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HEALTH: CHILDREN AND YOUNG PEOPLE

HEALTH: CHILDRENANDYOUNGPEOPLE

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Introduction

The health and wellbeing of London's children and young people is fundamental to the health of the city. The recent Marmot Review of health inequalities noted that "What a child experiences during the early years lays down the foundation for the whole of their life." The Mayor's Health Inequality Strategy for London responds to this by challenging all partners in London to create "conditions that lead to better early years experiences".

This chapter provides recent evidence on the health experience of children and young people in London. It reveals many areas of inequality within the city, but also highlights the ways in which London's children are doing well. Estimates suggest that smoking, drinking and drug use are not as prevalent as in many other English regions, and the risk of injury is not as high. However, levels of childhood obesity in the capital are high, as is the teenage pregnancy rate, and children in London are also less likely to be immunised than those in other English regions. The chapter concludes with an update of key indicators of life expectancy and mortality for London.

Executive Summary

> London's infant mortality rate in 2006-08 was 4.6 deaths per 1,000 live births, which was similar to the England average. However, rates varied substantially between ethnic groups within the capital. The infant mortality rate among those in the Black/Black British group was significantly higher than the London average and more than double the rate for the White ethnic group.

> Women in London are more likely than average to start breastfeeding their newborn babies. In 2008/09, 84 per cent of mothers in London started breastfeeding compared with 72 per cent in England as a whole.

> Compared with other parts of the country, immunisation levels in London are low. In 2008/09, 76 per cent of children aged under two were immunised for measles, mumps and rubella (MMR), compared with the England average of 85 per cent.

> There were more than 15,500 hospital admissions in 2008/09 as a result of either unintentional or deliberate injury to a child or young person (aged 0-17).

> London has a high prevalence of childhood obesity. In 2008/09, 11 per cent of children in Reception, and 21 per cent of children in Year 6, were at risk of being obese. Children living in the more deprived areas of London were at greater risk of being obese than those in the less deprived areas.

> It is estimated that less than a quarter of girls and only a third of boys (aged 2-15) living in London achieved the recommended level of physical activity in 2008.

> Five per cent of pupils aged 11-15 in London reported smoking regularly in 2006-08. Girls were more likely than boys to be regular smokers. A separate survey, among a sample of London children aged 4-15 who did not currently smoke, found that more than half had been exposed to secondhand smoke.

> Around 640 Londoners aged under 18 are admitted to hospital each year for conditions specifically related to alcohol. However, in the period from 2006/07 to 2008/09, the hospital admission rate in London (39 admissions per 100,000 population) was much lower than the England average (65 per 100,000) .

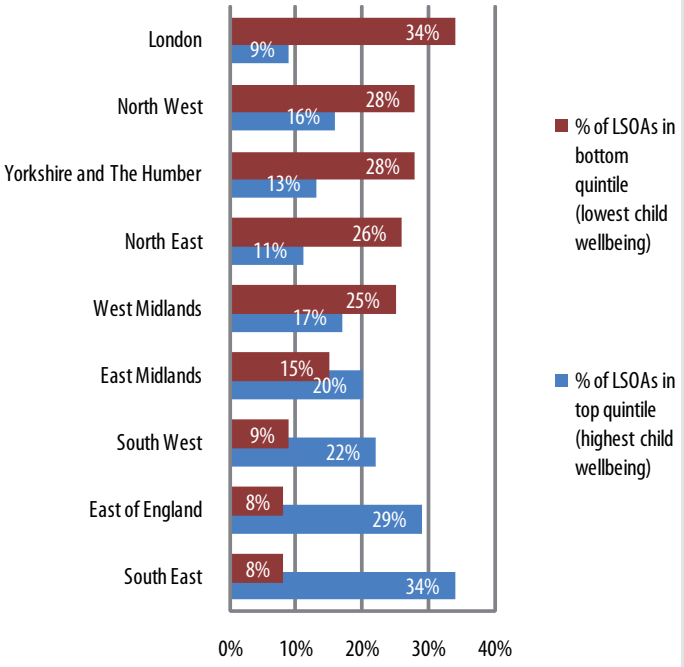
> In 2009, there were more than 25,100 new diagnoses of chlamydia among young people (under 25 years) in London. Of the people who were tested for chlamydia, young women were more likely to be diagnosed with the infection than young men.

Local Index of Child Wellbeing

Child wellbeing is often represented by how children are doing in a range of different areas of their life. The Child Wellbeing Index (CWI) has recently been developed for use at local level in England. It contains indicators across seven domains which have an impact on child wellbeing: health, material wellbeing, education, crime, housing, environment and children in need. The CWI is available for small, geographical areas, known as Lower Super Output Areas (LSOAs) of which there are nearly 4,800 in London. Summary results are also available for local authorities which show that eight London boroughs are among the 20 local authorities in England with the lowest average child wellbeing.

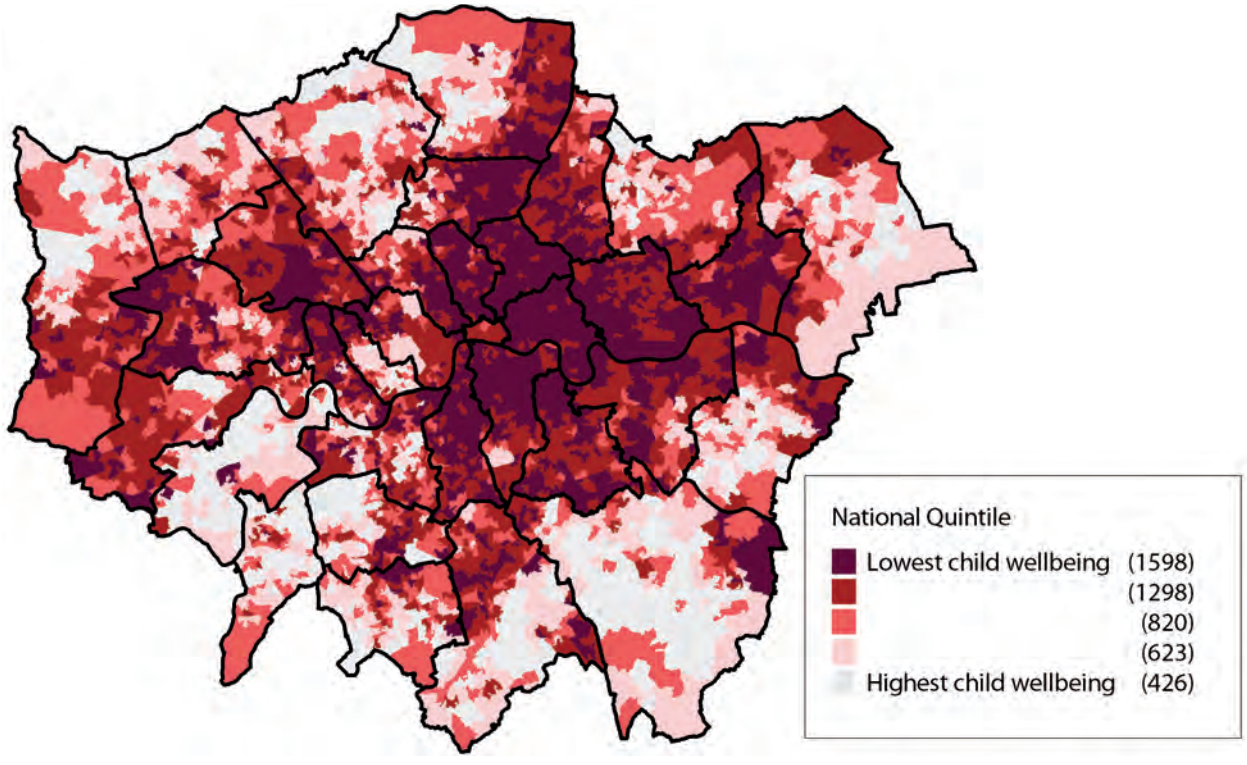
LSOAs can be ranked by their CWI scores and divided into five categories (quintiles). The top quintile then represents the 20 per cent of areas with the highest child wellbeing. Only nine per cent of London's LSOAs fall into this category, the lowest proportion of any English region (Chart 1). London also has the highest proportion of small areas which were classified as having the lowest child wellbeing. The LSOAs within London with the highest and lowest CWI scores can be seen in Figure 1.

Chart 1: The Regional Distribution of LSOAs with Highest and Lowest Child Wellbeing, percentage



Source: Communities and Local Government, Child Wellbeing Index 2009

Figure 1: Level of Child Wellbeing by LSOA, London



Source: Communities and Local Government, Child Wellbeing Index 2009

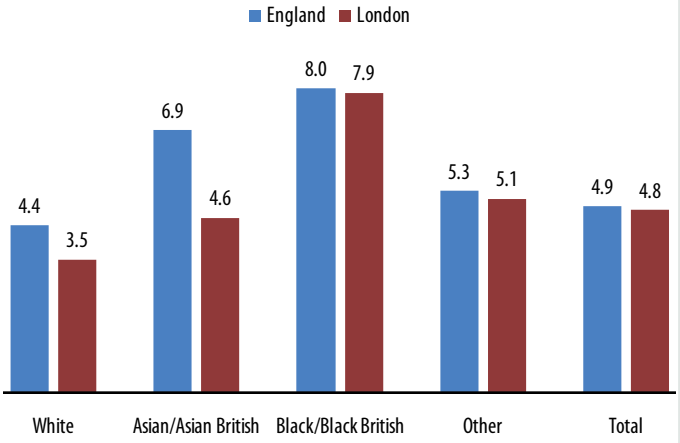
Infant Mortality

The infant mortality rate (IMR) is a key indicator of levels of child health and is associated with factors such as maternal health, quality of, and access to, medical care, and socio-economic conditions.

London's infant mortality rate in 2006-08 was 4.6 deaths per 1,000 live births, which was not significantly different to the England average. However, there is great variation across London boroughs (Table 2, p.14). In 2006-08, Kingston, Kensington and Chelsea, and Richmond all had the lowest infant mortality rates (2.2 deaths per 1,000 live births), while Southwark had the highest (7.3 deaths per 1,000 live births).

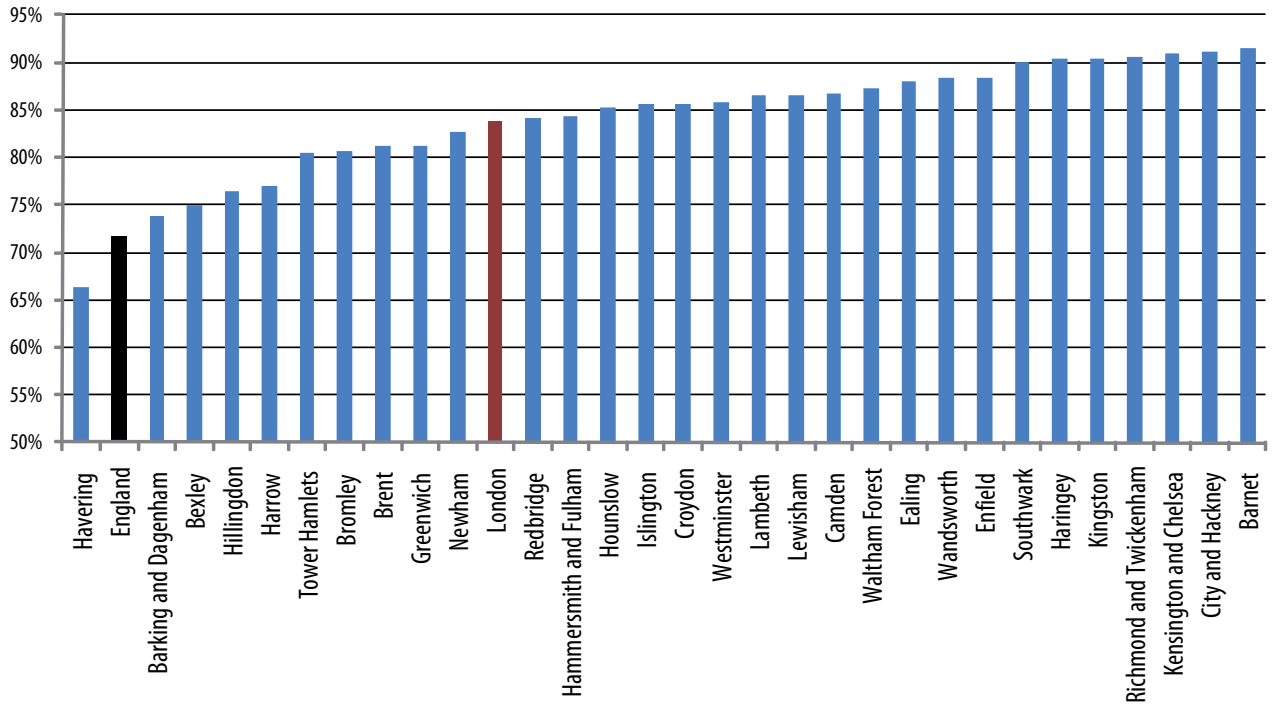
Infant mortality rates within London also differ substantially by ethnic group (Chart 2). The most recently available data (2005-06) show that the IMR for the White ethnic group in London was 3.5 deaths per 1,000 live births, significantly lower than both the overall London rate (4.8) and the average for the White group nationally (4.4) The IMR amongst those in the Asian/ Asian British group in London was also significantly lower than the Asian/Asian British group national average, although it was similar to the overall London average. However, for those in the Black/Black British ethnic group, the rate was 7.9 deaths per 1,000 live births in 2005-06, similar to the Black/Black British group national average but significantly higher than the overall London average, and more than double the rate for the White ethnic group in London.

Chart 2: Infant Mortality by Ethnic Group, London and England, 2005-06, per 1,000 live births



Source: Office for National Statistics

Chart 3: Mothers Who Start Breastfeeding, London Primary Care Trusts, 2008/09, percentage



Note: Data from Sutton and Merton did not meet validation criteria and are therefore not reported.

Source: Department of Health, Vital Signs Monitoring Return 2008/09

Breastfeeding

Breastfeeding provides short and long term physical and emotional benefits to both mother and child. In 2008/09, 84 per cent of mothers in London started breastfeeding their newborn babies, more than the England average of 72 per cent. However, breastfeeding initiation varied greatly between Primary Care Trusts (PCTs) in London (Chart 3, p.6). Barnet had the highest proportion (92 per cent) of mothers who started breastfeeding. The lowest proportion was in Havering (66 per cent), the only PCT which was lower than the England average.

Immunisation

Immunisation is an important part of preventive public health in children. The UK has a recommended immunisation schedule for children and young people from two months to 18 years. If more people choose not to immunise their children, then the number of children at risk of catching a disease will increase and outbreaks of the disease may occur.

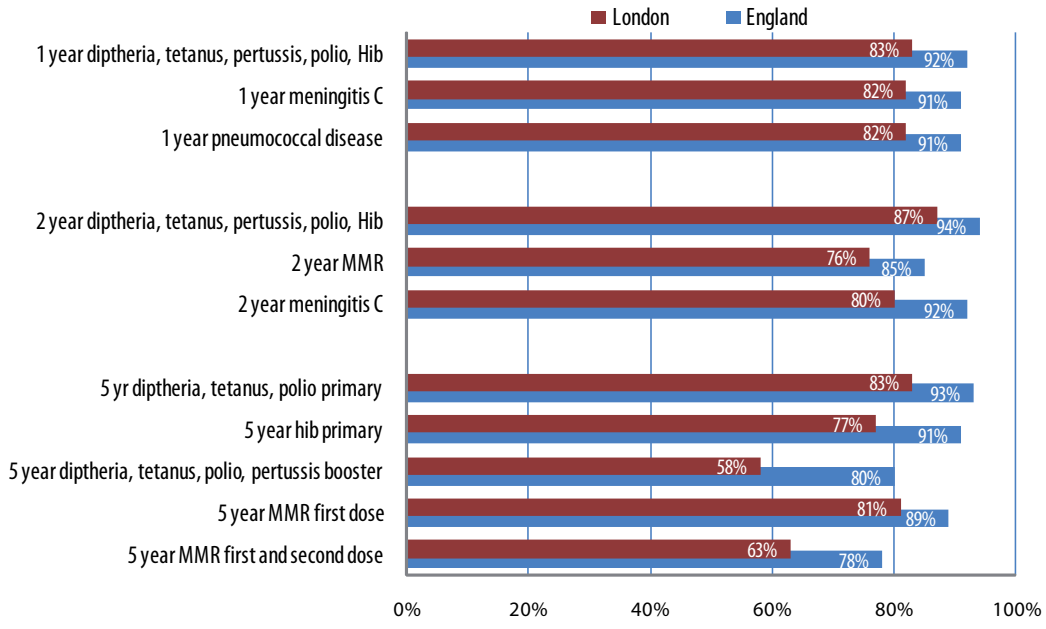
Although the majority of children in London are immunised, levels are low compared with averages for England (Chart 4). In 2008/09, 76 per cent of children under 2 were immunised for measles, mumps and rubella (MMR), compared with the England average of 85 per cent. Meningitis C immunisation was also lower than average, with 80 per cent of London's under twos immunised compared with the national average of 92 per cent. Similarly, 87 per cent of London's children under two received the combined vaccine for diphtheria, tetanus, pertussis, polio and hib (haemophilus influenza type b), while 94 per cent received it nationally. Similar patterns were seen amongst children at both one and five years of age.

Injury

Injuries, such as the results of falls, burns, poisonings and road traffic accidents, are a leading cause of death among children, and put more children in hospital than any other cause. Preventing injury is, therefore, an important component of wider efforts to improve the health of children and young people.

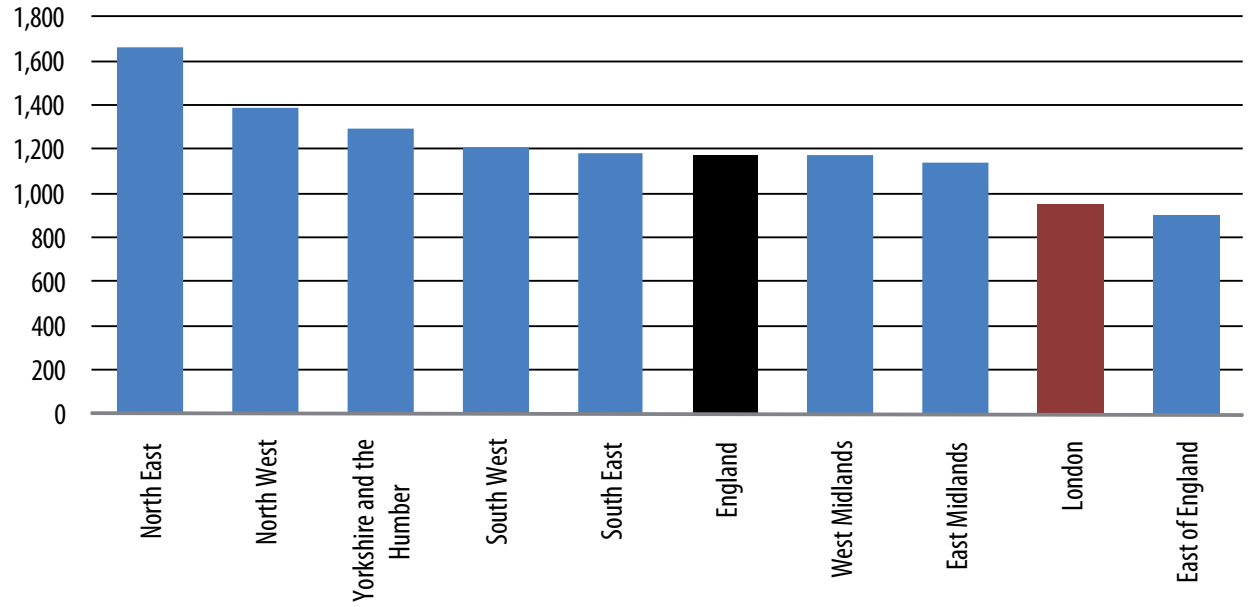
The rate of admission to hospital following injury is the second lowest among English regions (Chart 5, p.8). In 2008/09 in London, for every 100,000 children and young people aged 0-17, there were 948 hospital admissions following injury. The national rate, at 1,174 per 100,000, was significantly higher. Although London's rate was comparatively low, it still equated to more than 15,500 hospital admissions per year as a result of either unintentional or deliberate injury to a child or young person.

Chart 4: Children Immunised by Their First, Second and Fifth Birthdays, London and England, 2008/09, percentages



Source: Health Protection Agency data reported by the Information Centre

Chart 5: Hospital Admission Following All Injuries (0-17 years), England, 2007/08, rates per 100,000 population



Source: The Information Centre for Health and Social Care

Childhood Obesity

Over recent decades, childhood obesity rates have increased substantially in England, as they have in many other parts of the world. Obesity in adulthood is associated with a range of chronic conditions, including diabetes, heart disease, high blood pressure and some cancers. As obese children are more than twice as likely to become obese adults, preventing childhood obesity carries benefits for later in life.

The National Child Measurement Programme (NCMP) was established in 2005 as an integral component of the Government's strategy to reduce childhood obesity. Every year, the programme measures the height and weight of children in Reception (usually aged 4-5 years) and Year 6 (usually aged 10-11). Data from the NCMP are used to calculate a child's Body Mass Index which is then applied to an age and sex-specific national standardised reference curve. This is used to classify whether children are overweight or obese. For example, children who are in the top five per cent of the reference curve are classified as obese. As the definitions of obesity and overweight are based on children's position on the reference curve, the term 'at risk of' is used to emphasise that this not a clinical diagnosis.

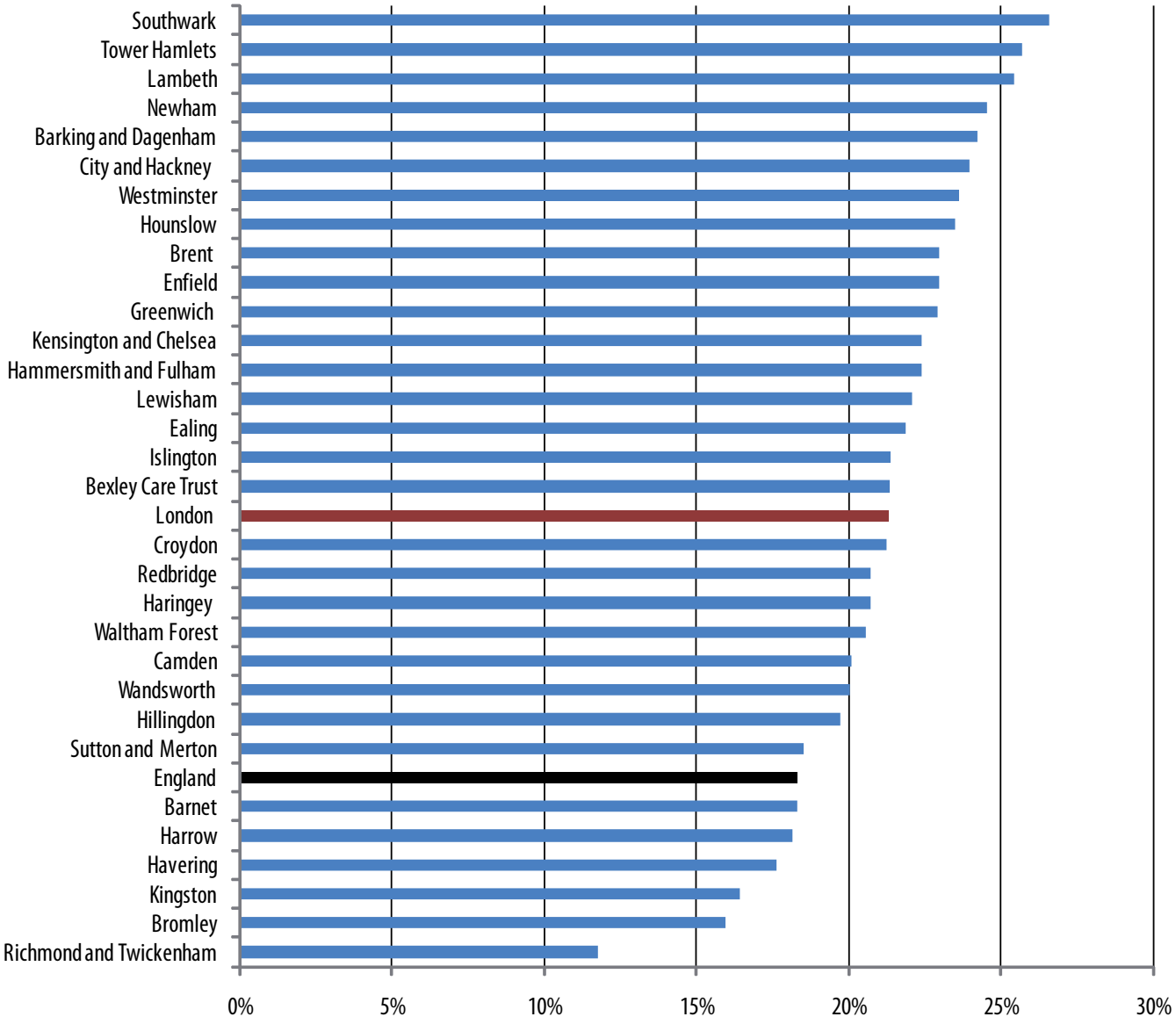
Boys are more likely to be at risk of obesity but at the same time a higher proportion of boys meets the recommended level of physical activity.

Compared with the England average, London has a high prevalence of childhood obesity. In London in 2008/09, 11 per cent of children in Reception, and 21 per cent of children in Year 6 were at risk of being obese. A further 12 per cent of children in Reception and 15 per cent in Year 6 were at risk of being overweight. Boys were more likely than girls to be at risk of obesity in both age groups.

There is significant inequality in the risk of childhood obesity between London's Primary Care Trusts (Chart 6, p.9). In 2008/09, the prevalence among children in Year 6 ranged from 12 per cent in Richmond and Twickenham to 27 per cent in Southwark.

There are also inequalities in the risk of obesity by level of deprivation. Based on their home address, children were assigned to one of ten deprivation groups within London. In 2008/09, 25 per cent of Year 6 children living in the most deprived areas were at risk of obesity. For children living in the least deprived areas this figure was only 15 per cent.

Chart 6: Year 6 Children at Risk of Being Obese, London Primary Care Trusts, 2008/09, percentages



Source: National Child Measurement Programme (NCMP). Information Centre

Ethnicity also appears to be associated with the risk of childhood obesity. Among children in Year 6 in 2008/09, those in the Black ethnic group had a significantly higher risk of obesity (26 per cent) compared with the London average (21 per cent), while those in the White ethnic group had a significantly lower risk (19 per cent).

Physical Activity

Physical activity during childhood has a range of benefits including healthy growth and development, psychological wellbeing and social interaction. The Chief Medical Officer recommends that children and young people should be active at moderate or greater intensity for at least 60 minutes every day through structured exercise and sport, as well as active games and play.

The 2008 Health Survey for England found that for children aged 2-15, only 33 per cent of boys and 24 per cent of girls in London achieved this recommended level of physical activity in the previous week. These results were similar to the England average.

Diet

A healthy diet is essential for children's growth and development and, along with physical activity, can also help to prevent or reduce the risk of obesity.

Although current recommendations in the UK are that children should eat at least five portions of fruit and vegetables each day, three quarters of London's children eat less than this. In 2008, only an estimated 23 per cent of boys and 24 per cent of girls (aged 5-15) in London ate at least five portions of fruit and vegetables per day. However, these figures are higher than the England average of 19 per cent of boys and 20 per cent of girls.

Smoking

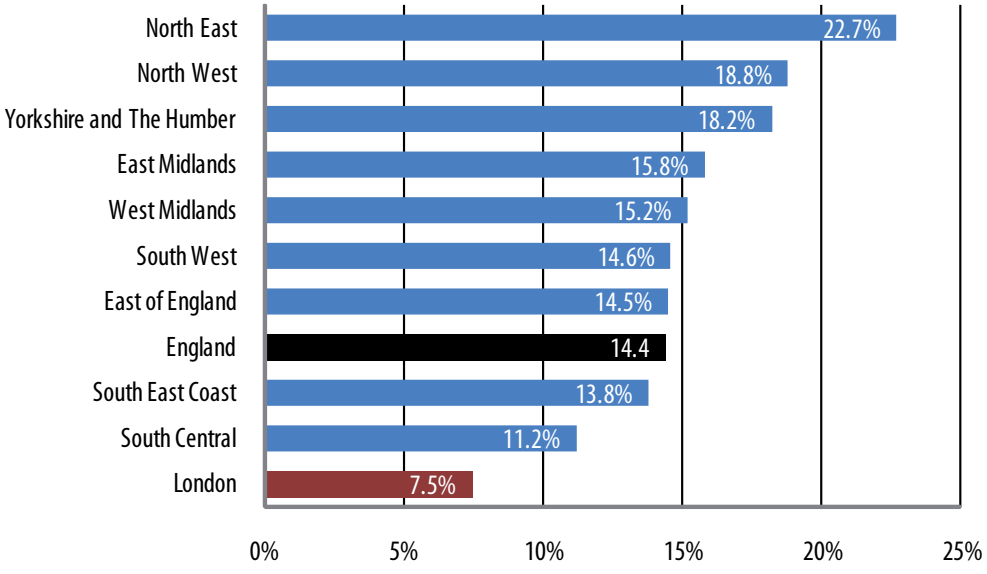
Although the harmful effects of smoking have been well known for several decades, smoking remains one of the UK's leading causes of preventable disease and early death. Taking up smoking at an early age greatly increases these health risks, such as developing lung cancer. Children and young people who start smoking are more likely to continue smoking as adults, and are less likely to give up than those who start smoking in later life.

In London in 2006-08, 31 per cent of pupils aged 11-15 reported smoking at least once, while five per cent reported smoking regularly. Both figures are the lowest of all English regions. Girls were more likely than boys to be regular smokers.

Three quarters of children in London eat less than the recommended five portions of fruit and vegetables a day.

Secondhand smoke exposure ('passive smoking') is also known to be detrimental to health, and infants and young children are particularly vulnerable. The 2008 Health Survey for England examined both smoking prevalence and exposure to secondhand smoke among children. Measurements included self-reported behaviour and saliva cotinine, a marker of current smoking or recent exposure to secondhand smoke. The survey found that among a sample of London children aged 4-15 who did not currently smoke, more than half had detectable cotinine levels indicative of exposure to secondhand smoke.

Chart 7: Women Who Smoke during Pregnancy, Strategic Health Authorities, 2008/09, percentages



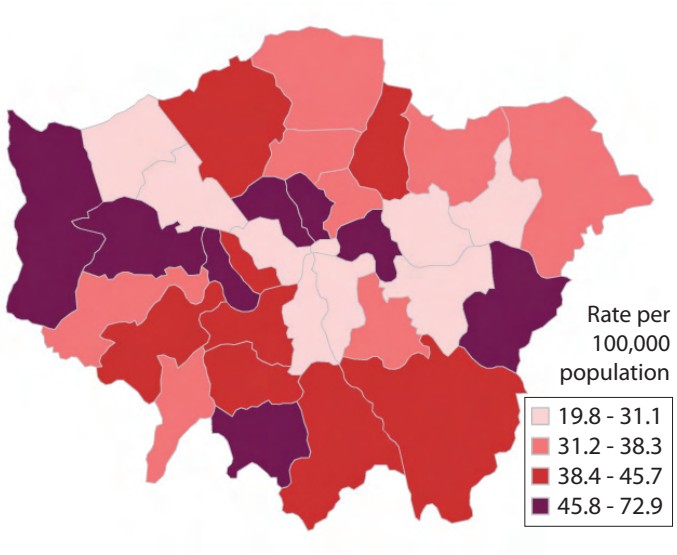
Source: Department of Health

Smoking during pregnancy increases the risk of complications during pregnancy and labour, and the risk of infant death. Although women in London were almost half as likely to smoke while pregnant compared with the England average (7.5 per cent compared to 14.4 per cent), one in 13 women in London smoked during pregnancy in 2008/09 (Chart 7).

Figure 2: Alcohol-specific Hospital Admission Rates for Under 18s, London boroughs, 2006/07 to 2008/09

Area	Rate per 100,000 population
Sutton	72.9
Islington	70.0
England	64.5
Hammersmith and Fulham	58.6
Ealing	57.5
Hillingdon	51.7
Bexley	51.5
Tower Hamlets	49.1
Camden	46.5
Bromley	45.7
Richmond upon Thames	45.5
Waltham Forest	43.6
Merton	40.9
Barnet	40.9
Kensington and Chelsea	40.7
Wandsworth	40.3
London	39.3
Croydon	38.9
Kingston upon Thames	38.3
Haringey	37.5
Redbridge	36.6
Hounslow	36.5
Lewisham	36.3
Hackney	35.2
Havering	34.1
Enfield	32.4
Barking and Dagenham	31.1
Greenwich	30.1
Harrow	26.8
Newham	25.3
Brent	22.8
Southwark	22.0
Westminster	20.9
Lambeth	19.8

Source: North West Public Health Observatory - Local Alcohol Profiles for England



Alcohol Consumption

Children and young people who drink alcohol increase their risk of a wide range of health and social problems, including injury, teenage pregnancy, drug use and attempted suicide. Furthermore, those who start drinking at an early age are more likely to develop alcohol dependence in adulthood. The Chief Medical Officer advises that an alcohol-free childhood is the healthiest and best option.

Evidence suggests that young Londoners consume less alcohol than their peers in the rest of the country. In 2008, the proportion of children (aged 8-15) who reported that they never drink was higher in the capital compared with other regions in England. In London, 87 per cent of boys and 86 per cent of girls reported never drinking alcohol, compared with 75 per cent boys and 73 per cent girls nationally.

Compared with the England average, fewer young Londoners are also admitted to hospital due to conditions that are specifically related to alcohol, such as alcohol poisoning and mental and behavioural disorders due to alcohol. London's alcohol-specific hospital admission rate for under 18s was 39 per 100,000 population in the period 2006/07 to 2008/09, compared with 65 per 100,000 in England as a whole. The rate for London still equated to around 640 admissions each year. There were also marked inequalities across London's boroughs - the rate in Sutton, the highest in the capital, was almost double the London average (Figure 2).

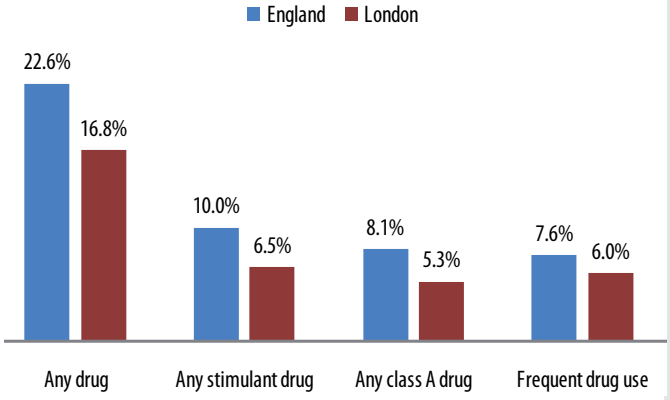
Drug Use

Tackling illegal drug use, especially among young people, has long been a focus of Government policy. Overall, it appears that drug use among young people is lower in London than the England average. However, gaining an accurate picture of drug use can be difficult, as people may be reluctant to disclose any illegal activity in surveys and questionnaires. Survey results are therefore likely to underestimate the true prevalence of drug use in the population.

'Smoking Drinking And Drug Use Among Young People', is an annual survey that measures awareness, availability and use of 15 named drugs among children and young people in England. In 2006-2008, 16 per cent of 11 to 15 year olds in London reported they had used drugs in the previous year. The most commonly used drug in this age group was cannabis, which nine per cent had taken. The proportion of boys (10 per cent) who had taken cannabis was higher than that for girls (seven per cent).

The British Crime Survey provides information on drug use among young people aged 16-24. In 2008/09, 17 per cent of young people in London reported using drugs, the lowest proportion in any English region (Chart 8). Five per cent had used a Class A drug. The most commonly used drug was cannabis, which 14 per cent of 16-24 year olds in London had used (Chart 9).

Chart 8: Drug Use Among Young People aged 16-24, England and London, 2008/09, percentages

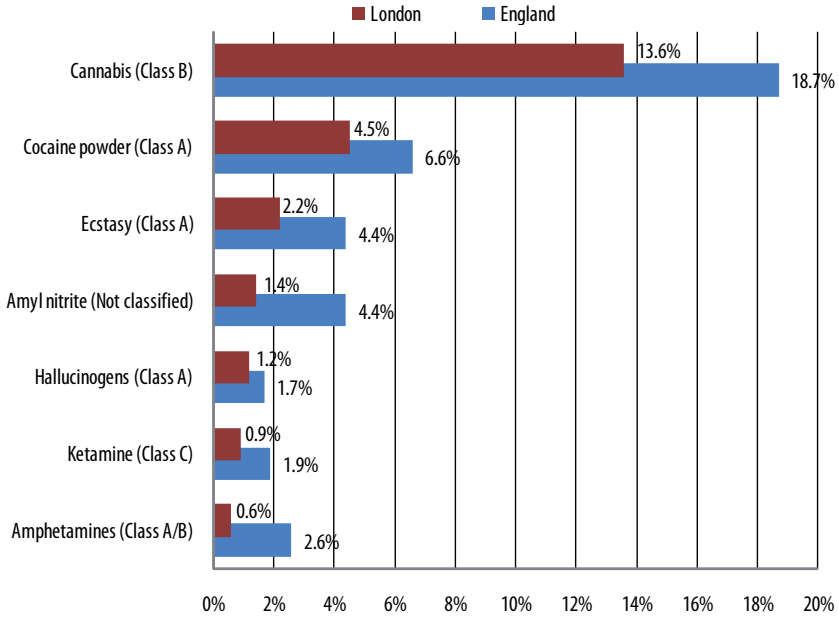


Source: British Crime Survey

Teenage Conceptions

Teenage pregnancy can lead to poor health and social outcomes for both the mother and baby. London has a high rate of teenage pregnancy. In 2008, there were over 5,500 conceptions in females aged under 18 in London. The rate was 45 teenage conceptions per 1,000 females (aged 15-17), which was higher than the England average of 40 (Chart 10, p.13). However, there was wide variation between London boroughs, with teenage pregnancy rates in 2008 ranging from 23 per 1,000 females (aged 15-17) in Harrow to 72 per 1,000 in Lambeth. The percentage of teenage pregnancies in London leading to abortion in 2008 was 61 per cent.

Chart 9: Drug Use Among Young People aged 16-24 by Drug Type, England and London 2008/09, percentages



Source: British Crime Survey

Sexual Health

Chlamydia is the most commonly diagnosed sexually transmitted infection in both London and England, and rates of chlamydial infection are much higher in young people (16-25 years) than in other age groups. Uncomplicated chlamydial infection can usually be treated with antibiotics. However, if left untreated, chlamydia can have serious effects for young women, including pelvic inflammatory disease and infertility.

In 2009, there were more than 25,100 new diagnoses of chlamydia among young people (under 25 years) in London reported by genitor-urinary medicine (GUM) clinics, the National Chlamydia Screening Programme and other sources (e.g. laboratories) (Table 1). Among 15-19 year olds, the rate of new diagnoses of chlamydia was 2,496 per 100,000 population, and among 20-24 year olds, it was 2,572. Of the people who were tested for chlamydia, young women were more likely to be diagnosed with the infection than young men in both age groups.

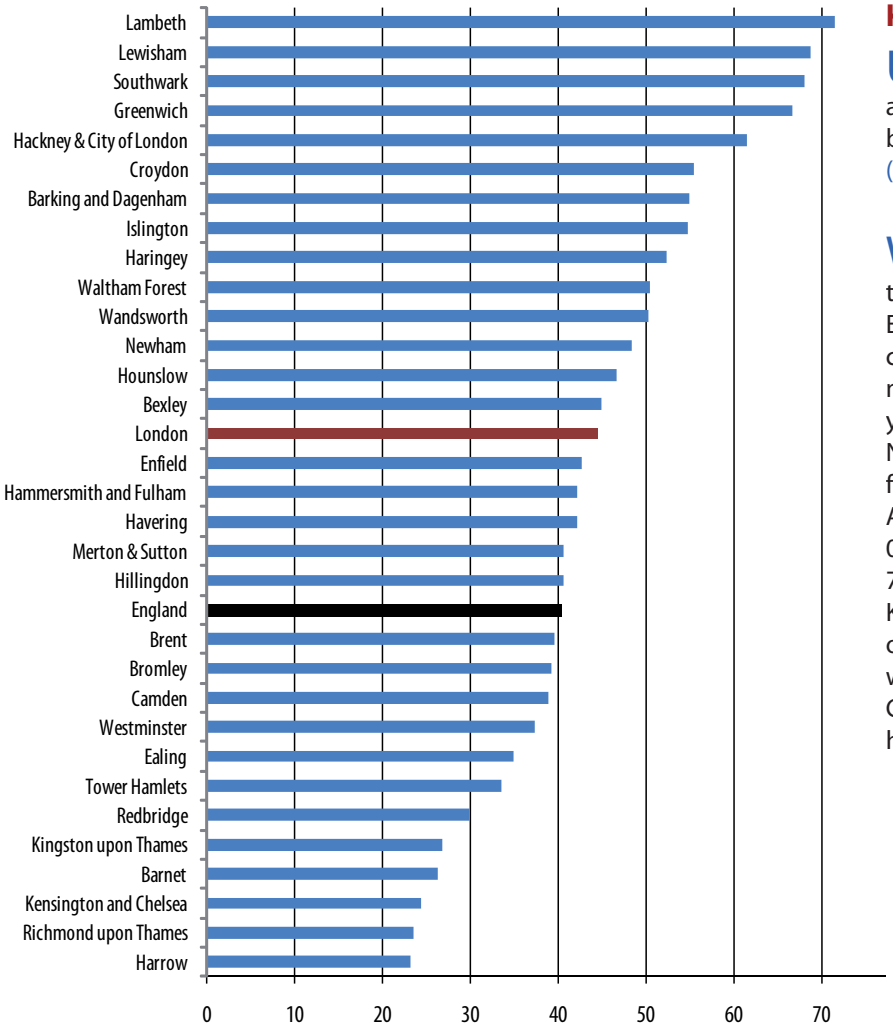
Table 1: Chlamydia Diagnoses by Age Group, London, 2009, cases

Age group	Male	Female	Total
<15	5	52	57
15-19	3,013	7,739	10,788
20-24	5,826	8,372	14,256
Total Under 25	8,844	16,163	25,101

Source: Health Protection Agency

The National Chlamydia Screening Programme (NCSP) was established in 2003 to control and prevent infection among young people. In 2009/10, 26 per cent of young people aged 15-24 years in London were tested, higher than the England average of 22 per cent and an increase of eight per cent since 2008/09. However, the proportion of young people who were screened varied between London PCTs, ranging from 10 per cent in Enfield to 41 per cent in Lambeth.

Chart 10: Under 18 Conception Rates per 1,000 Females Aged 15-17, London boroughs, 2008



Source: Office for National Statistics

Key Mortality Indicators

Updated life expectancy results and selected death rates for London boroughs are provided in Table 2 (p.14).

While life expectancy has continued to increase in both London and England, it remains higher in the capital. Life expectancy at birth for males in London in 2006-08 was 78.2 years, while for females it was 82.7 years. Nationally, the figures were 77.9 years for males and 82.0 years for females. Amongst London boroughs in 2006-08, male life expectancy ranged from 75.1 years in Islington to 84.3 years in Kensington and Chelsea, a difference of over 9 years. Female life expectancy was also highest in Kensington and Chelsea (88.9 years), over eight years higher than in Newham (80.4 years).

Table 2: Life Expectancy and Key Mortality Indicators, London boroughs and England, 2006-08

	Life expectancy at birth (years)		Deaths from all causes per 100,000 people[1,2]	Cancer deaths per 100,000 people[1,2]	Circulatory disease deaths per 100,000 people[1,2]	Suicides per 100,000 people[1,2,3]	Infant deaths per 1,000 live births[4]
	Males	Females					
Barking and Dagenham	76.4	80.6	662	140.4	105.4	7.1	4.9
Barnet	79.9	84.0	486	96.9	56.2	6.6	3.6
Bexley	79.1	82.7	537	108.5	68.2	6.9	4.0
Brent	78.9	84.0	518	104.6	84.1	6.8	6.0
Bromley	79.7	83.6	503	104.0	53.2	7.1	3.0
Camden	77.8	82.6	583	111.5	84.1	12.1	3.4
Croydon	78.9	82.2	556	99.4	75.8	6.7	5.4
Ealing	78.7	83.1	546	107.2	90.7	6.4	3.7
Enfield	78.8	82.7	543	104.1	73.1	4.1	6.1
Greenwich	75.4	81.7	654	127.9	97.6	9.0	4.6
Hackney	75.9	82.2	639	121.4	112.5	11.8	5.7
Hammersmith and Fulham	78.3	84.3	541	109.1	90.4	9.8	3.3
Haringey	76.3	83.1	594	120.3	89.8	8.5	5.1
Harrow	80.4	84.2	479	95.0	59.3	6.2	4.1
Havering	78.5	82.5	558	117.5	68.2	6.0	3.7
Hillingdon	78.1	83.2	552	107.4	74.1	7.2	4.5
Hounslow	77.4	81.6	613	111.3	85.2	8.9	4.3
Islington	75.1	81.0	686	133.3	119.5	11.5	4.6
Kensington and Chelsea	84.3	88.9	361	70.5	49.2	6.1	2.2
Kingston upon Thames	80.0	83.3	515	103.5	60.3	4.7	2.2
Lambeth	75.7	81.0	670	133.4	95.8	8.3	5.5
Lewisham	76.2	81.0	661	127.2	99.7	5.9	5.1
Merton	79.9	83.4	504	94.9	65.4	5.9	4.1
Newham	75.8	80.4	687	120.9	118.8	7.3	5.8
Redbridge	79.0	82.6	539	98.3	68.8	5.0	5.3
Richmond upon Thames	80.3	84.3	483	103.8	57.8	5.6	2.2
Southwark	77.2	82.4	599	129.2	87.2	7.8	7.3
Sutton	79.0	82.6	546	106.4	75.5	6.1	4.1
Tower Hamlets	75.3	80.4	717	144.9	120.5	11.9	4.1
Waltham Forest	76.5	81.2	642	114.7	95.3	5.8	5.4
Wandsworth	77.5	81.5	614	125.9	88.7	7.0	3.3
Westminster	82.9	85.8	423	82.9	64.2	8.7	3.2
London	78.2	82.7	561	109.8	79.4	7.3	4.6
Males	-	-	677	124.3	114.1	11.0	-
Females	-	-	463	97.2	47.7	3.6	-
England	77.9	82.0	582	114.0	74.8	7.8	4.8
Males	-	-	692	126.3	105.1	12.0	-
Females	-	-	491	102.7	46.3	3.7	-

Sources: Office for National Statistics
National Centre for Health Outcomes Development

[1] Directly age-standardised rates, standardised to European Standard Population.
[2] Deaths from all causes, and suicides - all persons, all ages. Cancer deaths and circulatory disease deaths - all persons aged under 75.
[3] Intentional self-harm or injury/poisoning of undertermined intent.
[4] Deaths under 1 year.

Notes

Local Index of Child Wellbeing
(Chart 1 and Figure 1)

The Local Index of Child Well-being (CWI) was commissioned by Communities and Local Government in response to calls for its Indices of Multiple Deprivation to be produced for different groups of the population. It represents the first attempt to create an index exclusively for children in England for small, neighbourhood areas (Lower Super Output Areas).
The CWI is based on the methods used to construct the Index of Multiple Deprivation 2007, but it is an index of child well-being, rather than an index of deprivation, as it also contains variables not strictly related to deprivation. The index was released in 2009 but is mainly based on indicators which relate to 2005.

Infant Mortality
(Chart 2 and Table 2)

Figures for infant mortality by ethnic group were produced by the Office for National Statistics. As ethnicity is not recorded at the registration of births and deaths in England and Wales, it has not been routinely possible to produce infant mortality rates by ethnic group. A system for allocating NHS numbers at birth (NN4B), introduced in 2002, now however provides an opportunity to obtain information on ethnicity. NN4B records have been linked by ONS with birth registration data, and further linked with registration records for deaths in the first year of life. This has allowed ONS to produce infant mortality rates by ethnic group for the first time.
Classification by ethnic group is based on the recorded ethnicity of the infant as defined by the mother. However it is possible that the mother's ethnic group was recorded rather than the infant's or that the health professional decided what to record rather than asking the mother.
The figures for infant mortality by ethnic group in London are taken from data supplied by ONS for inclusion in the Health Inequalities Intervention Toolkit, produced by the Association of Public Health Observatories. The Infant Mortality Tool allows users to view trends in infant death rates and to find information on factors which influence infant mortality. Infant mortality rates by ethnic group are available for all English regions within the tool, however it should be noted that differences in rates may be partly due to regional variations in the mix of ethnic groups within the broad ethnic categories for which rates are reported.

Breastfeeding
(Chart 3)

Data on local breastfeeding initiation are requested on a quarterly basis from all Primary Care Trusts (PCTs). The information is collected via a web based system set up by the Department of Health to collect performance data directly from the NHS. The figures are typically obtained by PCTs from midwives in acute trusts and information recorded at deliveries.

Immunisation
(Chart 4)

Data on immunisations are collected by the Health Protection Agency Centre for Infections. Information on childhood immunisation uptake is collected through the Cover of Vaccination Evaluated Rapidly (COVER) data collection for PCTs. Figures are collated in an annual report on immunisation statistics produced by the NHS Information Centre.

Injury
(Chart 5)

Figures on hospital admissions following injury are based on Hospital Episode Statistics collected by the NHS Information Centre. The data are based on both unintentional and deliberate injuries to children and young people aged 0-17.
'Unintentional' injury is used in this data source to mean accidental external causes of harm e.g. traffic accidents, falls, trips, accidental contact with tools/machinery etc, drowning, exposure, burns and scalds etc.
'Deliberate' injury refers to admissions which are coded in the data under different types of assaults, including bodily force, sexual assault by bodily force, sharp/blunt objects etc.
Figures are restricted to emergency admissions only, when a child or young person is formally admitted to a hospital bed. The admission rates for each region are based on the region of usual residence, not where the injury occurred.

Childhood Obesity
(Chart 6)

The National Child Measurement Programme (NCMP) was established in 2005 to weigh and measure children in reception year (aged 4-5) and year 6 (aged 10-11). PCTs are required to collect data for the NCMP on an annual basis from all Local Education Authority (LEA) maintained schools.

Data are taken from an analysis by the London Health Observatory of NCMP data which has been cleaned and validated by the NHS Information Centre. Figures for the risk of obesity by level of deprivation are based on categories assigned using children's home addresses. These were allocated to Super Output Areas (SOAs), which were then ranked by deprivation score, using the Index of Multiple Deprivation 2007. The most deprived category represents those children living in the 10 per cent of areas within London with the worst deprivation scores.
The classification of children into groups at risk of being overweight or obese is defined below:

Body mass index (BMI)
Body-mass index (BMI) is an indicator of body fat based on height and weight, and is used to calculate prevalence rates as described below:

$$\text{BMI} = \frac{\text{Weight (kg)}}{\text{Height (m)}^2}$$

Prevalence rates
Prevalence rates were calculated according to the standard UK BMI centile classification (UK90). This uses a child's BMI, date of birth and sex to classify children into groups based on their position on the reference curve as below:

Children at risk of obesity
Children having a BMI greater than the 95th percentile of the reference curve. Children within the highest 5% of the BMI scale.

Children at risk of being overweight
Children having a BMI greater than or equal to the 85th percentile but less than the 95th percentile of the reference curve. Children within the highest 15 to 5% of the BMI scale.

Children at risk of being underweight
Children having a BMI less than or equal to the 5th percentile of the reference curve (definition recommended by National Obesity Observatory guidelines). Children within the lowest 5% of the BMI scale.

These cut-off points are used for the purposes of population monitoring and do not provide the number or percentage of children clinically defined as obese, overweight or underweight. Alternative cut-off points and several other factors are taken into account before clinical diagnosis is made. The term 'at risk of' is therefore used to emphasise this difference.

Physical Activity

Figures are taken from the Health Survey for England, an annual survey commissioned by the NHS Information Centre, which also reports its results. Information is collected from a nationally representative sample of the population living in private households in England. The surveys provide information on a range of aspects concerning the public's health, and those factors which affect health. The 2008 survey focussed on physical activity and fitness.
Data were collected on self-reported activities for children aged 2-17, to take account of the majority of their total physical activity, including active transport to and from school, and formal and informal activities.
In the survey children were asked about their physical activity in the last seven days. Those aged 13-15 were asked questions directly, while the parents of children aged 2-12 were asked the questions on the child's behalf, but with the children present in most cases.
Physical activity during school hours was excluded because:
i) it was assumed activities done at school would tend to be similar across children of a given age.

ii) activities at school would generally be compulsory and the survey was more concerned with activities done out of choice.

iii) a large proportion of data was collected from parents, who might not be able to provide accurate information about activities at school.

Diet

In the 2008 Health Survey for England, questions about fruit and vegetable consumption were asked of children aged 5-15. Children aged 13-15 answered the questions themselves (with their parents present) while parents of children aged from 5-12 answered on their behalf.
To determine the overall amount of fruit and vegetables that children consumed (including pulses, salad and juice), questions were asked about a range of food, including fresh, frozen, tinned and dried items. Consumption was measured for the 24 hour period the day before the survey interview took place.

Smoking

A survey of smoking, drinking and drug use among young people in England, commissioned by the NHS Information Centre, has been carried out annually since 2000. The survey is conducted among 11-15 year olds in secondary schools. Figures on smoking prevalence in London are taken from the 2008 survey.

To examine children's exposure to other people's smoke, saliva samples were taken by nurses from children aged 4-15 in the core sample of the 2008 Health Survey for England. These were analysed for cotinine, a biological marker which provides an indicator of recent exposure to tobacco or its smoke.
Data on smoking in pregnancy (Chart 7) are collected from Primary Care Trusts using a system set up to collect performance returns from the NHS. Every quarter, PCTs must submit their number of maternities and number of mothers smoking at delivery.

Alcohol Consumption
(Figure 2)

In the 2008 Health Survey for England, all children aged 8 and above were asked about alcohol consumption using a self-completion questionnaire. Children aged 8-12 were asked whether they had ever had a whole alcoholic drink, how old they were when they first did so, how often they drank alcohol and when they last had a drink. Children aged 13-15 were also asked these questions and also asked to provide details of the type and quantity of alcohol they had drunk in the previous seven days.
Figures on alcohol-specific hospital admission rates (Table 2) are taken from alcohol profiles produced for each region, local authority and PCT in England, by the North West Public Health Observatory. These data are based on Hospital Episode Statistics for children aged under 18.

Drug Use
(Chart 8 & 9)

Figures on drug use among 11-15 year olds are taken from the 2008 survey of smoking, drinking and drug use, conducted annually in secondary schools. The British Crime Survey is conducted annually and mainly consists of a face-to-face interview in which people are asked about their experience of crime victimisation and perception of crime-related issues. At the end of the interview, respondents are asked to self-complete a drugs module, which they can do with their answers hidden from the interviewer.

Teenage Conceptions
(Chart 10)

Teenage conception rates are produced by the Office for National Statistics. Conceptions are defined as pregnancies that result in one or more live or stillbirths, or a legal abortion under the Abortion Act 1967. Miscarriages and illegal abortions are not included.

Rates are based on all conceptions for females under the age of 18. Age at conception is calculated as the number of complete years between date of birth and date of conception. The date of conception is estimated using recorded gestation periods for abortions and stillbirths, and assuming 38 weeks gestation for live births. The denominator for the rate is the female population aged 15-17.

Sexual Health
(Table 1)

Figures for new diagnoses of chlamydia are taken from the Health Protection Agency and are compiled from a combination of sources including diagnoses made in genito-urinary medicine (GUM) clinics and in other community healthcare and non-healthcare settings including general practice. Numbers will therefore be higher than those reported in national GUM clinic statistics. Figures are based on the number of chlamydia diagnoses reported and not the number of people diagnosed.
The National Chlamydia Screening Programme (NCSP) is a control and prevention programme targeted at sexually active young people aged under 25. It reports on the number of young people being tested for chlamydia, and the number of new diagnoses. Figures on the percentage of young people aged 15-24 being tested are taken from the 2009/10 report, based on the PCT of usual residence.

Key Mortality Indicators
(Table 2)

The life expectancy figures for 2006-08 are an estimate of the average number of years a new-born baby would survive if he or she experienced the particular area's age-specific mortality rates for that time period throughout his or her life. The figures reflect mortality among those living in the area in 2006-08, rather than mortality among those born in each area. It is not therefore the number of years a baby born in the area in 2006-08 could actually expect to live, both because the death rates of the area are likely to change in the future and because many of those born in the area will live elsewhere for at least some part of their lives.
Life expectancy figures are calculated by the Office for National Statistics. Other mortality indicators for 2006-08 are calculated by the National Centre for Health Outcomes Development (NCHOD). All figures can be found on NCHOD's Clinical and Health Outcomes Knowledge Base.

Websites, References and Further Reading

Health websites:

London Health Observatory
www.lho.org.uk/

Department of Health
www.dh.gov.uk/

London Health Commission
www.london.gov.uk/lhc/

Health Protection Agency
www.hpa.org.uk/

Office for National Statistics
www.ons.gov.uk/

Clinical and Health Outcomes Knowledge Base
www.nchod.nhs.uk/

NHS London
www.london.nhs.uk/

NHS Information Centre
www.ic.nhs.uk/

References and further reading:

The London Health Inequalities Strategy (2010)
http://www.london.gov.uk/who-runs-london/mayor/publications/health/health-inequalities-strategy

Fair Society, Healthy Lives - Strategic Review of Health Inequalities in England post 2010, The Marmot Review:
http://www.marmotreview.org/

Local Index of Child Well-being
http://www.communities.gov.uk/publications/communities/childwellbeing2009

Health Inequalities Intervention Toolkit
http://www.lho.org.uk/LHO_Topics/Analytic_Tools/HealthInequalitiesInterventionToolkit.aspx

NHS Information Centre, immunisation statistics
http://www.ic.nhs.uk/statistics-and-data-collections/health-and-lifestyles/immunisation

Injury Observatory for Britain and Ireland
http://www.injuryobservatory.net/

World Health Organization Global Database on Body Mass Index
www.who.int/bmi/index.jsp?introPage=intro_3.html

National Childhood Measurement Programme
www.ncmp.ic.nhs.uk

The National Obesity Observatory for England
www.noo.org.uk

Health Survey for England - 2008: Physical activity and fitness
http://www.ic.nhs.uk/pubs/hse08physicalactivity

Smoking, drinking and drug use among young people in England in 2008
http://www.ic.nhs.uk/pubs/sdd08fullreport

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

Drug misuse declared: findings from the 2008/09 British Crime Survey
http://rds.homeoffice.gov.uk/rds/pdfs09/hosb1209.pdf

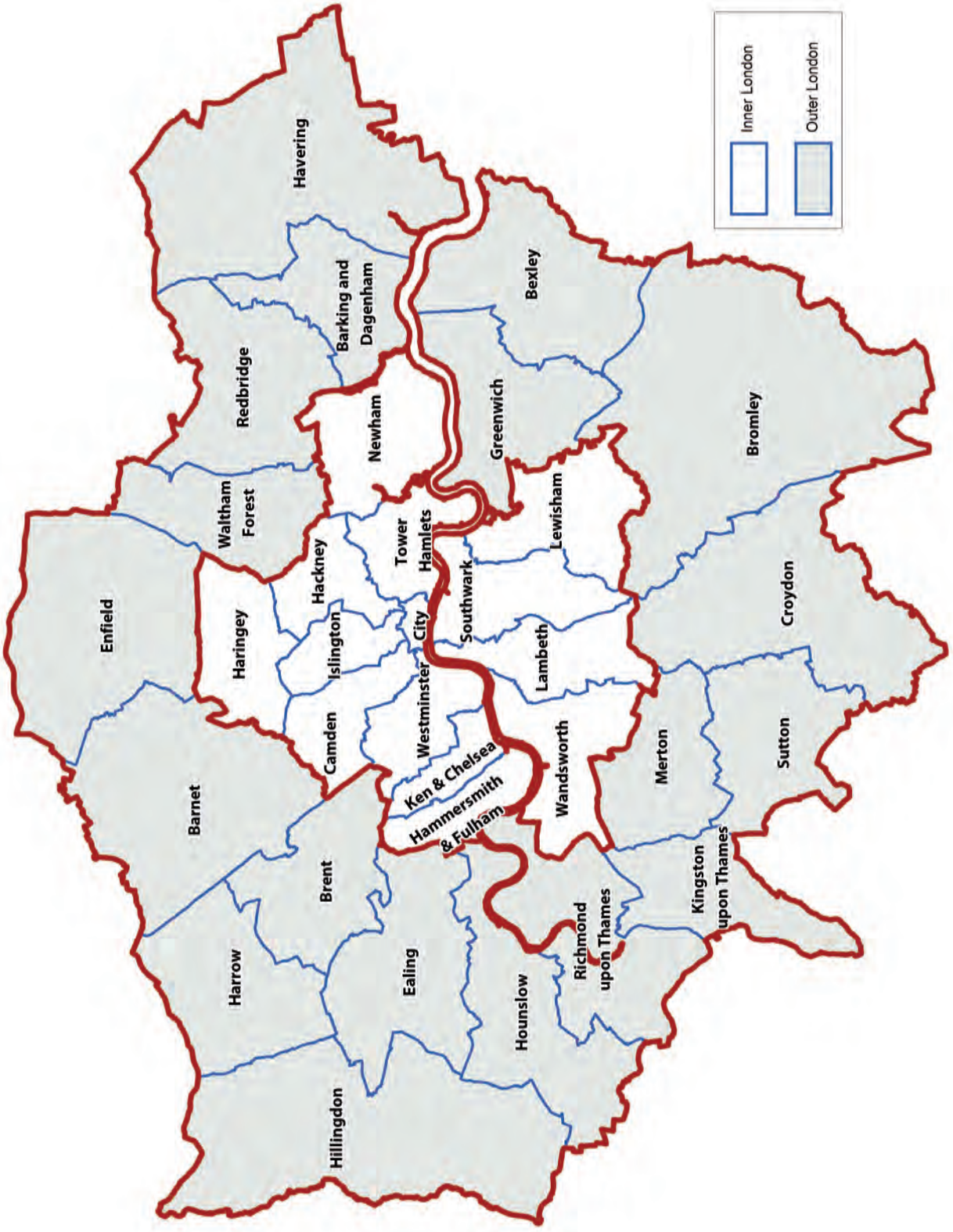
Every Child Matters - teenage pregnancy
http://www.dcsf.gov.uk/everychildmatters/healthandwellbeing/teenagepregnancy/statistics/statistics/

National Chlamydia Screening Programme
http://www.chlamydiascreening.nhs.uk/ps/index.html

Office for National Statistics, life expectancy results for local areas
www.statistics.gov.uk/statbase/Product.asp?vlnk=8841

Child and Maternal Health Observatory
http://www.chimat.org.uk/

London Child Health Profiles
http://www.lho.org.uk/LHO_Topics/Health_Topics/Populations/ChildHealthProfiles.aspx



This map shows the ONS definition of inner / outer London. The replacement London Plan uses a different definition.