping and are highly likely to have medical conditions that need treatment - yet a large number of them do not get the appropriate treatment. Difficulties in accessing healthcare services are common. Many conditions are treated by a hospital in the first instance rather than a GP. Of particular concern is the number of occasions on which clients come into contact with healthcare services (typically hospital) and come away with no ongoing treatment plan. A report by St Mungo’s on their clients’ health and experiences with medical services found:
- One in three interviewees had a condition for which they were not receiving treatment at all.
- Half of clients had experienced a negative contact with A&E or hospital.
- A third reported experiencing difficulties accessing health services.
- 18% of clients did not use a GP at all and 41% used a GP ‘as necessary’.
- Over half of ‘untreated’ clients had a condition, which could potentially escalate into a situation requiring urgent medical attention.
- In 60% of cases the client sought treatment at either A&E or hospital rather than from a GP, corroborating findings from the ambulance service that conditions are left to become acute before healthcare is sought.
Barriers to obtaining appropriate health care for rough sleepers include strong financial disincentives for general practitioners to register rough sleepers; lack of integration between mainstream primary care services and other local services (e.g. housing, social services, criminal justice system, and the voluntary sector); and rough sleepers themselves not prioritising their health.90

A study by Broadway of rough sleepers contacted by outreach teams in London in 2007/08 found that almost half had support needs related to alcohol, compared to 41 per cent for drugs and 35 per cent for mental health problems.

Support needs of rough sleepers contacted by outreach teams, 2007/08
(Source: Broadway)

<table>
<thead>
<tr>
<th>Support needs</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>46%</td>
</tr>
<tr>
<td>Drugs</td>
<td>41%</td>
</tr>
<tr>
<td>Mental health</td>
<td>35%</td>
</tr>
<tr>
<td>No alcohol, drugs or mental health needs</td>
<td>4%</td>
</tr>
</tbody>
</table>

Refugees and asylum seekers
Access to appropriate health and social care provision is a major issue facing refugees in the UK. While the issues that refugees face may be similar to those of many other marginalised, disadvantaged and socially excluded people living in London, several additional factors related to the experience of exile need to be taken into account.91 Refugees often find registering with GPs, particularly on a permanent basis, problematic. Reasons why they may not be registered include:

- shortages of GPs and full patient lists can mean that people are turned away or put on a waiting list, with refugees more likely to experience this
- interpretation typically doubles the amount of time needed for a consultation, and GP’s time is limited, making it more likely for a GP to refuse to register a refugee
- high mobility leading to periods of time during transition when refugees are not registered
- lack of understanding of how to register and access services (by refugees)
- lack of understanding of refugee issues and rights (by front-line staff)
- communication difficulties due to inadequate or unavailable interpretation and advocacy services
- lack of information in appropriate languages.

Informal barriers to access can include lack of self confidence and difficulties with social interaction, different expectations and perceptions regarding the roles of patient and health professional, lack of knowledge about health and social care system structures, health professionals' lack of knowledge about health issues facing refugees and discrimination.92
In a survey of 140 asylum seekers in one London borough, it was reported that 95 per cent had been refused GP registration at least once in the preceding 12 months. PCT officers further noted that poor access to GP services was reflected in high use of hospitals’ A & E facilities by asylum seekers in London.\textsuperscript{93} Currently, refused asylum seekers awaiting departure from the UK have significant restrictions on access to health care, whereby they are not automatically entitled to secondary health care.\textsuperscript{94}

Medecins Du Monde’s Project London found that, of the 39 pregnant women who came to the clinic, 28 had tried to get access to care but had experienced difficulties – either at a hospital or in a general practice.\textsuperscript{95} Of these, nearly half had been unable to register with a GP to access primary care, seven had encountered difficulties accessing antenatal care at a hospital, connected to the introduction of charges for maternity services, and four had experienced difficulties in trying to access a termination of pregnancy. Many had been unable to register with a GP because they did not have the documents to prove their address and/or identity. Administrative barriers, such as the need for particular documents to prove address and/or identity, have previously been recognised as a potential barrier to healthcare.

\textbf{Gypsies & travellers}

Research undertaken by Fordhams found that a third of participants on unauthorised sites were not registered with a GP.\textsuperscript{96} Among those not registered, half said they had been refused registration. Almost half said they had used a hospital’s A&E department for health treatment because they could not see a GP. Health visits to sites were widely seen as effective. Some participants suggested booking appointments could be made easier, for example allowing travellers to get appointments on arrival at surgeries rather than having to phone up.

\textbf{Lesbian and bisexual women, and trans people}

A resurvey of lesbian and bisexual women’s health needs (over 6,000 respondents) revealed that:

- Half of lesbian and bisexual women have had negative experiences in the health sector in the last year, despite the fact that it is now unlawful to discriminate against lesbian and bisexual women.
- Fifteen per cent of lesbian and bisexual women over the age of 25 have never had a cervical smear test, compared to seven per cent of women in general.
- One in five who have not had a test have been told they are not at risk.
- One in fifty have been refused a test.
- One in twelve lesbian and bisexual women aged between 50 and 79 have been diagnosed with breast cancer, compared to one in twenty women in general.\textsuperscript{97}

Access to health care for trans people is difficult, with 30 per cent or more facing difficulties getting information from their GP, obtaining funding for GRS, being made to wait for accessing health services or surgery, and accessing ordinary non-trans related health care. One in seven trans people feel that they are treated adversely by health care professionals because of their trans status.\textsuperscript{98}
4. Evidence on people – lifestyle factors

Obesity
The Foresight experts estimate that, based on current trends, levels of obesity and overweight will rise to 60 per cent in men, 50 per cent in women, and 25 per cent in children by 2050, with a further 35 per cent of adults and nearly 40 per cent of children overweight. The report noted that interventions based on improved nutrition and increased physical activity can be effective for individuals but shifting the population distribution of obesity will require policy-based interventions that target elements of the obesogenic environment as well.99 Research from the US has suggested that prevention of obesity at population level must consider the environmental factors that make everyone overweight, such as car reliance versus public transport, the built environment and its effects on physical activity, and the local food environment.100

Severely obese individuals are likely to die on average 11 years than those with a healthy weight, comparable to, and in some cases worse than, the reduction in life expectancy from smoking.101 Being overweight or obese increases the risk of a wide range of chronic diseases, principally type 2 diabetes, hypertension, cardiovascular disease including stroke, as well as cancer. The most recent Health Survey for England shows that one in four adults is now obese. Current trends suggest that around eight per cent of obese 1-2 year old children will be obese when they become adults, while 80 per cent of children who are obese at age 10-14 will become obese adults, particularly if one of their parents is also obese.

The London Boost of the Health Survey for England (HSE) found that:

- The prevalence of obesity among adults in London was 17%. This compared with around a third being classed as “Overweight but not Obese” and around half being classed as “Not Overweight”.

- The prevalence of obesity was higher among females (18%) and those aged over 55 years (26%). The Black or Black British ethnic groups had the highest prevalence of obesity (22%) out of all the ethnic groups.

- The prevalence of obesity was higher in Outer London (18%) compared with Inner London (14%), though there was little difference between Spearhead and Non-spearhead areas.

- Each socio-economic group had similar levels of obesity, however, those in Routine and Manual occupations living in Spearhead areas had the highest prevalence (24%).

- There was little variation of prevalence of obesity by deprivation quintile.

There are significant disparities within London. The map below is based on 2006/07 Quality and Outcomes Framework data published by Dr Foster Research. It shows the proportion of people on GP practice registers with a BMI of 30 or more, by London PCT. The PCTs with the highest prevalence of obesity were Bexley (9.3 per cent) and Barking and Dagenham (9.1 per cent), while Camden (3.9 per cent) had the lowest prevalence. These figures are considerably lower than those recorded by the HSE because they only reflect the proportion of GP patients aged 16 and over who have been registered as having a BMI of 30 or more within the last 15 months.
The HSE found that the proportion of men and women who were obese was lower among those in managerial and professional households, and in intermediate households, than in the other three socio-economic status groups.\textsuperscript{102, 103} There is also a strong association between severe mental illness and obesity, partly due to the weight gaining impact of antipsychotic drugs and partly due to the loss of motivation, normal social activity and poor diet associated with severe mental illness.\textsuperscript{104} The relationship between obesity and income inequality, coupled with the evidence of an increasing tendency for obesity rates to be highest among the poor, suggests that psychosocial factors related to social position or relative income may be more important than absolute living standards.\textsuperscript{105}

Findings for London from the National Child Measurement programme included:\textsuperscript{106}

- Eleven percent of children in reception year (ages 4-5) and 22% in year 6 (ages 10-11) were at risk of obesity in London in 2007/8. This was the highest prevalence of all the English regions for both year groups and significantly higher than the English average for both.

- Boys are at greater risk of obesity than girls in both reception year and year 6. By the time children reach year 6 obesity has become a much more significant problem than overweight - with 21 out of 31 PCTs having a prevalence of obesity that is significantly higher than England.

- There is significant inequality in the risk of obesity between London’s local authorities. The highest risk was among children from the poorest authorities with a range of 6% to 14% for children in reception year, and from 12% to 26% in year 6.

- The prevalence of children at risk of obesity was higher in more deprived areas. This relationship was strongest when the location of the child’s home was considered but was also apparent by school location.
Children from Black ethnic minority groups in both year groups were at significantly higher risk of obesity than other ethnic groups in both year groups. Children in the White ethnic groups had significantly lower risk with the exception of Irish children in year 6.

A strong relationship exists between deprivation (as measured by the 2007 IMD score) and obesity prevalence in children in both years; in Year 6 the prevalence of obese children is 65% higher in the most deprived rank compared with the least deprived; in Reception, the difference is 64%.

Educational attainment is also a factor. The children of mothers with the equivalent of at least five GCSE grades A-C are less likely to be overweight or obese than those whose mother had lower qualifications or none.

The map below shows prevalence of childhood obesity among reception age children across all of the London boroughs, illustrating the generally higher prevalence of childhood obesity in inner and east London boroughs.

Physical activity

Regular physical activity plays a major role in combating obesity and reduces the overall risk of dying prematurely from any cause. It also reduces the risk of developing diabetes, high blood pressure, colon and breast cancer, and reduces feelings of depression and anxiety. Studies have shown that the likelihood of death is lowest among those who are most active and the greatest benefits from increasing physical activity come to those who are least active to start with.

The London Boost of the HSE found that Over half (58%) of Londoners did not participate in any sport or exercise in the previous week, with just over a quarter (27%) participating in up to three hours and 15% participating in more than three hours. Non-participation was higher in females (61%), in the 55+ age group (79%) and among those in Routine and Manual occupations (50%). The London boost also found that two-thirds of the Asian or Asian British groups did not participate in any sports or exercise in the previous week, the highest of any
ethnic groups. The non-participation rate was lowest in the White groups (56%). Non-participation was higher in people living in the most deprived areas (66%).

Results from the Active People 2 survey revealed wide disparities within London in participation rates for physical activity, with the lowest rates tending to be in the most deprived boroughs to the east of London. Participation rates range from 27% in Kensington and Chelsea, to 13% in Harrow.

Levels of participation in sport and physical activity among children and young people in London are slightly lower than national averages. The 2006 HSE asked young people about their participation in sport and physical activity in the past week. It found that fewer young Londoners have ‘high’ levels of physical activity, 66 per cent of boys and 52 per cent of girls, compared to 70 and 59 percent nationally. A greater proportion of young Londoners had a ‘low’ level of activity - 16 per cent of boys and 25 per cent of girls compared to 15 and 22 per cent nationally.

People with low socioeconomic status are less likely to exercise than are those with high socioeconomic status, partly because the environments in which they live are less conducive to it. People from the most disadvantaged groups are more likely to be subject to an environment which discourages walking and cycling, perceiving their neighbourhoods to be busier with traffic, less attractive, and less supportive of walking. Around 44 per cent of the BME population in England falls within the most deprived fifth of society. Physical inactivity is a particular problem among some ethnic minority women, with only 11 per cent of Bangladeshi and 14 per cent of Pakistani women in England and Wales meeting the recommended physical activity levels, compared to 28 per cent of women in the general population.

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ii ‘High’ level of activity was defined as 60 minutes plus on all 7 days of the week, ‘low’ levels of activity was less than 30 minutes activity per day in the previous week.
Results from a new YouGov survey (total sample size was 553 parents with a household income of less than £15,000) revealed that just under half (49 per cent) of families said they could not afford to pay for their children to take part in sports activities during the summer and 42 per cent said they could not afford to take their children swimming.\textsuperscript{113} A 10 year study by Manchester Metropolitan University Institute for Sport & Physical Activity has found that children who play sports are up to eight times more likely to achieve good examination grades than those with a sedentary lifestyle.\textsuperscript{114}

Low physical activity levels are found among those who perceive their neighbourhood to be unsafe due to crime. Concern about personal safety is a major reason for low levels of walking in disadvantaged neighbourhoods. In one study, European residents in neighbourhoods with high levels of social disorder were about 50% less likely to be physically active and about 50% more likely to be overweight or obese.\textsuperscript{115}

Cycling is an easy and low-impact activity which can significantly improve individual fitness and reduce the risk of a range of health problems, notably heart disease and cancer. One study found that people who cycle to work experienced a 39 per cent lower rate of all-cause mortality compared to those who did not – even after adjustment for other risk factors, including leisure time physical activity. As well as improving physical health, cycling has a positive affect on emotional health – improving levels of well-being, self-confidence and tolerance to stress while reducing tiredness, difficulties with sleep and a range of medical symptoms.\textsuperscript{116} Across all age groups, men make more cycle trips than women.\textsuperscript{117} This is especially apparent in the 25-44 age group, where men made nearly twice as many trips as women. However, in all age groups except children, women make more walk trips than men.

- **Cycle trips by age group**
  - (2006/07) Source: LTDS
  - 2006/07 Household Survey

- **Walking trips by age group**
  - (2006/07)

A recent poll suggests that the perceived effect of cycling on appearance, together with a lack of confidence in cycling on the road, is behind this gender imbalance. Two thirds (64 per cent) of women said they never cycle and just two per cent cycled every day.\textsuperscript{118} 53 per cent of women said that safety is an issue and 42 per cent said they lacked the confidence and skills to cycle on the road. When asked what would make them feel more reassured about cycling on the roads, a quarter (26 per cent) said they would consider cycling if there were shower facilities to freshen up at work and 16 per cent said they would be more likely to cycle if they had received proper cycle training to equip them with skills and confidence.
Diet
Poor diet is linked to obesity. It is an important risk factor for CHD, some cancers and other conditions such as diabetes, and significantly affects life expectancy. Eating at least five portions of fruit and vegetables a day is one the most effective ways to reduce the risk of cancer. The London Boost of the HSE found that more than half of Londoners (51%) consumed their recommended daily amount of five or more portions of fruit and vegetables. The percentage of people consuming five or more portions of fruit and vegetables was higher in females (52%), in the 35-54 age group (53%), and in the Asian and Asian British ethnic groups (63%). The 2004 Health Survey for England, which focused on ethnic minorities, found that nationally those in Indian, Pakistani and Bangladeshi ethnic groups were amongst the groups that consumed the most fruit and vegetables.

Camden had the highest percentage of adults that consumed more than five portions of fruit and vegetables on the previous day at 61%. Bexley had the lowest percentage at 38%. Consumption of fruit and vegetables was found to be highest in those in Managerial and Professional occupations (54%) and lower in the Routine and Manual occupational groups (46%). Consumption was lower among those areas classified as more deprived. Both the 2006 and 2007 core surveys showed that nationally consumption of fruit and vegetables was lowest among households with lower incomes.

The 2006 Health Survey for England (HSE) found that 30 per cent of boys and 31 per cent of girls in London reported eating five or more portions of fruit or vegetables a day. This was the highest level of fruit and vegetable consumption of any region, with other regions ranging from 11-22 per cent for boys and 18-23 per cent for girls. This is partly due to London’s ethnic diversity – previous research shows that adults and children in minority ethnic groups are more likely to consume fruit and vegetables than the general population.

A study by the University of Liverpool psychologists has shown that obese and overweight children increase their food intake by more than 100% after watching food advertisements on television. It was also found that weight dictated food preference during the experiment. The obese group consistently chose the highest fat product – chocolate – whereas the overweight children chose jelly sweets which have a lower fat content, as well as chocolate.

While social and economic conditions result in a social gradient in diet quality that contributes to health inequalities, a recent study of more than 3,500 people, published by the Food Standards Agency, found that there was no direct link between income and dietary patterns, access to food or cooking skills. People on low incomes were generally eating a diet of similarly poor quality to the rest of the population, with too little fruit and oily fish, too few vegetables and too much saturated fat and sugar. Friel et al. carried out a study to determine the weekly financial cost of a diet as recommended by national policy relative to the financial capacity of different household types. The research found that the types of retail outlets in which low-income groups tend to shop do not carry many own brand items, and are less likely to stock healthy options, but when they do, they are more expensive than in other outlets.

Food prices rose more than CPI as a whole between January 2004 and July 2008. In 2003/04 ‘Broad Food’ took 19 per cent of the fixed basket of goods and services, compared to 21 per cent in August 2008. People in the lowest income quintile were spending more on food in 2007 than in 2004. The inflation rate for the lowest quintile has tended to be higher during periods of high inflation and is now considerably higher (although inflation is set to decrease and may fall below the Government target of 2 per cent during 2009).
Smoking
Smoking is widely acknowledged to be one of England’s biggest causes of premature death, preventable illness and health inequalities. The 2008 progress report\textsuperscript{125} notes that there has been a general decline in smoking prevalence but no narrowing of the gap. Risk factors associated with smoking include: being in a lower social class, having no access to a car, living in rented housing and/or crowded accommodation, being unemployed, being a lone parent/divorced/separated, having a history of mental illness, current tranquilliser use and being a heavy drinker. Evidence also shows that poorer smokers take in more nicotine, and consequently more of the toxic emissions, from each cigarette smoked — either by smoking cigarettes with a higher yield, by leaving a shorter stub, or by drawing harder on the cigarette.\textsuperscript{126}

In the 2007 Health Survey for England, almost a quarter of men in London aged 16 and over were current cigarette smokers. This was the same as the national average for England. The percentage of women in London who smoked (17 per cent) was however lower than the national figure of 21 per cent. Of all the English regions, London had the highest proportion of people who had never regularly smoked cigarettes. Among the Asian or Asian British ethnic groups, the proportion classified as never smoking was 80 per cent. In the Black / Black British ethnic groups this proportion was 73 per cent, while in the White ethnic group, only 46 per cent of Londoners were never smokers. The latter ethnic group were also more likely to be current smokers. A quarter of White Londoners (25 per cent) were current smokers compared with only 12 per cent of those classified as Asian / Asian British and 14 per cent of Black / Black British.\textsuperscript{127}
The London Boost of the HSE found that smoking prevalence was higher among those aged 16-34 (25%), those living in deprived areas (27%), and those in Routine and Manual occupations (30%). At PCT level, City & Hackney PCT had the highest prevalence of smoking at 32%. Ealing PCT had the lowest smoking prevalence at 13%. The prevalence of smoking among the White ethnic groups was higher in Spearhead areas (30%) and in Inner London (27.5%) compared with Outer London and Non-spearhead areas.

There are major gender differences in smoking prevalence rates within many ethnic groups. Prevalence is highest amongst Bangladeshi, Turkish and Irish men. In addition, 45-59 per cent of Turkish women and 39 per cent of Irish women smoke. Smoking among Pakistani and Bangladeshi men is strongly seen as socially acceptable and, among Bangladeshis in particular, contributes to group cohesion and identity.

Adult men of working age in social class V are three times as likely to die of lung cancer as men in social class I. Women in social class V are almost twice as likely to die of lung cancer as women in social class I. Inequalities in female smoking are exacerbated during pregnancy, as a lower proportion of more deprived smokers are likely to quit before or during pregnancy. The smoking quit rate decreases with increasing ward deprivation level and 1 in 4 Black smokers quit smoking compared to 1 in 3 White British smokers (after controlling for confounding effect of age, gender, addiction, and ward deprivation level).

A study carried out amongst gay and bisexual men for the NHS Smoking Helpline has found that 41 per cent are smokers, rising to 60 per cent for 25 to 34 year olds, well in excess of the national average of 25 per cent. Two thirds of lesbian and bisexual women have smoked compared to half of women in general.
Smoking is associated with all types of mental health problems. Those living with a mental health problem living in the community are 63 per cent more likely to smoke than those with good mental health.132

Alcohol and drug misuse
Alcohol and drug misuse pose significant threats to health, particularly among young people. Alcohol dependence and illicit drug are closely associated with markers of social and economic disadvantage and are important factors in worsening health inequalities.133

Between 15,000 and 22,000 premature deaths in England and Wales each year are associated with alcohol misuse, with liver disease accounting for over 4,500 of these (a 90 per cent increase over the past decade). Nearly 5,000 cancer deaths per annum are attributed to alcohol. Heavy drinking also carries a severe risk of cardiovascular disease, with 1,200 deaths each year due to haemorrhagic stroke. Ten per cent of all deaths due to hypertension are associated with alcohol. In addition, 15-25 per cent of suicides and 65 per cent of suicide attempts are related to alcohol intoxication, and between 20-30 per cent of all accidents and 1,700 associated deaths per year are linked to alcohol.134

Around two-thirds of deaths in London related to alcohol are in men, with half of those in the 45 – 64 age group. Within London, Hammersmith & Fulham, Hounslow, Newham, Camden and Lewisham had the highest mortality rates from alcohol-related causes in 2002-2004. Sutton, Harrow, Bromley, Havering, Enfield, Redbridge and Barnet all had significantly lower rates of deaths associated with alcohol. Prevalence rates of binge drinking by London PCT range from 21 per cent in Wandsworth to nine per cent in Newham.135 136

The London Boost of the HSE found that 44 per cent of London residents consumed no units of alcohol in the previous week. However nearly one in five residents engaged in binge drinking in the previous week. There were higher levels of binge drinking in males (24%), those aged 16-34 (25%), Managerial and Professional occupations (25%), and the White ethnic groups.
(26%). Southwark had the highest percentage of binge drinkers (28%), while Newham had the highest percentage of those that consumed no alcohol in the previous week (72%). In Inner London and Spearhead areas the prevalence of binge drinking was higher than average. Binge drinking was also most prevalent in areas classified as the least deprived. The 2006 core HSE did not present analysis by deprivation, but had shown that nationally the prevalence of binge drinking was higher in households with higher income. In 2007 men in all minority ethnic groups had lower rates of hazardous drinking than White men. Over a third of White men were hazardous drinkers, compared with 19 per cent of Black men and 12 per cent of South Asian men.137

While less than one per cent of the general UK household population report being moderately or severely dependent on alcohol, this figure rises to two per cent for people with any neurotic disorder, five per cent among those with a phobia and six per cent in those with two or more neurotic disorders. People with severe and enduring mental illnesses such as schizophrenia, are at least three times as likely to be alcohol dependant as the general population.138

There is a direct link between drugs and deprivation; vulnerable and at-risk groups have been identified as children whose parents misuse drugs, young offenders, looked-after children, young homeless, young people excluded or truanting from school and sex workers.139 140 In 2007 drug use was most common in young men aged between 16 and 34 (28%) and young women aged between 16 and 24 (22%). The prevalence of drug dependence varied with ethnicity and income. In men, Black men were most likely and South Asian men least likely to report symptoms of dependence; the same pattern was seen for women. The prevalence of drug dependence was greater in men and women from lower income groups. There were no significant differences between regions.141

The lives of young refugees and asylum seekers, especially unaccompanied minors, are frequently characterised by social and economic exclusion that have been shown to be risk factors for problematic drug use amongst young people.142 According to Department of Health statistics, there was an eight per cent increase in hospital admissions for mental health problems caused by the use of cannabis between 1996/97 and 2005/06.143 The following map shows that prevalence of drug misuse is highest in Inner London, with rates more than twice as high as those in some Outer London boroughs.

**Prevalence of drug misuse per 1,000 population, by Local Authority, 2004/05**

*Source: London Health Observatory*
There is strong evidence of a mutually reinforcing relationship between substance misuse and homelessness. An experience of homelessness increases the risk of substance misuse among previously abstinent people, while entering into substance misuse also increases the risk that someone will become homeless. There is evidence that when someone is homeless and involved in substance misuse each problem compounds the other. A 2004 study by St Mungos of 1,534 homeless people found that 37 per cent reported having alcohol problems and 36 per cent a drug problem. Two thirds of the 389 homeless Londoners interviewed by Crisis in 2002 cited drug or alcohol use as the reason for first becoming homeless. The table below shows the increasing levels of substance misuse and mental health problems among homeless people in London who were contacted by CHAIN outreach teams.

**Recorded support needs of homeless people, London, 2004/05 and 2003**
(Source: CHAIN outreach teams)

<table>
<thead>
<tr>
<th>Area of Support Need</th>
<th>% with need 2004/05</th>
<th>% with need 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>32</td>
<td>29</td>
</tr>
<tr>
<td>Drugs</td>
<td>36</td>
<td>34</td>
</tr>
<tr>
<td>Mental health</td>
<td>26</td>
<td>22</td>
</tr>
<tr>
<td>None of the above</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Drugs and alcohol service providers report particular needs in relation to women. A high percentage of women using domestic violence support services report problematic alcohol and substance misuse as both cause and consequence of incidents. 100 per cent of women interviewed for a recent report on abuse through prostitution reported suffering from serious alcohol problems, while 95 per cent of those involved in street-based prostitution are believed to use heroin or crack.

**Teenage pregnancy**

The Acheson inquiry report noted that babies born to teenage mothers are likely to have a worse start in life. The Social Exclusion report on teenage pregnancy described a number of risk factors including poverty, being in care, being a daughter of a teenage mother, educational problems, non-participation in post-16 education, work or training, sexual abuse, mental health problems and crime. Other risk groups include homeless young people and members of some ethnic minority groups. Teenage parents have poorer ante-natal health, lower birth-weight babies and higher mortality rates among their infants.

Charities and health workers have expressed concern about a lack of awareness among child refugees about contraception and sexual health issues. There are high levels of teenage pregnancy and sexual health problems amongst some refugee groups. Sexual health education is unlikely to have taken place in the child’s home country.

Recent statistics show that the situation has not improved significantly since 2005. Teenage pregnancy conception rates in some London boroughs remain the highest in the country and success in reducing them is mixed. In 2007 there were around 5,700 conceptions to young London women under the age of 18 years. At 46 per 1,000 female population aged 15-17, London’s rate is higher than the England average of 42 per 1,000. However, the overall London figure hides the wide variation between and within London boroughs.
Nationally, the under-18 years conception rate by deprivation quintile shows a clear trend of increasing rate with increasing deprivation. The most deprived quintile has a rate more than double that of the least deprived quintile. In addition, girls and young women from social class V are at approximately ten times the risk of becoming teenage mothers as girls and young women from social class I. As shown in the following map the distribution of teenage pregnancy conceptions tends to be higher in inner London boroughs. Across London, areas of deprivation correlate to higher rates of teenage pregnancies at both borough and ward level, making the performance of London more complex than at first glance.
5. Evidence on people – life chances for health

**Income inequality**
The Gini Coefficient – a commonly used measure of income inequality – increased in 2007-08 to its highest level since 1961. This followed an increase in inequality in the previous two years whereby the incomes of the poorest fifth of households fell by 2.6 per cent, after inflation, compared to an increase of nearly 3.3 per cent for the richest fifth. The Institute for Fiscal Studies (IFS) has suggested that possible explanations for the higher level of inequality that has persisted since the late 1980s include: an increase in the gap between wages for skilled and unskilled workers, a fall in the rate of male participation in the labour market, often in households where there is no other earner, and an increase in female participation among those with working partners, leading to increased polarisation between two-earner and zero-earner households.

The table below compares the distribution of income in London relative to UK as a whole. It shows that London has more people in both the highest and lowest income groups – meaning income inequality in London is greater than in other parts of the country. The 2007/08 Family Resources Survey found that 11 per cent of London households had a total weekly household income of less than £200 while 28 per cent had a total weekly household income of £1,000 or more.

<table>
<thead>
<tr>
<th>Quintile distribution of income for individuals (whole population) after housing costs</th>
<th>Bottom Quintile</th>
<th>Second Quintile</th>
<th>Middle Quintile</th>
<th>Fourth Quintile</th>
<th>Top Quintile</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>25</td>
<td>15</td>
<td>15</td>
<td>16</td>
<td>28</td>
</tr>
<tr>
<td>UK</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: UK figures are for the year 2006/07 only and are not three-year averages.

**Household Median Income by London borough (Equivalised), 2007**

Source: PayCheck 2007, CACI
The average equivalised\textsuperscript{iii} household income for London in 2007 was £37,257. Barking & Dagenham had the lowest average household income in London and the City of London had the highest (see map above). Overall, 16 per cent of households in London had equivalised incomes below £15,000; Richmond upon Thames only had nine per cent of such households, the lowest percentage apart from the City. Overall, 15 per cent of households in London had equivalised incomes above £60,000 a year. A quarter of households in Richmond had an income of over £60,000 a year compared to only seven per cent in Barking & Dagenham.\textsuperscript{158}

Income inequality is an important factor in health. Richard Wilkinson has estimated between one half and three-quarters of the differences in average life expectancy from one developed country to another may be attributed solely to differences in income distribution.\textsuperscript{159} And evidence from the USA has revealed that inequalities in the state-wide distribution of income are associated with self-rated fair or poor health, even after individual income and other risk factors are accounted for.\textsuperscript{160} In counties where disparities in earnings are relatively narrow (and where there is a strong sense of social solidarity), for example in Japan and Sweden, the social gradient of health is less acute and life expectancy longer than in countries that are equally wealthy such as the USA.\textsuperscript{161} The following chart shows that disease prevalence is also reported to be much higher among those at the bottom of the income ladder compared with those at the top.\textsuperscript{162}

\textbf{Self reported health, by income (percent distribution) in England, ages 55–64 years}

Source: Banks, J, Marmot M, et al., 2006

Psychosocial factors related to relative income, or social position, may be as important as absolute living standards in explaining poor health outcomes. For example, there is a well-evidenced relationship between obesity and income inequality, with an increasing tendency for obesity rates to be highest among poor people.\textsuperscript{163} There is also a tendency for social resilience factors, such as voter turnout in elections, to decline when income differences are larger.\textsuperscript{164}

At the London level, data from the 2002 London Household Survey showed that over a third of those on incomes of less than £10,400 suffered from limiting long-term illness, compared to just over five per cent for incomes above £41,600.

\textsuperscript{iii} Equivalised household income is a measure that adjusts the total annual income of the household to take account of the number of people in the household.
Total household income by long-term illness, health problem or disability which, limits daily activities or the work they can do, including problems due to old age

Preliminary work by the GLA suggests that, while some health and social outcomes in London, such as infant mortality and physical activity, are correlated with average income, others, such as young people ‘not in education, employment, or training’ (NEET), drug misuse, violent offences and lung cancer may be more closely associated with income inequality.

<table>
<thead>
<tr>
<th></th>
<th>Median income (Coefficient)</th>
<th>Income inequality (Coefficient)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical activity</td>
<td>0.84</td>
<td>0.20</td>
</tr>
<tr>
<td>Infant mortality</td>
<td>-0.55</td>
<td>0.07</td>
</tr>
<tr>
<td>Assault on young people</td>
<td>-0.60</td>
<td>0.34</td>
</tr>
<tr>
<td>NEET</td>
<td>-0.13</td>
<td>0.65</td>
</tr>
<tr>
<td>Unemployment</td>
<td>-0.39</td>
<td>0.77</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>-0.33</td>
<td>0.66</td>
</tr>
<tr>
<td>Violent offences</td>
<td>-0.23</td>
<td>0.68</td>
</tr>
<tr>
<td>Drug misuse</td>
<td>0.17</td>
<td>0.66</td>
</tr>
<tr>
<td>Alcohol related admissions</td>
<td>0.07</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Cash benefits such as Income Support (IS) play the largest part in reducing income inequality as they go predominantly to households with lower incomes. Cash benefits make up 61 per cent of gross income for the poorest fifth of households, 39 per cent for the next group, falling to two per cent for the top fifth of households.165

**Housing affordability**

Housing affordability problems are greatest, as would be expected, in boroughs with the highest house prices, particularly those in inner west London. However, boroughs with higher prices tend also to have higher average incomes, and if it is assumed that people in these boroughs may also look for housing in neighbouring boroughs their ability to buy is much greater. For example, two thirds of young working households in Kensington and Chelsea
cannot afford to buy within that borough, but this drops to just 36 per cent unable to buy when neighbouring boroughs are included.166

Affordability ratio of average house price to average annual gross full time pay, by local authority, 2004-2006

Poverty, deprivation and social exclusion
The latest HBAI figures (2007/08) show that there is very little evidence of change in the proportion of people of working age in poor households either for UK as a whole or for London. At 15 per cent, Inner London rates remain slightly higher than for Outer London and as high as any region on the before housing costs measure, but very much higher than for any region on the after housing costs measure (26 per cent compared to 21 per cent for the UK overall). Poverty among pensioners is higher than among people of working age but lower than for children before housing costs. Pensioners are the only group for whom, nationally, the risk of being in poverty is lower after taking account of housing costs. However, in Inner London, the after housing costs rate is still higher than on a before housing costs basis, whereas in Outer London, the figures follow the national trend.167

Children born into low-income households are more likely to experience health problems from birth and accumulate health risks as they grow older. They are more likely to experience problems with nutrition, which over the longer-term can lead to childhood obesity. Poverty is also associated with a range of poor health outcomes including anaemia, diabetes, asthma, cancer, neuro-developmental problems and poor dental. Many studies connect growing up in low-income households with poor mental health.168 Children born into poverty are more likely than their better off neighbours to smoke or have a parent that smokes, become a lone parent, have or father children younger, and die younger.

The rise in overall income inequality is associated with a rise in relative child poverty. The incidence of child poverty has fallen over the past decade, but remains among the highest in Europe.169 Children, particularly those in workless households or in larger families, remain the group most likely to live in low income. In 2007/08 the poverty rate for children in London, after housing costs, was 39 per cent, higher than for any other region and, showing little
change over the last decade. Poverty rates for children in Inner London, although falling in recent years, are still particularly high at 44 per cent, while the rates for Outer London have risen to 37 per cent. London child poverty rates have been consistently higher after housing costs than national figures since the measure began in 1994.

The characteristics of children living in poverty have been well described by Bradshaw, drawing on data from the Households Below Average Income (HBAI) series. These characteristics include: living in a lone parent household; living in a workless household; living in a family with three or more children; having a disabled adult in the household; and coming from a Pakistani/Bangladeshi family. London children with a very high risk of living in poverty include those from Pakistani and Bangladeshi groups (69 per cent), those from black ethnic groups (51 per cent), and those living in lone parent families (60 per cent). Children in families where nobody is working are the most likely to be in poverty. Seventy-nine per cent of children in workless lone parent families and 88 per cent of those living in workless couple families live in poverty. Research by the IPPR found that 29 per cent of households with one or more disabled children live in poverty, compared with 21 per cent of households without disabled children.

Child poverty rates vary widely in London between the different tenures. Children in social housing are roughly three times more likely to live in poverty than those in owner occupied homes, and poverty rates in privately rented housing are also very high once housing costs are taken into account. Housing costs make such a difference to poverty rates in part because they do not take account of housing benefit, which helps many low-income households pay their rent.

In August 2007, 28 per cent of all London’s children were living in families on key benefits. Just over three quarters of these lived in lone parent families. Around one quarter of all London’s children in benefits families were in families where the main adult claiming was sick or disabled. In Inner London, over one third (36 per cent) of all children live in families on key benefits and in Outer London, nearly 23 per cent. Within London, the percentage of children living in benefit families ranges from nine per cent in Richmond upon Thames up to 49 per cent in Tower
Hamlets. Of the ten authorities in Great Britain with the highest rates, seven are Inner London boroughs. The following map from the 2007 Indices of Deprivation shows the spatial distribution of income deprivation affecting children in London. The labour market position of parents is key to understanding London’s high child poverty rates. Those children most at risk of poverty are those who live in families where no adults are in paid work. Seventy-nine per cent of children in workless lone parent families and 88 per cent of those living in workless couple families live in poverty.

Income Deprivation Affecting Children Index 2007

Children from low-income households have lower educational aspirations than their better-off peers. Young people who have grown up in low income households are more likely to be unemployed, work in low or unskilled jobs and be poorly paid in adult life. Childhood poverty reduces earnings by between 15 and 28 per cent and reduces the probability of being in employment at age 34 by between 4 and 7 per cent.\(^{174}\) The relationship between employment and childhood poverty persists even when educational outcomes and background are controlled for. Children growing up in poverty are more likely to suffer from low self-esteem.\(^{175}\) In a recent DWP study of families found to be persistently poor,\(^ {176}\) almost one-half of children were living in bad housing, one in ten had been suspended or expelled from school, and children in these families were more likely to suffer material deprivation. Over one-quarter of lone-parent families were persistently poor, four times the proportion of persistently poor couple families. When controlling for other characteristics of the family, work status had the biggest influence on whether a family would experience persistent poverty.

However, moving into work does not necessarily mean moving out of poverty, especially for families with children. Over half of poor children now live in households in which an adult is working and the number of poor children in working households has not changed since 1997. Households containing couples with just one earner, or in which neither is working full-time, face a particularly high risk of in-work poverty.\(^ {177}\)
Fuel poverty

The government uses the full income definition of fuel poverty, which does not take into consideration housing costs. Under a residual income definition of fuel poverty, which does take housing costs into account, more households tend to be classified as fuel poor. In April 2008 there were an estimated 760,000 households in fuel poverty in London under the residual definition of fuel poverty compared to 318,00 under the government’s definition. The change in definition particularly affects those living in rented accommodation. Compared to White households, the difference in the levels of fuel poverty among Black, Asian and Minority Ethnic (BAME) are not statistically significant under the full income definition. However, under the equivalised definition, the incidence of fuel poverty in BAME households is approximately twice as high as in White households.

Fuel poverty in London by tenure and income definition, 2008

Source: GLA

Work and health

Employment is one of the most strongly evidenced determinants of health. A comprehensive review of more than 400 pieces of scientific evidence has concluded that being in work is good for your physical and mental health. The evidence review shows that:

- Being in the right type of work is good for your health. It improves self-esteem, quality of life and well-being.
- Being out of work is bad for both mind and body. Unemployment progressively damages health and results in more sickness, disability, mental illness, obesity, use of medication and medical services, decreased life expectancy and increased likelihood of suicide.
- When people return to work from unemployment their health improves. Returning to work from unemployment improves health by as much as unemployment damages it.
- If you have a health condition, being in work can help you get better. Remaining in or returning quickly to work is beneficial for people with both physical and mental health problems.
The positive effects of work do not just benefit the individual. Work also reduces poverty and health inequalities for the family and the community. Although aspects of work can pose a risk to health, far more people gain health benefits from work than are negatively affected by it. The benefits of work are also greater than the harmful effects of prolonged sickness absence. The positive effects apply to all age groups. Employment and socio-economic status are the main drivers of social gradients in physical and mental health and mortality.

The Whitehall studies\(^{181}\) have dispelled two myths. The first is that people in high status jobs have higher risks of heart disease. The second is that the gradient of health in industrialised societies is simply a matter of poor health for the disadvantaged and good health for everyone else.

Unemployment is a key measure of labour market disadvantage and is closely associated with poverty, poor educational attainment and poor health. It is associated with morbidity, injuries, poisoning, premature mortality (especially coronary heart disease), depression, anxiety, self-harm and suicide.\(^{182}\) The health effects of unemployment are linked to both its psychological consequences and the financial problems it brings.\(^{183}\) Findings from research undertaken by the Work Foundation on the health effects of unemployment include the following:\(^{184}\)

1. There is a positive association between mortality and unemployment for all age groups, with suicide increasing within a year of job loss.
2. Cardiovascular mortality accelerates after 2 or 3 years, continuing for the next 10–15 years.
3. There is an estimated 20 per cent excess risk of death for both men actively seeking work and their wives, with the possibility that this may be higher still in areas of higher unemployment.
4. During the anticipation and termination phase of factory closure, illness and health service use increase, the rate of hospital admissions doubles and conditions such as heart disease and higher blood pressure increase.
5. Factory closure studies indicate that job insecurity itself was found to bring higher levels of psychiatric morbidity among those anticipating the threat of redundancy compared to those anticipating no change.
6. Upon re-employment there appears to be a reversal of these effects. While the direction of causality is difficult to determine unemployment is considered to be a significant cause of psychological distress in itself.

Employment

The employment rate for BAME Londoners overall is 60 per cent, far lower than the rate of White Londoners (75 per cent). Londoners who were born outside the UK tend to have lower employment rates (66 per cent) than UK-born Londoners (73 per cent). Within the migrant population, the employment rate for BAME migrants is far lower (60 per cent) than the rate for White migrants (74 per cent).\(^{185}\) The employment rate is very low among BAME women (52 per cent), especially those of Bangladeshi/Pakistani origin (26 per cent). The huge employment penalty faced by Pakistani and Bangladeshi women has not changed much during the last 30 years.\(^{186}\) This is in stark contrast to Caribbean women have had higher employment rates than White women.

Just over half of all London’s mothers (54 per cent) are in employment compared with 70 per cent in the rest of the UK. The employment rate for lone parents living in London (42 per cent)
is well below the rate for lone parents outside London (58 per cent). For mothers in couples, whose rates are generally higher, there is a similar differential in rates (59 and 74 per cent). Employment rates are very low for the mothers in London with no qualifications (20 per cent), disabled mothers (34 per cent), BAME mothers (46 per cent) and those born outside the UK (44 per cent). London has a shortage of part-time jobs and the low employment rate of parents in London can almost entirely be accounted for by this shortage. Lack of access to affordable childcare keeps many people out of paid employment and training, especially among low-income families and those in deprived communities where provision is scarce. Over twice as many lone parents (17 per cent) cited childcare costs as the main reason they did not work compared to couple mothers (8 per cent).\textsuperscript{187}

**Employment rates by ethnicity and gender, Greater London, 2007**

<table>
<thead>
<tr>
<th>Persons working age</th>
<th>Emp. rate (%)</th>
<th>CI (+/-)</th>
<th>Males Emp. rate (%)</th>
<th>CI (+/-)</th>
<th>Females Emp. rate (%)</th>
<th>CI (+/-)</th>
<th>Gender gap in rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>White groups</td>
<td>69.8</td>
<td>±0.7</td>
<td>76.6</td>
<td>±0.9</td>
<td>62.7</td>
<td>±1.0</td>
<td>13.9</td>
</tr>
<tr>
<td>BAME groups</td>
<td>75.1</td>
<td>±1.3</td>
<td>80.6</td>
<td>±1.6</td>
<td>69.0</td>
<td>±1.9</td>
<td>11.6</td>
</tr>
<tr>
<td>- Indian</td>
<td>60.4</td>
<td>±1.9</td>
<td>68.9</td>
<td>±2.7</td>
<td>52.0</td>
<td>±2.7</td>
<td>16.9</td>
</tr>
<tr>
<td>- Pakistani/Bangladeshi</td>
<td>70.9</td>
<td>±4.3</td>
<td>73.8</td>
<td>±5.5</td>
<td>62.5</td>
<td>±5.5</td>
<td>15.8</td>
</tr>
<tr>
<td>- Black or Black British</td>
<td>45.0</td>
<td>±5.3</td>
<td>62.5</td>
<td>±7.4</td>
<td>25.9</td>
<td>±6.5</td>
<td>36.6</td>
</tr>
<tr>
<td>- Mixed ethnic group</td>
<td>62.7</td>
<td>±3.4</td>
<td>66.4</td>
<td>±5.2</td>
<td>59.7</td>
<td>±4.5</td>
<td>6.7</td>
</tr>
<tr>
<td>- Other ethnic group</td>
<td>60.9</td>
<td>±8.0</td>
<td>62.4</td>
<td>±12.4</td>
<td>59.6</td>
<td>±10.5</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Source: Annual Population Survey 2007  
Notes: CI=95% confidence intervals, in percentage points, attached to the employment rates.

Disabled people face a range of barriers in accessing the labour market, and the employment rate for working age disabled Londoners is very low (45 per cent) relative to the rate for non-disabled Londoners (74 per cent). Disabled people are also much less likely to enter employment once out than other non-employed people. Disabled Londoners who live in Inner London have very low employment rates (40 per cent relative to those in Outer London (49 per cent), where rates are closer to the UK average (50 per cent). Ten per cent (81,000) of disabled Londoners of working age have been diagnosed with mental illness.\textsuperscript{188} Of these, only 14,000 were in employment in 2001/02. Of all people coming onto incapacity benefits in London, 43 per cent have mental health problems as their main disability, and mental problems are a secondary factor for another 10 per cent or more.\textsuperscript{189} A 2001 survey found that only 37 per cent of employers said they would be likely to employ someone with mental health problems, compared to 62 per cent who said they would be likely to take on someone with a physical disability.\textsuperscript{190} 83 per cent of respondents to the Social Exclusion Unit’s consultation of mental health and social exclusion reported stigma and discrimination to be the main barrier to social exclusion.\textsuperscript{191}

Within London, employment rates range from 82 per cent in Bromley down to 57 per cent in Tower Hamlets. For London’s women, rates are even more polarised across boroughs from 76 per cent in Bromley down to 43 per cent in Tower Hamlets – a gap of 33 percentage points. The three boroughs with the lowest employment rates are Tower Hamlets (57 per cent), Newham (58 per cent) and Hackney (63 per cent). Tower Hamlets and Newham have the lowest employment rates in Great Britain and Hackney is ranked fourth bottom.
The labour market profile of Londoners by tenure is quite polarised. Well below half (43 per cent) of all London’s working age residents in social housing are in employment, relative to 79 per cent for owner occupiers and 73 per cent of those in the privately rented sector. Almost two thirds (62 per cent) of all those Londoners who are economically inactive due to sickness or disability live in social housing.\textsuperscript{192}

\textit{Unemployment}

Unemployment has been brought back into focus again with the recent downturn in the economy. For the period October – December 2008 London had an unemployment rate of 7.2 per cent, well above the national rate, but lower than the North East, North West and West Midlands regions. London is the only region with a higher unemployment rate for women than for men (7.9 per cent compared with 6.7 per cent) and there are nearly as many unemployed women as men in London (144,000 women and 150,000 men).\textsuperscript{193} Borough level unemployment figures are only produced once a year and relate to the previous year, so no results are yet available based on 2008 data. For 2007 rates average eight per cent across Inner London and six per cent in Outer London. Unemployment rates are particularly high for young people aged 16-24 (18 per cent); disabled people (13 per cent) and BAME Londoners (11 per cent). Within London, unemployment rates range from 12 per cent in Tower Hamlets down to four per cent in Richmond upon Thames. Tower Hamlets, Hackney and Newham have the highest unemployment rates of all local authorities across Great Britain.\textsuperscript{194}

The following figure shows the differential in unemployment rates between White and BAME Londoners between 1985-2006. The chart shows that ethnic differentials in unemployment rates have persisted over the period 1985-2006. While the general level of unemployment has fallen for both White and BAME groups, since the last recession in the early 1990s, the ethnic differential in rates has persisted and has in fact widened over the period.

\textbf{Unemployment rates by ethnicity, persons working age, Greater London, 1985-2006 (APS/LFS estimates)}

<table>
<thead>
<tr>
<th>Unemployment rate (%) persons working age</th>
<th>Ratio of rates BAME:WHITE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate (%): White groups</td>
<td></td>
</tr>
<tr>
<td>Rate (%): BAME groups</td>
<td></td>
</tr>
<tr>
<td>Ratio BAME: White rate (3 year moving average)</td>
<td></td>
</tr>
</tbody>
</table>

The unemployment rate in London for those living in social housing is 19 per cent, almost five times higher than the rate of those in owner occupied housing (4 per cent).195

Worklessness
Almost half of households in London’s social housing are workless, compared to fewer than a fifth in the private rented sector and just seven per cent of owner occupiers.196 There is no single reason for this difference, but causes include the loss of economically active households from council housing through the Right to Buy, the declining supply of social housing and the rationing of access to particularly vulnerable or deprived groups, and the relative under-supply of low skilled jobs in inner London, where much social housing is concentrated.

High levels of worklessness among households with children are central to explaining the exceptionally high rate of child poverty in London.197 Children living in lone parent households are far more likely to be living in workless households than those living in couple households (62 per cent compared with eight per cent). Children in workless lone parent households account for 77 per cent of all children in workless households. Over half of children in social rented accommodation live in workless households. Research by the GLA has shown that children from certain ethnic groups face a very high likelihood of living in workless households. LFS estimates for Oct-Dec 2007 show that almost one third (32 per cent) of London’s BAME children live in workless households compared with 19 per cent of White children. Of all children living in workless households in London, 61 per cent are from BAME groups. In Inner London, three quarters (74 per cent) of children living in workless households are from BAME groups.

In London 43 per cent of men with a health problem are workless, compared with 36 per cent elsewhere. Among women, 54 per cent of Londoners with a health problem are workless, compared with 49 per cent elsewhere.198 While London’s worklessness can be partly explained by an abundance of groups who are traditionally associated with labour market disadvantage, multiple disadvantage also plays a part. In the rest of the country 23 per cent of individuals face two or more key barriers, but in London this figure rises to 30 per cent.199

<table>
<thead>
<tr>
<th>Incidence of worklessness by long-term health problem; excluding Students (Proportion of population aged 16-64)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Have longstanding health problem</td>
</tr>
<tr>
<td>36.0%</td>
</tr>
<tr>
<td>(9,296)</td>
</tr>
<tr>
<td>Do not have health problem</td>
</tr>
<tr>
<td>9.0%</td>
</tr>
<tr>
<td>(22,790)</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>16.9%</td>
</tr>
<tr>
<td>(32,086)</td>
</tr>
</tbody>
</table>


Note: Sample numbers are shown in brackets.
Skills and training

The Leitch review concluded that, where skills were once a key driver of prosperity and fairness, they are now the key driver, and unequal access to skills has contributed to relatively high rates of child poverty and income inequality in the UK. Skills and qualifications are a key determinant of income, and the relatively polarised distribution of qualifications in the UK have led to a wide distribution of earnings. This impact has been reinforced by changes taking place in the global economy over this period, which have increased the wage premium for skilled workers.\(^{200}\)

As shown in the following table, low skills have an impact on employment, but more so in London than nationally (although the national figure would drop significantly if it was those qualified below level 2 i.e. without 5 good GCSEs or equivalent - just 69 per cent of those qualified below NVQ2 are in employment and 43 per cent of those with no qualifications at all).\(^{201}\)

<table>
<thead>
<tr>
<th>Disadvantaged groups in the labour market</th>
</tr>
</thead>
<tbody>
<tr>
<td>All working-age population</td>
</tr>
<tr>
<td>Man</td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td>Black or minority ethnic</td>
</tr>
<tr>
<td>White</td>
</tr>
<tr>
<td>Born in the UK</td>
</tr>
<tr>
<td>Born abroad</td>
</tr>
<tr>
<td>Parents (including lone parents)</td>
</tr>
<tr>
<td>Lone parents</td>
</tr>
<tr>
<td>Aged 50 or over</td>
</tr>
<tr>
<td>High skill (NVQ4+)</td>
</tr>
<tr>
<td>Mid skill (NVQ 3)</td>
</tr>
<tr>
<td>Low skill (NVQ2 or less)</td>
</tr>
<tr>
<td>Homeowners</td>
</tr>
</tbody>
</table>

London has a greater proportion of its workforce achieving the highest skills level, Level 5, than does the rest of the UK, but in-commuters from elsewhere make up a greater proportion of the higher skilled workers than London’s residents. In contrast, London residents make up a disproportionate number of lower skilled workers in the capital.

Half of the London workforce has numeracy skills at the minimum level sought for 11 year olds (NVQ Level 1) or below, and 25 per cent have literacy skills at the same low level. 25 per cent of the population are not qualified to Level 2 (the equivalent of at least five good GCSEs), and 14 per cent have no qualifications whatsoever. As a result of low skills, London risks increasing inequality, deprivation and child poverty, and risks a generation cut off permanently from labour market opportunity. Poor skills are likely to increase as a barrier to work as Cambridge Econometrics forecast an additional 290,000 high skill jobs between 2004 and 2014 in London, while jobs requiring levels 1 and 2 are set to decline. Skill issues cut across all the most disadvantaged groups in London, particularly those from BAME groups, lone parents and those with disabilities.

Health problems, including depression and obesity, are more common in unskilled and low-income households. Skills can impact on health either directly, by providing information on...
improving health, or indirectly, by improving income and making a healthy lifestyle more affordable. One study suggests that moving 50 per cent of women currently without qualifications to Level 1 would have benefits of between £300 million and £1.9 billion per annum in terms of reduced obesity and depression.

Offenders are far less likely to have qualifications and so tend to have poorer pay and employment prospects: more than one half of offenders have no qualifications, compared to 15 per cent of the population as a whole. Ex-offenders face similar obstacles to finding employment as other disadvantaged groups - poor basic skills, low self-esteem and possible behavioural and health problems. They comprise a large part of the labour market - it is estimated that one third of the working population is an ex-offender and each year 100,000 people leave jail in the UK, with 90 per cent entering unemployment immediately upon release. While it is extremely difficult to quantify the impact of skills on crime, one study found that the benefits from reduced crime of a one percentage point increase in the proportion of the working age population with GCSE or equivalent qualifications could be £10-320 million per annum.

There is a strong correlation between the percentage of young people ‘not in education, employment, or training’ (NEET) and the performance of the wider labour market. Characteristics associated with young people being NEET include poor educational attainment, persistent truancy, teenage pregnancy, use of drugs and alcohol, looked after children, disability, mental health issues and crime and anti social behaviour. Those areas with the highest proportion of young people NEET also have relatively high unemployment and low employment and economic activity overall. The high skill nature of much London employment may work against the very youngest age groups leaving full time education with poor or no qualifications, making it much harder for them to gain an initial foothold in the labour market and thus making it more likely that these individuals fall into the young people NEET group.

Early years and educational attainment
The Acheson inquiry noted that education was one of the most important routes out of poverty and disadvantage to a good job and adequate income. Education has a bearing on health-related behaviour such as smoking, drinking, drugs, exercise, diet and safe play areas for children. Poor reading and writing scores at primary school are strongly and significantly associated with later low achievement.

There is growing evidence early years are critical to success in later life, not least through basic physiological and brain development. The Equality Review found:
- In the early years the protective effect of a good home learning environment is more influential on a child’s development than parents’ qualifications, income or ethnicity, and the effect persists even to age 10.
- The quality of pre-school education is also very important to future learning and behavioural outcomes, especially for disadvantaged or vulnerable children.
- Poorer White families and some ethnic minority families, such as those of Pakistani and Bangladeshi origin, are less likely to use pre-school education for their children. Many disabled children are unable to go to pre-school because appropriate provision is limited.

Parental background, however, continues to exert a very significant influence on the academic progress of children. In one study, those from the poorest fifth of households, but in the brightest group at age three, dropped from the 88th percentile on cognitive tests at age three to the 65th percentile at age five. At the other end of the spectrum, those from the richest
households, who were least able at age three, moved up from the 15th percentile to the 45th percentile by age five. If this trend were to continue, the results suggest that the children from affluent backgrounds who are doing poorly at age three would overtake their poorer but initially bright peers in test scores by age seven.

**Evolution of Test Scores by Ability Grouping and Family Income for children in the Millennium Cohort Study**

<table>
<thead>
<tr>
<th>Age in months</th>
<th>Vocab test percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>High ability at 3, high income</td>
</tr>
<tr>
<td></td>
<td>High ability at 3, low income</td>
</tr>
<tr>
<td>60</td>
<td>Low ability at 3, high income</td>
</tr>
<tr>
<td></td>
<td>Low ability, low income</td>
</tr>
</tbody>
</table>

Notes: Low income is bottom quartile of family income averaged over the age three and five surveys. High income is top quartile. Low ability is defined as bottom quartile in vocabulary score at age three, high ability is defined as top quartile in vocabulary score at age three.

How children do in school remains the single most important determinant of future success. The percentage of pupils achieving 5 or more higher grade GCSE passes, or their equivalent, has increased over time in London and nationally. In 2008, the proportion that achieved 5 or more higher grade passes was 65 per cent in London, half a percentage point higher than England. The following map shows the borough distribution of pupils achieving five or more A*–C grade GCSEs. Some of the most rapid improvements in results in recent years have been among Inner London boroughs. But, because Inner London performance started from a much lower baseline, overall attainment has yet to catch up with Outer London - the gap, which started off at 14 percentage points in 2000, was down to six percentage points in 2008.

**Percentage of 15 year old pupils achieving 5+ A*-C grades at GCSE , London 2007**
There is marked disparity along ethnic group lines concerning educational achievement. In 2006, Chinese, Indian and Mixed White/Asian pupils in England achieved the best GCSEs (grade A*-C) scores at 80 per cent, 72 per cent and 69 per cent respectively, whilst Black Caribbean, Black Other and Mixed White/Black Caribbean pupils fared the least well, at 45 per cent, 47 per cent and 47 per cent respectively. Evidence suggests that inequalities in attainment for Black Caribbean pupils become greater as they move through the school system and such differences become more pronounced between the end of primary school and the end of secondary education.

The third State of London’s Children Report found good progress in the educational attainment of disadvantaged children generally, but still poorer than average outcomes for children in care (only 15 per cent achieving 5 A*-C GCSEs). And there are significant and persistent attainment gaps for pupils from Gypsy/Roma and Travellers of Irish Heritage backgrounds throughout primary and secondary school, who “linger on the periphery of the education system” (Ofsted). Their poor educational attainment is in part due to an inadequate supply of suitable accommodation. There is a projected need for nearly 800 additional new residential pitches over the next ten years, nearly double the current supply.

There is a clear difference in the attainment of pupils from the poorest and the wealthiest areas, but there are also differences in the attainment of pupils in the groups in between. As the following table shows, there a clear ‘gradient’ in attainment by income level. Educational underachievement is not confined to children experiencing poverty. And while poverty (as measured by eligibility for FSM) is associated with low attainment in all ethnic groups, the impact is not the same across those groups. Nine out of ten Chinese and four-fifths of Indian pupils entitled to FSM achieved one or more higher grade pass at GCSE, or equivalent, in 2006. By contrast approximately half of White British pupils entitled to FSM did not achieve any GCSE passes higher than a grade ‘D’ in that year.

<table>
<thead>
<tr>
<th>Achieved 5+ A*-C</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>less than £18,000 (60% of median) or FSM</td>
<td>39.5</td>
</tr>
<tr>
<td>£18,000 to £25,200 and no FSM</td>
<td>45.9</td>
</tr>
<tr>
<td>£25,300 to 32,400 and no FSM</td>
<td>55.0</td>
</tr>
<tr>
<td>£32,500 to £39,700 and no FSM</td>
<td>63.8</td>
</tr>
<tr>
<td>£39,800 or £53,900 and no FSM</td>
<td>69.8</td>
</tr>
<tr>
<td>£54,000 and above</td>
<td>70.5</td>
</tr>
<tr>
<td>Total</td>
<td>57.4</td>
</tr>
</tbody>
</table>

There is a modest, but statistically significant, positive correlation between socio-economic background and mean GCSE performance. Pupils at schools with pupils of generally ‘higher status’ than themselves are more successful than those at schools with similar or ‘lower status’. This emphasises the difficulties implicit in raising standards in schools that draw pupils from predominantly disadvantaged areas. Other indicators of disadvantage, such as the neighbourhood unemployment rate, the percentage of single-parent households and the proportion of parents with low educational qualifications, all measured in the immediate area round the student’s home, are also statistically associated with low achievement. Disadvantaged students and minority ethnic students are likely to attend worse performing schools. This can affect their performance adversely and it does so particularly for students with special educational needs.
**Social mobility**

Data from the ONS Longitudinal Study suggests that social mobility did not increase the extent of health inequality between 1991 and 2001, but rather served to constrain or dilute it by exposing individuals of various social origins to more of a 'mix' of experiences over time. The implication of this is that increasing social mobility would make a positive contribution to the policy objective of reducing health inequality.\(^{218}\) To increase social mobility, everyone’s capabilities and opportunities need to be raised in the context of emerging job opportunities in a global economy. Better jobs have to be available at all skill levels and not simply for those who are already the most highly skilled.\(^{219}\)

<table>
<thead>
<tr>
<th>Results for model 1 (NS SEC 1991)</th>
<th>Results for model 2 (NS SEC 2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Odds ratio</strong></td>
<td><strong>95% confidence interval</strong></td>
</tr>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>1, higher professionals and managers</td>
<td>1.066 (1.064–1.069)</td>
</tr>
<tr>
<td>2, lower professionals and managers</td>
<td>1.38 (1.26–1.50)</td>
</tr>
<tr>
<td>3, intermediate</td>
<td>2.25 (2.02–2.50)</td>
</tr>
<tr>
<td>4, self-employed</td>
<td>1.87 (1.71–2.06)</td>
</tr>
<tr>
<td>5, lower supervisory, higher technical</td>
<td>2.24 (2.04–2.46)</td>
</tr>
<tr>
<td>6, semiroutine</td>
<td>3.20 (2.91–3.52)</td>
</tr>
<tr>
<td>7, routine</td>
<td>3.86 (3.53–4.22)</td>
</tr>
<tr>
<td><strong>Social mobility</strong></td>
<td></td>
</tr>
<tr>
<td>Stable</td>
<td>1.21 (1.25–1.28)</td>
</tr>
<tr>
<td>To more favourable</td>
<td>1.45 (1.35–1.55)</td>
</tr>
<tr>
<td>Model fit</td>
<td>(\chi^2 = 404.6, 9)</td>
</tr>
</tbody>
</table>

*Source: ONS LS.*
6. Evidence on places – the physical and environmental determinants of health

‘Many of today’s preventable health problems are concentrated in the most deprived areas where a combination of environmental, social and economic factors lead to relatively poorer health and lower life expectancy. The health gap between rich and poor stubbornly persists despite Government policy and spending to reduce such health inequalities. There tends to be a concentration of the lowest quality and paucity of natural environments in the most deprived communities where health inequalities are most acute. These communities have fewer chances to connect with the natural environment, and to meet and socialise, thus reducing their sense of belonging, of community spirit and ultimately their health and wellbeing.’


Poor housing

The interface between living conditions and health in a complex one. Poor housing can cause or contribute to ill-health or exacerbate existing conditions through damp, mould, cold, bad lighting or design, or poor maintenance. Certain vulnerable groups such as homeless people, asylum seekers and people with mental health problems often reside in low standard accommodation which can seriously impact on their health. Living in bad housing means up to 25 per cent higher risk of severe ill-health and disability during childhood and early adulthood, as well as an increased risk of meningitis, asthma, coronary heart disease, mental illness, behavioural problems, lower educational attainment, and a greater likelihood of unemployment, and poverty. There are a number of ‘indirect’ processes that work to compound the problem of poor housing and further reduce the health status of populations in very poor and stress-laden environments. These include lowered resistance to illness and longer recovery times, the adoption of health threatening habits such as smoking, and a reduction in self-organising capacity.

Housing ‘fitness’ now forms part of a new and wider concept of ‘decent homes’, which is the target for all social housing by 2010. Homes in the most deprived districts are more likely to be non-decent than elsewhere, and households in these districts are more likely to be living in poor quality environments. In 2007 London had a higher than average proportion of homes across all tenures which did not meet the Decent Homes Standard (34 per cent, compared with the national average of 31 per cent). As is the case with unfit homes, homes in the private sector are less likely to be non-decent than social sector homes, but within the private sector conditions of privately rented homes are considerably worse than the owner occupied stock. Within the social sector, homes owned or managed by Registered Social Landlords (RSLs) continue to be in better condition than local authority homes.

The following map shows the borough distribution of local authority non-decent homes in the capital in 2007, ranging from over a half in Sutton, Newham, Tower Hamlets, Waltham Forest and Harrow to none in Brent, Hounslow and Westminster.

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A decent home meets the following four criteria: it meets the current statutory minimum standard for housing; it is in a reasonable state of repair; it has reasonably modern facilities and services; and it provides a reasonable degree of thermal comfort.
Overcrowding has been associated with both physical and mental health risks including the spread of infectious diseases, accidental deaths, asthma, cardiovascular diseases, stress and depression. Children in overcrowded homes miss school more frequently due to illnesses and infections. Overcrowding is linked to delayed cognitive development and poorer educational outcomes. A study by Shelter found that children living in bad housing (homeless, overcrowded or poor housing fitness) have up to 25 per cent higher risk of severe ill health and disability during childhood and early adulthood.

Currently there are over 61,000 families on London borough housing waiting lists in need of a home with three or more bedrooms. As a consequence, overcrowding has increased in recent years. In the decade from 1996/07 to 2006/07 the number of overcrowded households in London rose by a quarter to nearly 200,000. Overcrowding is particularly concentrated among minority ethnic communities. Overall in London, 14 per cent of BAME households are living in overcrowded condition compared to less than four per cent of White households. In some boroughs the problem is particularly acute. In Tower Hamlets, for example, nearly a third of BAME households are overcrowded, by far and away the highest rate in London (Waltham Forest is next highest with 18 per cent). However, for any given household size overcrowding is higher in BAME households, suggesting that higher overcrowding rates among these households has more to do with poverty and poor housing. Low-income families in London are more likely to live in overcrowded conditions than low-income families in Great Britain as a whole (28 per cent compared with 19 per cent).

Related to overcrowding is the issue of density and housing design. A review of studies found that residents living in high-rise accommodation reported more mental health symptoms than those living in traditional style dwellings. Other aspects of the physical and urban environment that are associated with the mental health and well-being include damp, the look of an estate or road, noise on the street and between neighbours, over-crowding, access to green open spaces, availability of local community facilities, and sense of safety.

There is clear evidence that low indoor temperatures have a negative impact on physical and mental health and contribute to the numbers of excess winter deaths particularly among older people. Adverse health effects include respiratory conditions, bronchitis, heart attacks, and
strokes. There is a gradient of risk linked with age of the property with the greatest risk for dwellings built before 1850 and lowest in the more energy efficient dwellings built after 1980.231 Research into energy efficiency and housing has shown that dealing with fuel poverty among low-income households alone does not solve the underlying problem of energy inefficiency or cold homes - this can only be solved by improvements to the housing stock, improvements to the levels of insulation, the air-tightness, and the heating systems.232

Overcrowded household in London by ethnicity and household size, 2008

Homelessness
The health status of homeless people has been found to be far worse than that of the general population. Homelessness is associated with high mortality rates, high levels of health need and difficulties accessing health care, particularly primary health care services.233 For those who are living on the streets, hostel dwellers or using night shelters, health problems can include poor condition of feet, skin diseases, tuberculosis and chronic respiratory disease, problems associated with drugs and alcohol, poor mental health and physical violence.234

Data from a depth survey by St Mungo’s into the health of 600 homeless people showed a very much lower mean age at death (42 years of age) than for the general population, and a death rate of 25 times that of the general population in rough sleepers between 45 and 62.235 A broader St Mungo’s survey of around 1,500 homeless people highlighted the complexity of the issues they face - for example, only 17 per cent said they were free of mental health, substance use or physical health issues. 70 per cent reported four or more problems in addition to their homelessness and over half were classed as being socially vulnerable, socially excluded or having poor social skills.

Tuberculosis (TB) is not effectively controlled among homeless people, prisoners and problem drug users in London. In a recent cohort study, extremely high prevalence of TB was seen in homeless people living on the streets or in hostels (788 per100,000), problem drug users (354 per 100,000), and prisoners (208 per100,000). Homelessness was associated with infectious tuberculosis, multi-drug resistance, poor adherence and loss to follow-up. In London, homeless people, prisoners and problem drug users collectively comprise 17 per cent of TB cases, 44 per cent of smear positive drug resistant cases, 38 per cent of poorly compliant cases and 44 per cent of cases lost to follow-up.236
Homeless children are three or four times more likely to have mental health problems than other children. They are two to three times more likely to be absent from school than other children due to the disruption caused by moving into and between temporary accommodation. Homeless children are more likely to have behavioural problems such as aggression, hyperactivity and impulsivity, factors that compromise academic achievement and relationships with peers and teachers.237

Households from ethnic minority groups are disproportionately likely to become homeless, reflecting in part greater exposure to risk factors such as poverty, deprivation and overcrowding. White British households make up 60 per cent of London’s population but just a third of those accepted as homeless and in priority need. Caribbean, African and other black households comprised another third of those accepted as homeless but just 11 per cent of the general population.238 The number of homeless households living in temporary accommodation varies widely among London boroughs. Generally the highest numbers can be found in inner and north London, due both to higher underlying need but also different approaches towards dealing with homelessness (see map). Over 330,000 households, around 10 per cent of London households, are on a local authority waiting list, up from 179,000 ten years ago. At the same time as housing waiting lists have grown, lettings to social housing in London have fallen to 42,000 from nearly 70,000 in 1997/98.

For those living in temporary accommodation, conditions are often very poor with little privacy or security and shared kitchens and/or bathrooms. The accommodation may be damp, cold and overcrowded. Poor quality temporary housing has been associated with a number of health risks including: respiratory and gastrointestinal infections, poorer perinatal outcomes and mental health problems linked to stress.239

![Homeless acceptances by ethnic group, 2007/08](image)

Source: CLG
Research has highlighted serious safety concerns for asylum seeker households with young children living in temporary accommodation. For example, sixty per cent of respondents had not been told what to do in case of fire or emergency, half of respondents said that they had nowhere safe for their children to play indoors and a third said they had nowhere safe outdoors. Respondents described a range of serious accidents, fires and health problems relating to their accommodation.240

Air quality
Epidemiological evidence shows a good correlation between PM$_{10}$ concentrations and mortality rates. Air pollution can aggravate existing conditions, especially cardiovascular and respiratory diseases. Young children, older people and people with certain health problems are the most vulnerable to its effects. In children, outdoor air pollution is associated with acute lower respiratory tract infections, asthma, low birth weight, and impaired lung function.241

The main air pollutants, sources of these pollutants and potential health effects*  

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Sources</th>
<th>Health Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen dioxide</td>
<td>Road transport, domestic boilers, power stations and industry</td>
<td>Causes irritation to airways. High concentrations can increase asthma symptoms</td>
</tr>
<tr>
<td>Fine particulates (PM$_{10}$ and 2.5)</td>
<td>Road transport (mainly diesel vehicles), power stations, domestic boilers</td>
<td>Can cause heart and lung diseases and lead to premature death in those already ill</td>
</tr>
</tbody>
</table>

* Taken from http://www.cityoflondon.gov.uk/Corporation/LGNL_Services/Environment_and_planning/Pollution/air+quality.htm#defra  
(Original source, Defra)
Ozone (ground level) | Produced when sunlight reacts with pollutants from vehicle and industrial emissions. | Causes irritation to eyes, nose and throat. Can cause damage to lungs and airways.

Concern that minority populations and/or low-income populations bear a disproportionate amount of adverse health and environmental effects have also increased. King and Stedman (2000) found tentative evidence for a link between air pollution and social deprivation in the UK, supported by a study in Ontario, Canada. It was noted, however, that other socioeconomic factors were important to this relationship, such as education levels and employment in the manufacturing industry. Those most affected by air pollution tend to live in deprived neighbourhoods with major arterial roads running close to them. The combined health impacts from road traffic injuries and transport related air pollution are estimated to account for one percent of annual deaths in London and is responsible for a major contribution to morbidity.

In a recent US study, long-term exposure to increased concentrations of fine particulate air pollution was associated with an increased risk of first cardiovascular events among postmenopausal women. For death from cardiovascular causes, there was an estimated 76 percent increase in risk with each increase of 10 μg per cubic metre in long-term PM$_{2.5}$ exposure. Neither educational level nor household income significantly modified the relationship between air pollution and cardiovascular disease, although there was a trend toward greater effects among those with less education.

London’s air pollution levels are the worst of any city in the UK and amongst the worst in Europe. A recent report from the European Environment Agency indicates that air pollution contributed to 650 deaths per million people in the UK in 2005. Government estimates suggest that air pollution may have contributed to around 1,000 premature deaths in London each year, but experts at a recent Environment Committee meeting believe this is an underestimate, and recent figures show this could be closer to 3,000 deaths. Evidence from King’s College London suggests that the PM$_{10}$ emitted in London (mostly traffic) is responsible for the majority of damaging health effects.
Noise
The health significance of noise pollution includes noise-induced hearing impairment, interference with speech communication, disturbance of rest and sleep, psychophysiological, mental health and performance effects, effects on residential behaviour and annoyance, and interference with intended activities. Worldwide, noise-induced hearing impairment is the most preventable irreversible occupational hazard. Prolonged exposure to environmental noise can cause susceptible individuals to develop permanent effects, such as hypertension and IHD associated with exposure to high sound levels. Environmental noise is not believed to cause mental illness directly, but it is assumed that it can intensify and accelerate the development of latent mental disorders.

Crime
Crime imposes economic costs, reinforces social exclusion and can contribute towards environmental degradation. It is associated with social disorganisation, low social capital, relative deprivation and health inequalities. Fear of crime can make people reluctant to walk, use public transport, or go out after dark. The same social and environmental factors that predict geographical variations in crime rates may also be relevant to explaining community variations in health and well-being.

Household victims of burglary are higher among lone parents, social renters and unemployed people. Alongside young people, they are also more likely to be victims of violence. Young people are more likely to be victims of theft from the person. People on lower incomes are both more likely to be victims of crime and more likely to commit crime. Domestic burglary is used as a proxy indicator for crime in general because it is more likely to be reported to the police than any other crime (except vehicle crime which only affects car owners). The following map shows the pattern of domestic burglary for London boroughs in 2007/08. Rates range from 3.2 burglaries per 1,000 residents in Kingston upon Thames to 12.7 per 1,000 residents in Haringey – four times the rate.
In Britain there are substantially increased risks of burglary, vehicle crime and street crime for all ethnic minorities, whichever method of measurement is used. White people are at above-average risk of other types of crime, like assault and vandalism. Pakistanis have been the group at greatest risk of crime overall; they have also been the group most susceptible to racially motivated crime. Though research to quantify it does not yet exist, the risk that refugees will become crime victims is likely to be disproportionately high: incidence of crime tends to be higher in more deprived parts of the capital where they typically live; hate crime may be targeted at them because of their immigration status (as well as because of race or faith); and lack of confidence in police may mean they are less likely to seek protection.

The British Crime Survey (BCS) provides information on attitudinal measures such as worry about crime. The factors most strongly independently associated with individuals’ high levels of worry about burglary are: believing it likely their home will be burgled in the coming year, perceiving a high level of disorder in the local area, having a low household income, and being from a minority ethnic group. Victims of crime often suffer severe psychological distress and subsequent mental health problems, but the fear of crime can also alter people’s lifestyle and affect their health. Fear of crime particularly affects the elderly, women, poor and other disadvantaged and vulnerable groups and has been shown to be significantly associated with poorer health and lower mental and social wellbeing. People in social rented accommodation are more likely to have high levels of worry about burglary, car crime and violent crime than those from other tenure groups. People from minority ethnic groups overall are more than twice as likely to have high levels of worry about all three crime types compared to those from the White ethnic groups. People who are unemployed, or economically inactive, and social renters are more likely to have high levels of worry about violent crime.

The London Household Survey 2002 asked respondents how safe they felt walking in their local neighbourhood alone in the evening. Among the White group around 30 per cent said they felt unsafe. Respondents from Black & White African, Other Mixed, Bangladeshi, Pakistani, Chinese and Other groups had higher rates overall, while those from Black Caribbean, African, Other Black, Indian, White & Asian and Black & White Caribbean had lower rates all.

There is substantial over-representation of young Black men in the prison system. Whilst many young offenders from London are held outside of the capital, at Feltham, the only Young Offender Institution in London, 44 per cent of prisoners held there were Black as of 31 December 2005. In all, 64 per cent of Feltham’s population are from BAME groups. Young Black people are more likely than the general population to have a history of poor educational achievement and a wide range of health and social needs, which are likely to contribute to their levels of offending.

<table>
<thead>
<tr>
<th>London</th>
<th>White %</th>
<th>Black %</th>
<th>Asian %</th>
<th>Other ethnic minorities %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Youth population</td>
<td>59</td>
<td>15*</td>
<td>17</td>
<td>9</td>
</tr>
<tr>
<td>Stop and search</td>
<td>45</td>
<td>37</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Accused of crime by police</td>
<td>52</td>
<td>31</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Police warning, reprimand or other pre-court decision</td>
<td>59</td>
<td>26</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Remanded in custody until trial</td>
<td>35</td>
<td>49</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Given a custodial sentence</td>
<td>40</td>
<td>43</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>Dealt with by youth offending teams</td>
<td>51</td>
<td>30</td>
<td>9</td>
<td>9</td>
</tr>
</tbody>
</table>

*This can be used as a benchmark to measure over or under representation

58
Transport and road casualties
Transport can promote health by enabling people to access employment opportunities and by facilitating social networks. Lack of access to transport is experienced disproportionately by women, children and disabled people, people from minority ethnic groups, older people and people with low socio-economic status. These groups spend a higher proportion of their resources on transport. Disadvantaged urban areas tend to be characterised by high traffic volume, leading to increased levels of air and noise pollution and higher rates of road traffic accidents. Improving the urban environment can have a positive impact on travel behaviour by making the conditions for walking, cycling or using public transport more appealing and safer, and by making high street and town centres more attractive than out of town shopping centres and supermarkets, which are usually accessed by car. Cycling, walking and the use of public transport promote health in four ways - by providing exercise, reducing fatal accidents, increasing social contact and reducing air pollution.

Road traffic accidents are a major avoidable hazard to health and casualties from road traffic accidents are the subject of both national and London targets. 23,116 road traffic collisions involving personal injury were reported to the Metropolitan and City Police during 2008 within Greater London, resulting in 28,153 casualties. Of these, 204 were fatally injured, 3,322 were seriously injured, and 24,627 were slightly injured. Compared with 2007, fatalities decreased by eight per cent. Sight casualties, fatal or serious casualties and childhood casualties were 37 per cent, 47 per cent and 67 per cent below the 1994-98 baseline figures respectively.

In 2007, males accounted for about 63 per cent and females for 37 per cent of casualties. Females accounted for 63 per cent of bus or coach occupant casualties and 43 per cent of car occupant casualties. Males accounted for 90 per cent of powered two-wheeler casualties, 778 per cent of pedal cyclist casualties, 55 per cent of car occupant casualties and 55 per cent of pedestrian casualties. Of child casualties (under 16 years), 53 per cent were pedestrians, 26 per cent were car occupants, eight per cent were bus passengers and 11 per cent were pedal cyclists. Seventeen children were killed in 2008, an increase of 113 per cent compared with 2007. Child serious casualties decreased by nine per cent, and overall, child casualties decreased by one per cent.

Rates of road traffic injury are not evenly distributed across the population. Children from deprived areas are less likely to be car passengers, more likely to walk, cross more roads that have higher volumes and speeds of traffic, and are less likely to be accompanied by an adult or to have been taught road safety. Therefore they have both higher exposure and higher risk for

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Road traffic casualties in Greater London 2008

<table>
<thead>
<tr>
<th>Mode of travel</th>
<th>Severity of casualty in 2008 (and percentage change over 2007)</th>
<th>% of total in 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fatal</td>
<td>Serious</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>94</td>
<td>1,114</td>
</tr>
<tr>
<td>Pedal cyclist</td>
<td>15</td>
<td>430</td>
</tr>
<tr>
<td>Powered two-wheeler</td>
<td>50</td>
<td>688</td>
</tr>
<tr>
<td>Car</td>
<td>39</td>
<td>841</td>
</tr>
<tr>
<td>Taxi</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Bus or coach</td>
<td>1</td>
<td>151</td>
</tr>
<tr>
<td>Goods vehicle</td>
<td>5</td>
<td>40</td>
</tr>
<tr>
<td>Other vehicle</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>204</strong></td>
<td><strong>3,322</strong></td>
</tr>
</tbody>
</table>

% of total in 2008: 0.7% Fatal, 11.8% Serious, 87.8% Slight, 100.0% Total.
Children’s risk of sustaining a road traffic injury increases as they grow older, particularly in the 10-13 years age group. Boys are more likely to be killed or seriously injured on the roads than girls, with the highest rates for boys in the 12-15 year age-group. Evidence from the 1980s and early 90s suggests that some of the decline in casualty rates (nationally) may have been due to falls in the level of walking and cycling by children.

There is some evidence that there are ethnic inequalities in injury risks. Between 1996 and 2006, there were 428,000 casualties recorded in road traffic collisions occurring in London. In children and adults, road traffic injury rates were higher in ‘Black’ groups (305 per 100,000 population in children; 617 in adults) and lower in ‘Asian’ groups (175 in children and 421 in adults), compared with rates in ‘White’ groups (234 in children and 479 in adults). ‘Black’ Londoners have been on average 1.3 times more likely to be injured on the roads than ‘White’ Londoners. Between 2001 and 2006, rates of injury for children and adults in all ethnic groups declined for all modes of travel. The rate of decline was similar across the ethnic groups, with one exception: for adult car occupants, ‘White’ rates declined faster than other groups.

There is a strong relationship between pedestrian injury rates and deprivation in London:
- Relationship exists for adults & children, and for those killed & seriously injured.
- Deprivation effect remains after adjusting for effects of other factors, such as road network.
- Differences in exposure is likely to be part of the explanation.

Given that area deprivation is linked to risk of injury, and more ‘Black’ people, on average, live in the most deprived areas, more ‘Black’ people might be expected to be injured. However, area level effects do not explain all the difference. ‘White’ children in the most deprived areas were 2.5 times more likely to be injured as pedestrians than those in the least deprived. For ‘Asian’ children, the injury rates in the most deprived areas were over four times higher than in least deprived areas. However, for ‘Black’ children there did not appear to be any relationship between deprivation and risk – the relative risk of being injured was the same across deciles of deprivation. In the two most deprived deciles of the population, there are no differences in the injury rates between ‘White’ and ‘Black’ Londoners, but in more affluent areas, ‘Black’ rates are higher, suggesting that increasing area affluence protects ‘White’, but not ‘Black’ road users. There are grounds for predicting that exposure to traffic may account for some of the risk differential, but data available have not been able to identify how much.

In general, interventions directed at making the environment safer (e.g. reducing the speed and volume of traffic) will reduce injury risk for the whole population in the longer term, as well as reducing the differences across ethnic groups. In the short term, it will be necessary to work with local communities to look at ways of managing existing risks.

In terms of effects by socio economic class, the long-term unemployed have a death rate ratio 20 times greater than those in the managerial / professional SEC and 4 times greater than those in the routine SEC. Children of parents who have never worked, or who have been unemployed for a long time, are 13 times more likely to die from unintentional injury than children of parents in higher managerial and professional occupations.
The total numbers of casualties decreased by two per cent in Outer London but increased by two per cent in Inner London. Pedestrian casualties decreased by 2 per cent in Inner London and three per cent in Outer London. Pedal cyclist casualties showed a six per cent increase in Inner London, and a 12 per cent increase in outer London. Powered two-wheeler casualties decreased by four per cent in Inner and by seven per cent in Outer London. Car occupant casualties increased by five per cent in Inner London and decreased by three per cent in Outer London. The following map shows the number of people killed or seriously injured in road traffic accidents per 100,000 population by London borough in 2006.
Childhood accidents
Evidence suggests that the link between deprivation and childhood accidents reflects an uneven exposure of children to hazards rather than a tendency to behave in a particular way. These risks will be compounded by a number of factors including:
- lack of finances for safety equipment
- exposure to particular dangers (e.g., busy roads, poor/unsafe house design)
- ability of parents/carers to provide adequate supervision.

Where do accidents occur?
- Road accidents account for nearly half of all accidental injury fatalities (Towner and Dowsell 2001) and are disproportionately higher in the 11-15 age group due to increased use of bicycles and greater independence on the road.
- Pedestrian injuries account for a quarter of all childhood injury deaths.
- Fires and thermal injuries cause nine per cent of unintentional injury deaths in children and show very steep social gradients. Children in social class V are sixteen times more likely to die from a house fire compared to those in social class I. Older children are much less likely to die in house fires than those under five who constitute 70 per cent of fatalities.
- Injuries from play and recreation – in particular cycling injuries, drowning and field sports.
- Home accidents including suffocation and foreign bodies, drowning, poisoning (all less significant in 11-15 age group than in younger children).

Access to green spaces
There are substantial health benefits associated with access to, and use of, green spaces. Parks can provide alternative routes for circulation, including green routes for pedestrians and cyclists, thereby promoting more active and healthy lifestyles. Studies have shown that exposure to the natural environment, or green space, has an independent effect on health and health-related behaviours. Several studies have shown that contact (either by presence or visual) with green spaces can be psychologically and physiologically restorative, reducing blood pressure and stress levels and possibly promoting faster healing in patients after surgical intervention.

Physical environments that promote good health might be important to reduce socioeconomic health inequalities – a recent study found that health inequalities related to income deprivation in all-cause mortality and mortality from circulatory diseases were lower in populations living in the greenest areas. Another study suggested that there is a gradient in self-perceived health according to whether people live in a greener environment (see chart below).

Child development has been shown to improve through play in a variety of stimulating environments, including woodlands, parks and wetland areas. Play can promote the acquisition of social skills, experimentation, confrontation and resolution of emotional crises, to moral understanding, cognitive skills such as language and comprehension.
While many parts of London are well served by parks and green belt, there are also large areas with identified open space deficiency, measured in terms of distance to the nearest district or metropolitan park. The London Plan expects all developments to incorporate appropriate elements of open space that make a positive contribution to the wider network.

**Open space deficiency in London**

![Map showing open space deficiency in London]
Climate change
Mortality in the population aged 55 increases sharply when mean daily temperature exceeds 25°C for a few days, as it did in south-east England in 1976 with one day at 25.7°C followed by three at 27.45–27.7°C.269 Heat-related deaths occurring in the summer are estimated to increase by 2,000 per year (from about 800 to around 2,800) by the year 2050. A significant increase in hospital admissions is also likely. On the other hand it is estimated that excess cold weather deaths will have declined significantly, perhaps by 20,000 per year, assuming that other social and material conditions do not change.

The most significant consequence of drought would be a failure of the domestic water supply, resulting in a need for standpipes and other methods of water delivery. The potential health effects of this would include infectious intestinal diseases, due to contamination of water and reduced hygiene. Access to sufficient water for the elderly, disabled and less mobile would be of concern. Localised water shortages may be particularly important in south-east England due to population growth and climate change (HPA, 2006).

Flooding has a number of potential health risks. Elderly people are particularly at risk of drowning in their own homes. In the 1953 ‘Big Flood’ in East Anglia, the majority of the deaths were of elderly people (Baxter, 2005). Men are much more at risk of drowning than women, probably due to more risky or ‘heroic’ behaviour. Effects on mental health are now recognised as an important health consequence of flooding.270 A case-control study from the UK found a fourfold increase in psychological distress among adults whose homes were flooded compared with those whose homes were not flooded (Reacher et al., 2004).

Understanding the linked adverse health outcomes of climate change, physical inactivity and injury, owing to their common antecedent of fossil fuel use, paves the way for the implementation of a common solution.271 Reduced traffic speeds have been shown to reduce road accidents. A decreased dependence on motor transport could encourage walking and the use of bicycles, which would also improve health. Efforts to improve insulation of houses may contribute to a decline in cases of cold-related deaths and illness. However, such benefits will need to be considered in light of possible deteriorations in indoor air quality resulting from decreased ventilation.272
7. What works to reduce health inequalities?

Key guidance and toolkits on reducing health inequalities include:

- NST approach - systematically addressing health inequalities

- Health Inequalities Toolkit
  http://www.lho.org.uk/LHO_Topics/Analytic_Tools/HealthInequalitiesTool.aspx

- HDA guidance on promoting healthier communities and narrowing health inequalities: a self-assessment tool for local authorities
  http://www.idea.gov.uk/idk/aio/276453

a) Examples of effective interventions
(This includes evidence-based guidance from NICE and evidence from academic research.)

Health in London

- Interventions that have a positive impact of infant mortality and that can be monitored using routinely available data include smoking in pregnancy, initiation of breastfeeding and early booking of antenatal care. (LHO, Born Equal? A briefing on inequalities in infant mortality in London)

Access to health-related services

- Provision of Language Support, use of Plain English, especially for non-English speakers (who are sometimes the most in need of basic services) has proven to prevent misdiagnosis. (London Ambulance Service)

- The Department of Health Increasing Access to Psychological Therapies programme currently has two demonstration sites, which are linked to regional networks of local improvement projects. The sites are showing that quicker access to therapy services can help patients to recover from illness and return to leading an independent lifestyle, particularly in terms of returning to work or finding employment.

Lifestyle factors

- Public policies promoting greater equality and reducing the burden of low social status may make an important contribution to reducing and preventing obesity. Relative deprivation may influence the effectiveness of policies designed to promote good nutrition and physical activity. (Pickett, Wilkinson et al, Wider income gaps, wider waistbands, 2005)
• There is evidence to suggest that targeting parents and children together, in family-based interventions, involving at least one parent with physical activity and health promotion, is effective in treating obesity and overweight in children. (NICE)

• Limiting television advertising of food and drink aimed at children is likely to have a beneficial impact on children’s food preferences and choices. One study found that, after watching advertisements for fast food, breakfast cereal and soft drinks, obese children increased their food consumption by 134 per cent, while overweight and normal weight children did so by 101 per cent and 84 per cent respectively. (Liverpool University Kissileff Human Ingestive Behaviour Laboratory)

• There is strong evidence that improving nutrition and development in socioeconomically disadvantaged children can lead to healthy cognitive development and improved educational outcomes, especially for those living in impoverished communities. The most effective intervention models are potentially those which combine nutritional interventions. (WHO, Promoting Mental Health: Concepts Emerging Evidence Practice, 2004)

• Evidence suggests that teenage pregnancy may reflect gender-differentiated responses to low social status and could be reduced by reducing income inequality. (Pickett, Wilkinson et al, Adolescent birth rates, total homicides, and income inequality in rich countries, 2005)

• Educational programmes to stimulate pregnant women to abstain from, or reduce, substance use can have long-term mental health benefits. (Brown & Sturgeon 2004; Tuthill et al. 1999).

• Smoking bans in mental health units can only lead to cessation when they are supported by a range of smoking cessation programmes. (Greenwich Teaching Primary Care Trust). There is real potential for intervention if anti-smoking programmes screen for mental health problems and mental health services screen and refer for anti-smoking advice. (London Development Centre)

• A 10-year study by Manchester Metropolitan University Institute for Sport & Physical Activity has found that children who play sports are up to eight times more likely to achieve good examination grades than those with a sedentary lifestyle. (Times Higher Education Supplement 29/06/2007 p8)

Life chances for health

• The repeated success of supported employment models, which generally offer a combination of competitive employment and health services, suggests that integrating these types of supports into Pathways could be one option to improve outcomes for people with psychiatric conditions. The expansion of the existing permitted work rules for IB, which currently restricts work to 16 hours per week before benefits are cut, might enhance more substantial labour market attachment by Pathways participants. (Anu Rangarajan, David Wittenburg, 2008.273)

• Policies on mental health at work offer the possibility of addressing prevention, retention and rehabilitation. For people already experiencing common mental health
problems at work, evidence suggests that the most effective approach is brief (up to 8
weeks) of individual therapy, especially CBT. The intervention seems to be effective
whether face-to-face or via computer-aided software. (British Occupational Health
Research Foundation, 2005). Out of the ten currently published mental health
guidelines from NICE, seven have as key recommendations for implementation
psychological therapies as either a first line treatment or one to be used concurrently
with medication.

- There is strong evidence that early interventions starting at age two that promote basic
  reading skills and engage children in conversations with their parents about picture
  books improve reading skills and facilitate the transition to school. (Valdez-Menchaca &

- Sure Start programmes which are well integrated with local health services appear to
  have the most effective outcomes. (House of Commons Health Committee. 274)

**Interventions on place**

- A New Zealand study showed that a relatively modest investment in insulation per
  house (around £700 excluding taxes) led to significant improvements in the
  population’s self reported health and a lower risk of children having time off school, or
  adults having sick days off work. Improving the thermal properties of older houses led
to warmer houses and had demonstrable health benefits. Interventions of this kind,
which focus on low-income communities and poorer quality housing, have the potential
to reduce health inequalities. (BMJ, Effects of insulating existing houses on health
inequality, 2007)

- Rehousing people from areas of poor quality housing can improve self-reported physical
  and mental health outcomes in the longer term (18 months). (NICE, Housing and public
  health: a review of reviews of interventions for improving health: Evidence briefing,
  December 2005)

- Home visits to people in lower socio-economic areas plus provision of advice on home
  hazards, combined with health education and media campaigns, are effective at
  encouraging parents to make physical changes to the home environment to make their
  homes safer. (NICE, Housing and public health: a review of reviews of interventions for
  improving health: Evidence briefing, December 2005)

- The Accidental Injury Task Force identified a number of key areas where generally low
  cost interventions would have the biggest impact on unintentional injury in the short
  term. For road accidents these were: 20 mph speed limits in areas of higher pedestrian
  activity; local child pedestrian training schemes and safe travel plans; systematic road
  safety intervention in inner city areas; and advice and assessment programmes for
  elderly car drivers. (Audit Commission, 2007)

- Evidence regarding traffic calming schemes is generally positive, although it is not clear
  whether injury reductions have been achieved in the most disadvantaged areas
  (Dowsell & Towner, 2002)
• Evidence suggests that traffic calming can lead to small self-reported and observed increases in walking and cycling (including children’s play) both in the short and in the long term. Closing or reducing the capacity of roads can lead to long-term increases in levels of walking within the area of the scheme and can result in a decrease in road traffic casualties. Introduction of road user charging schemes and changes to the road system can lead to short-term increases in levels of walking and long-term increases in cycling within the area of the scheme. (NICE promoting and creating built or natural environments that encourage and support physical activity.275)

• The introduction of cycle infrastructure can lead to long-term increases in levels of cycling within the area of the scheme. Cycle infrastructure interventions may result in important positive public health outcomes alongside increasing cycling, notably a reduction in cycle casualties. It appears that cycle infrastructure in both urban and rural areas can be effective in increasing cycling. (NICE promoting and creating built or natural environments that encourage and support physical activity)

• Research has shown that traffic free routes in particular promote walking and cycling within the most deprived areas and encourage more women, people from black and minority ethnic groups and older people to cycle. (Moore et al, 2006. 276)

b) Examples of promising interventions
(This includes examples from a call-for-evidence responded to by around 100 community and voluntary sector organisations.)

Access to health-related services

• A new IT shared system linking the three homeless PMS sites and local doctor’s surgeries resulted in increases in number of patients seen and completed consultations and reduced admissions/readmissions to secondary care. (Nurse-led homelessness health team in Westminster)

• A Race on the Agenda (ROTA) review found that the experiences of BAME communities in accessing services improved when users are involved in service design and when the diversity of service delivery staff reflects the makeup of the community the health agency serves.

• The Rape Haven in Whitechapel has demonstrated how employment of an Asian Development worker has increased the uptake of the forensic and counselling service for victims of sexual assault.

• Lesbians who reported good experiences of both breast and cervical screening cited the absence of heterosexism in the health care interaction and an environment where their confidentiality was respected. (De Montfort University Leicester)

• ‘Project Harmony’ has provided resources to increase usage of 999 services and basic life support skills such as CPR to Vietnamese, Latin American and refugee groups in three London boroughs. (London Ambulance Service)
**Lifestyle factors**

- There is evidence from many ongoing initiatives in London that young people and adults can be successfully reached through sexual health promotion initiatives conducted in social and entertainment settings. A number of GLA cultural, community safety and tourism activities offer excellent opportunities to support communication work around sexual health, well-being and drugs & alcohol issues.

- The involvement of young people in the planning and design of sexual health services is a key factor in their ability to reach vulnerable groups. The Brook approach also includes employing peer educators, maintaining a user group and recruiting young people on the management committee. (Brook London)

- Therapeutic group work can result in positive outcomes with gay and bisexual men, with men reporting increased safer sex, reduced fear of others and increased ability to negotiate safety within relationships. (PACE)

- Ethnic Alcohol Counselling in Hounslow (EACH) have a strong emphasis on outreach work and have had success in engaging women from BAME communities with alcohol and domestic violence problems.

**Life chances for health**

- Job subsidies targeted on the more disadvantaged can be successful and will tend to substitute such workers for more job ready workers, thereby helping to tackle poverty and social exclusion. (GLA-LDA What works in tackling worklessness)

- Recent migrants benefit from advice and support on how the local labour market works, both in terms of recruitment methods and in terms of access to social networks as a source of jobs, in addition to language training related to workplace usage. (GLA-LDA What works in tackling worklessness)

- The Working Futures Initiative, aimed at tackling unemployment among families in temporary accommodation, has had some promising small-scale results, which show increasing movement into training and employment.

**Interventions on place**

- ‘Before (1996)’ and ‘After (2000)’ surveys in Central Stepney concluded that area-based initiatives have some effectiveness in redressing longstanding national inequalities, although impacts are limited partly because policies are not sufficiently holistic.

- An evaluation of Broadway’s Healthy Living Centre (HLC), designed to meet the health needs of rough sleepers and vulnerably housed people, concluded that, by supporting people to access mainstream health services and facilitating a high number of clinical episodes, the HLC has had a positive impact on health outcomes, with 80 per cent of respondents stating that using the health services had made some or a lot of difference to their health.
• Improving the urban environment enhances social inclusion by supporting modes of transport that are free or low cost to use. This particularly benefits those groups most dependent on walking and local bus services, including households on low incomes, older people, women, children and people from BAME backgrounds. (TfL, Transport 2025)

• Findings from completed Home Zone schemes show consistent positive outcomes for children and for communities. Almost all schemes are popular and lead to a stronger sense of community, making it more likely that parents will feel happy about giving their children greater freedom outside the home as they grow up. Schemes also show greater levels of contact and interaction between residents. (London Play, 2007.277)
8. Gaps in the evidence base

- For obesity, there is a complete lack of evidence regarding the effectiveness of interventions targeting specific socio-economic, ethnic or vulnerable groups. This reflects the general dearth of evidence in relation to public health interventions that address health inequality issues (NICE briefing).

- For physical activity, it is imperative that future exercise promotion research examines the independent and interactive effects of these social determinants (black and minority ethnic groups, in people in low-income households, in lower social classes and in people with low levels of education) to inform appropriate intervention study designs (NICE briefing).

- There is a dearth of evidence on how environmental interventions affect the physical activity levels of different groups. For example, little is known about how the effects vary in relation to gender, age, ethnicity, culture and religion. In addition, there is little evidence in relation to people with disabilities or according to people’s sexual orientation. (NICE, 2008.279)

- For alcohol misuse, there is a complete lack of evidence regarding the effectiveness of interventions targeting specific socioeconomic, ethnic or vulnerable groups (NICE briefing).

- For teenage pregnancy, there is little or no evidence on interventions, and evaluation of interventions, to prevent pregnancy aimed at specific vulnerable groups, e.g. young people in/leaving care, school excludees/persistent truants, children of teenage parents, young people from some black and minority ethnic groups (primarily Caribbean, Pakistani and Bangladeshi). Despite startling inequalities in who becomes a teenage parent, virtually no data seems to exist on how best to prevent pregnancies for these groups, or how to support them and improve their outcomes if they do become young parents. (NICE briefing).

- The evidence about the effectiveness of interventions to reduce infant mortality is weak, particularly those that will narrow the gap between the R&M group and the overall population. (DH review of the health inequalities infant mortality PSA target, February 2007.279)

- There are few studies which have evaluated other types of community-based programmes in meeting the emotional well-being and mental health needs of children and young people (such as through the use of youth groups and clubs). (Thomas Coram Research Unit, Institute of Education)

- There has been little evaluation of local projects aimed at tackling child poverty in London. Most initiatives are small in scale and evaluating local projects requires a light touch. (London Child Poverty Commission, 2007).

- For unemployment, there is only limited UK evidence on the effectiveness of labour market programmes for people of Black, Asian and other minority ethnic origin. Some of the explanation for this appears to be that people of minority ethnic origin are over-
represented in the kind of provision (such as basic skills training) where the benefits are slow to emerge. (GLA-LDA What works in tackling worklessness).

- Most interventions for long-term sick and disabled people have not been shown to be effective. It is not clear what is likely to work for this important group, although the early indications from the Pathways to Work evaluation are encouraging. (GLA-LDA What works in tackling worklessness).

- There appears to be no published studies of evaluations of workplace mental health policies, either in the UK or internationally. There is an absence of large randomised control trials (RCTs) and well designed large-scale qualitative studies to provide evidence in support of effective workplace interventions for people with common mental health problems. (British Occupational Health Research Foundation, 2005).

- The literature linking home conditions with educational progress is thin and underdeveloped. In particular, there is a significant gap in understanding of how the evidence on overcrowding relates to educational attainment. (Ambrose). Additionally, very little is known about the relationship between overcrowding, children’s mental health, educational attainment and childhood growth and development. (ODPM).

- There is a lack of evidence regarding the effectiveness or cost effectiveness of interventions that target specific housing elements that are known to affect health outcomes. Similarly, there is a lack of evidence of effectiveness of housing-related interventions that might seek to address problems in the broader social and behavioural environment such as overcrowding, sleep deprivation, neighbourhood quality, infrastructure deprivation (i.e. lack of availability and accessibility of health services, parks, stores selling healthy foods at affordable prices); neighbourhood safety; and social cohesion. (NICE, Housing and public health: a review of reviews of interventions for improving health: Evidence briefing, December 2005)

- There is a lack of evidence of effectiveness of housing-related interventions that relate to the broader macro-policy environment such as housing allocation, lack of housing, housing tenure, housing investment, and urban planning. (NICE, Housing and public health: a review of reviews of interventions for improving health: Evidence briefing, December 2005)

- There is no strong evidence on the effectiveness of preventative services to counteract potential homelessness among people with a history of substance misuse. Most models of prevention are generic, i.e. they are intended to counteract the risk of homelessness across many groups, including people with a history of substance misuse, rather than being particularly focused on one group. There is a general lack of information about the extent to which successful service outcomes are maintained over time. (The Scottish Government, 2008.280)

- There is no good theoretical account of how to build social capital. (Kawachi, 1997).

- There is a lack of review-level evidence for the effectiveness of interventions to reduce inequalities in road injury rates in children under 15. Very few studies have explicitly investigated child accidental injury in relation to inequalities. (NICE Transport interventions promoting safe cycling and walking, July 2006). Very few studies have examined the impact of interventions in different social groups (Dowsell & Towner,
1 London Health Commission, Health in London 2005 update, October 2005
2 Greater London Authority, Focus on London 2009,
4 Department of Health, Tackling Inequalities; Status report, 2008
5 Association of Public Health Observatories
6 Department of Health (2008) op.cit.
8 The Fabian Society, Born Unequal: Why we need a progressive pre-birth agenda, 2007
9 Barker 1998
10 Research by Elizabeth Costello, Duke University Medical School, North Carolina, published in the ‘Archives of General Psychiatry’
11 Dibben, C., Area deprivation, individual factors and low birth weight in England: is there evidence of an “area effect”? Journal of Epidemiology and Community Health, 2006
12 ONS, Health Statistics Quarterly, Summer 2009
13 Families with children in Britain: Findings from the 2005 Families and Children Study (FACS)
14 Greater London Authority, 2001 Census: Health by ethnic group, religion and country of birth, DMAG Jan 2006
15 Bruce P Kennedy, Ichiro Kawachi et al., Income distribution, socio-economic status and self-rated health in the United States: multi-level analysis, BMJ, date?
17 London Health Observatory, Ethnicity and mortality in London, March 2009
18 The Health Status of Gypsies & Travellers in England; Report of Department of Health Inequalities in Health Research Initiative Project 121/7500, October 2004
19 ONS, Cancer survival lower in deprived areas, September 2008
21 Diabetes UK, Diabetes and the disadvantaged: reducing health inequalities in the UK, 2006
22 Health of Londoners Project, Developing health assessment for black and minority ethnic groups, 2000
24 Federation of Irish Societies
25 Health of Londoners Project, Developing health assessment for black and minority ethnic groups, 2000
26 Acheson, 1998
27 Marmot & Wilkinson, Psychosocial and material pathways in the relation between income and health, BMA 2001
28 DRC health inequalities investigation 2006 – subject to peer review
29 Disability Rights Commission, Equal Treatment: Closing the Gap, 2004
30 NHS Health Scotland 2004
31 Elliott et al 2003
32 Healthcare for London: a framework for action
33 London Health Observatory. The London Health Inequalities Forecast, November 2006
35 Mayhew and Bradshaw, 2005; Nelson, 2000; Prince et al., 2006
37 London School of Economics, 2006
38 New Philanthropy Capital, A long way to go, April 2007
41 Healthcare for London: a framework for action
42 Family Planning Association (FPA)
43 African HIV Policy Network
44 Ruth Hunt and Dr Julie Fish, Prescription for Change Lesbian and bisexual women’s health check 2008
47 London Development Centre, Care Services Improvement Partnership: Response to Healthcare for London: A framework for action
48 The London Paper 08/03/2007 p1
50 Healthcare for London: a framework for action - draft report from the Staying Healthy working group

74
51 Alistair Story et al., Tuberculosis in London - the importance of homelessness, problem drug use and prison
http://thorax.bmj.com/cgi/content/abstract/thx.2006.065409v1
52 APHO, Indications of Public Health in the English Regions 7: Mental Health, 2007
55 Fone, DL, Dunstan, F, Mental health, places and people: A multilevel analysis of economic inactivity and social deprivation, Health and Place
56 Nat Cen / University of Leicester / NHS Information Centre, Adult psychiatric morbidity in England, 2007: Results of a household survey, 2009
57 HomelessLink, Ending homelessness: From vision to action
58 London Development Centre, Care Services Improvement Partnership: Response to Healthcare for London: A framework for action
59 Choosing Health Fact Sheet
64 Mayor of London, Destitute by design: Withdrawal of support from in-country asylum applicants; An impact assessment for London, February 2004
65 GLA, MRAP special workshop, 4th January 2006
66 New Philanthropy Capital, A long way to go, April 2007
67 Meltzer et al, The Mental Health of Children and Adolescents, ONS 2000
68 ONS, Three years on: Survey of the development and emotional well-being of children and young people, 2008
69 Eric Emerson & Chris Hatton, The Mental Health of Children and Adolescents with Learning Disabilities in Britain, Lancaster University, January 2007
71 Claire Maxwell et al., The emotional well-being and mental health of young Londoners – a focused review of evidence; Thomas Coram Research Unit, Institute of Education, University of London, April 2007
72 Anna Goodman*, Vikram Patel and David A Leon, Child mental health differences amongst ethnic groups in Britain: a systematic review, BMC Public Health, July 2008
73 Lynne Friedli, Mental health, resilience and inequalities, WHO 2009
76 Family & Parenting Institute, Health visitors: A progress report, April 2009
78 Citizen’s Advice Bureau, Unhealthy charges, April 2001
79 Age Concern, Tackling Age Discrimination Beyond the Workplace: Age Concern Seminar Series, July 2006
80 London Assembly Health & Public Services Committee, Behind the Screen, March 2008
81 Age Concern England, Age of equality? Outlawing age discrimination beyond the workplace, 2007
82 Policy and Research Institute on Ageing and Ethnicity (PRIAE)
83 Submission from Dr Justin Varney (Gay and Lesbian Association of Doctors and Dentists
85 The ‘Count Me In’ census results for 2005 found that people from Black and minority ethnic backgrounds were more likely to be on a psychiatric inpatient ward than the White British and nearly twice as likely to be on a Section.
86 Mayor of London, Availability of mental health services in London, 2003
87 LHO, Equal Access, Equal Care? Can London Deliver the Race Equality Action Plan for Mental Health?
88 Claire Maxwell et al., The emotional well-being and mental health of young Londoners – a focused review of evidence; Thomas Coram Research Unit, Institute of Education, University of London, April 2007
89 St Mungo’s Health Report, Homelessness makes you sick, September 2008
90 ODPM, Addressing the health needs of rough sleepers, 2002
91 Patel, B and Kelley, N, The social care needs of refugees and asylum seekers, Social Care Institute for Health, 2006
92 BRIL reference paper
93 Mayor of London and London Assembly, Access to Primary Care in London, April 2003
95 Medecins Du Monde, Project London: Helping vulnerable people access healthcare, 2006
97 Ruth Hunt and Dr Julie Fish, Prescription for Change Lesbian and bisexual women’s health check 2008
98 The Equalities Review, Engendered Penalties: Transgender and Transsexual People’s Experiences of Inequality and Discrimination, February 2007
100 Kawachi, Paddling Upstream: Contributions of social determinants to population health, 2006
102 Joint Health Surveys Unit, 2001
103 NICE Obesity Guidelines
105 Pickett, Wilkinson et al, Wider income gaps, wider waistbands, 2005
108 Centre for Longitudinal Studies, Millennium Cohort Study: Childhood Obesity, Briefing 12 June 2007
109 Nick Cavill & Dr Adrian Davis, Cycling & Health: What’s the Evidence, Cycling England, August 2007
112 Sustrans, Active travel and health inequalities, Information Sheet FH12, November 2008
113 Save the Children
114 Times Higher Education Supplement 29/06/2007 p8
116 Nick Cavill & Dr Adrian Davis op.cit.
117 LTDS 2006/07 Household Survey
118 The research was conducted for Cycling England by YouGov, who interviewed 1,099 women, online between 11th and 13th August 2008. The men cycling three times as much as women statistic is taken from the Department for Transport National Travel Survey, 2005.
119 Marmot & Wilkinson, op.cit
121 Marmot & Wilkinson, op.cit
122 http://www.food.gov.uk/science/dietarysurveys/lidnsbranch/
123 S Friel, O Walsh, D McCarthy (2008) The irony of a rich country: issues of financial access to and availability of healthy food in the Republic of Ireland
124 Simon Kyte and Alkesh Hirani, Food price increases and their impact on London’s lowest income groups, GLA Economics, December 2008
125 Department of Health (2008) Tackling Inequalities; Status report
126 Submission from Action for Smoking and Health (ASH)
127 DMAG, Focus on London 2009
129 http://www.lho.org.uk/HIL/Lifestyle_And_Behaviour/Smoking.aspx
130 Action for Smoking and Health (ASH)
131 Ruth Hunt and Dr Julie Fish, Prescription for Change Lesbian and bisexual women’s health check 2008
133 Marmot & Wilkinson, op.cit
134 Choosing Health Fact Sheet
135 The National Centre for Social Research (NatCen)
136 LHO, Choosing Health: A briefing on reducing alcohol-related harm and encouraging sensible drinking in London, June 2006
137 Nat Cen / University of Leicester / NHS Information Centre, Adult psychiatric morbidity in England, 2007: Results of a household survey, 2009
138 Institute of Alcohol Studies, Alcohol and Mental Health Factsheet, April 2006
139 NICE, Drug use prevention among young people, 2004
140 Advisory Council on the Misuse of Drugs (ACMD), 1998
141 Nat Cen / University of Leicester / NHS Information Centre, Adult psychiatric morbidity in England, 2007: Results of a household survey, 2009
142 Mayor of London, Young refugees and asylum seekers in Greater London: vulnerability to problematic drug use, July 2004
143 Figures obtained by Andrew Lansley MP
146 Combined Homelessness and Information, which is managed by Broadway
147 Submission from The Stella Project
148 Submission from Eaves
149 NICE Teenage pregnancy and parenthood: A review of reviews (evidence briefing)
150 New Philanthropy Capital, A long way to go, April 2007
151 London Assembly Health and Public Services Committee, Young Londoners’ sexual health: An update review, August 2009
152 Association of Public Health Observatories
153 NICE, above
154 IFS press release; 7 May 2009
155 Institute for Fiscal Studies, Poverty and inequality in the UK, 2007
157 DMAG analysis of Department of Work and Pensions 2007/08 Family Resources Survey
158 DMAG, Paycheck 2008, DMAG Briefing 2008-33 November 2008
159 Wilkinson R., The epidemiological transition: from material scarcity to social disadvantage?, 1994
160 Kennedy, Kawachi et al., Income distribution, socio-economic status and self-rated health in the United States, BMJ
161 David Coates, Catherine Max, Healthy Work: Productive Workplaces: Why the UK needs more “good jobs”, December 2005
163 Pickett, Wilkinson et al, Wider income gaps, wider waistbands, 2005
166 Mayor of London, Housing in London 2008: London Housing Strategy evidence base
169 Leitch, Prosperity for all in the global economy – world class skills: final report, December 2006
171 Bradshaw, The wellbeing of children in the UK, 2005
172 IPPR, Disability 2020: opportunities for the full and equal citizenship of disabled people in Britain 2020
174 Jo Blanden et al., The GDP cost of the lost earning potential of adults who grew up in poverty, Joseph Rowntree Foundation, October 2008
177 IPPR, Nice Work If You Can Get It: Achieving a sustainable solution to low pay and in-work poverty, January 2009
181 Cabinet Office, CCSU, UCL, Work, Stress, Health: The Whitehall II Study, 2004
182 London Health Commission, Health in London 2006/07
183 Marmot & Wilkinson, op.cit
186 DWP, Persistent employment disadvantage, April 2007
188 DMAG analysis of the LFS
189 DWP 2005 and Mental Health: Britain’s Biggest Social Problem, Richard Layard, December 2004
191 Prime Minister’s Strategy Unit, Improving the Life Chances of Disabled People: Analytical Report, June 2004
199 Research by HM Treasury
200 Leitch, Prosperity for all in the global economy – world class skills: final report, December 2006
202 Fletcher et al, 1998
203 Leitch
204 Prime Minister’s Delivery Unit 2005
206 JRF, Tackling low educational achievement, 2007
207 Cabinet Office Strategy Unit, Getting on, getting ahead: A discussion paper: analysing the trends and drivers of social mobility, November 2008
209 The Sutton Trust, Recent Changes in Intergenerational Mobility in the UK: A Summary of Findings, (2007)
210 Greater London Authority, Focus on London 2009
211 Greater London Authority, Focus on London 2008
212 Mayor of London, Community safety Quarterly Issue 1
215 Greater London Authority, Focus on London 2008
216 Paper by Ian McCullum, education consultant
217 JRF, Tackling low educational achievement, 2007
219 Cabinet Office Strategy Unit op.cit.
220 Shelter, Chance of a lifetime, 2006
221 Ambrose, The costs of poor housing, 2002
222 DCLG, English House Condition Survey, 2005)
223 CLG Borough Business Plan Statistical Appendix - Annual Monitoring
224 CSIP, Good housing and good health?
225 London Health Commission, Health in London 2006/07
226 The Mayor of London, The London Housing Strategy op.cit
227 DWP, 2004 Families and Children Study
228 Ineichen, 1993
229 Study by Greenwich PCT
230 Wilkinson, Pattenson et al., Vulnerability to winter mortality in elderly people in Britain, BMJ 2004
231 Wilkinson, 2001
232 Ormandy, Energy efficiency, health and housing standards in England
233 Social Exclusion Unit, 1998; Bines, 1994; Burrows et al, 1997
234 Sian Griffiths, Addressing the health needs of rough sleepers, ODPM 2002)
235 SOS Sick of Suffering, St Mungo’s 2006
236 Alistair Story et al., Tuberculosis in London - the importance of homelessness, problem drug use and prison
http://thorax.bmj.com/cgi/content/abstract/thx.2006.065409v1
237 Shelter, Chance of a lifetime, 2006
238 The Mayor of London, The London Housing Strategy op.cit
239 LHO website
240 Mayor of London, Safe and Sound: Asylum seekers and temporary accommodation, June 2004
241 London Health Commission, Health in London 2006/07
242 Wheeler and Ben-Schlomo, Environmental equity, air quality, socioeconomic status, and respiratory health: a
linkage analysis of routine data from the Health Survey for England. Journal of Epidemiology and Community
Health, 2005
243 Jerrett, 2003
245 Kristin A. et al., Long-Term Exposure to Air Pollution and Incidence of Cardiovascular Events in Women, New
246 GLA Environment Committee, Every Breath You Take: An investigation into air quality in London, May 2009
247 WHO, Guidelines for Community Noise, April 1999
248 LHO
249 British Crime Survey: Based on people aged 16 and over for England and Wales for 2005/06
250 Leitch, 2006
251 Ambrose, 2002
252 London Health Commission, Health in London 2004
253 Community safety and Community Cohesion: preparing the Mayor’s Strategy for London: Report by GLA
Policy Support Unit and Community Safety Team
254 See for example, Green et al, 2002
255 British Crime Survey 2005/06
256 Home Affairs Select Committee Inquiry into Young Black People and the Criminal Justice System: Memorandum from the Mayor of London
257 Transport for London, Travel 2025
258 Marmot & Wilkinson, op.cit
260 London Health Observatory
261 Association of Public Health Observatories
262 London School of Hygiene and Tropical Medicine, Road Safety of London’s Black and Asian Minority Ethnic
Groups: A report to the London Road Safety Unit, 2007
263 Phil Edwards, Judith Green et al, Deprivation and road injury
264 Audit Commission, Better safe than sorry, February 2007
265 Health Development Agency, Childhood accidents update: Promoting young people’s health using the Health
Behaviour in School-aged Children (HBSC) study and the Health Development Agency’s Evidence Base
266 Richard Mitchell & Frank Popham,Effect of exposure to natural environment on health inequalities: an
observational population study, The Lancet, Volume 372, Issue 9650, Pages 1655 - 1660, 8 November 2008
267 Jolanda Maas et al., Green space, urbanity, and health: how strong is the evidence, 2006; 60; 587-592 J.
Epidemiol. Community Health
268 The Mayor of London, The London Housing Strategy op.cit
269 HPA, Health Effects of Climate Change in the UK 2008: An update of the Department of Health report
270 Flooding and human health, BMJ 2000;321:1167-1168 ( 11 November )
271 Ian Roberts, Carbon rationing and public health, London School of Hygene and Tropical Medicine
272 DH, Health Effects of Climate Change in the UK
273 Anu Rangarajan, David Wittenburg et al., Programmes to promote employment for disabled people: Lessons
274 House of Commons Health Committee, Health Inequalities: Third Report of Session 2008–09 Volume,
February 2009
275 NICE promoting and creating built or natural environments that encourage and support physical activity, Public Health Guidance 8, January 2008
276 Moore et al, 2006 The role of traffic-free routes in encouraging cycling among excluded group: A case study of the National Cycle Network, World Transport Policy and Practice
277 London Play, Can I play out...? Lessons from London Play’s Home Zones project, March 2007
278 NICE promoting and creating built or natural environments that encourage and support physical activity, Public Health Guidance 8, January 2008