The health and wellbeing of children and young people in London: An evidence based resource

Dr Marilena Korkodilos, Deputy Director Specialist Public Health Services, PHE (London)
17th March 2014
Acknowledgments

This report could not have been produced without the support of the following people:

• Susan Koffler-Sluijter, Local Specialist for the South East Child and Maternal Health Intelligence Network, PHE
• Simon Lewry, Senior Public Health Intelligence Analyst, Knowledge and Intelligence PHE (London)
• Lily Makurah, Health Improvement Manager, PHE (London)
• Mathew Phelan, Health Improvement Support Manager, PHE (London)
• Claire Robertson, Consultant in Dental Public Health, PHE (London)

I am grateful to the following individuals for their comments on the report:

• Allan Baker, Associate Director, Knowledge and Intelligence Team, PHE (London)
• David Beyt, Policy and Project Officer - Health, Greater London Authority
• Yvonne Doyle, Regional Director, PHE (London)
• Catherine Heffernan, Principle Advisor on Commissioning Early Years, Immunisations and Vaccination Services, NHS England (London)
• Justine Fitzpatrick, Interim Director, Knowledge and Intelligence Team, PHE (London)
• Alison Keating, Head of London Alcohol and Drugs Team, PHE (London)
• Liz Prosser, Healthy Schools Manager, Greater London Authority
• Natasha Warne, Programme Manager London Alcohol and Drugs Team, PHE (London)
• Helen Walters, Head of Health, Greater London Authority
### Acknowledgements

### Executive summary

### Aims and background

**Wider determinants**
- Increasing educational attainment
- Reducing child poverty
- Improving housing

**Pre conception and pregnancy**
- Reducing smoking in pregnancy
- Reducing low birth weight
- Improving maternal mental health

**Infancy and early years**
- Reducing perinatal and infant mortality
- Increasing breastfeeding
- Increasing immunisation uptake

**Childhood**
- Reducing tooth decay
- Reducing childhood obesity

**Adolescence**
- Increasing HPV immunisation uptake
- Improving adolescent mental health
- Reducing smoking, drinking and substance misuse
- Improving adolescent sexual health and reducing teenage pregnancy
## Executive summary:
**Children and young people living in London – Key facts**

### Wider determinants
- Nearly **1 in 4** (2,039,600) of all people in London are children and young people under 20 years
- Over **300 languages** are spoken by London pupils
- Children in London are **more likely to reach** required levels of educational attainment at ages 11, 16 and 19 than children in the rest of England
- About **3 in 10** children in London live in poverty
- **1 in 7** (291,000) children in London live in poor housing and **1 in 4** (510,000) children live in overcrowded houses

### Preconception and pregnancy
- In 2011, the percentage of mothers smoking at delivery in London (6.1%) was **about half** that of England (13.4%)  
- About **3 in 10** babies born at term in London have a low birth weight  
- At least **1 in 10** women (about 13,400 new mothers in London) will suffer from a perinatal mental illness

- In 2011-12 HPV immunisation uptake in London (78.9%) **was lower than** that of England (86.8%)  
- At least **1 in 10** (111,000) children aged 5-16 have a clinically significant mental health problem  
- Each day **67 children, more than two classrooms full** start smoking in London  
- The average admission rate for alcohol or substance misuse is **significantly lower** in London than England  
- Rates of chlamydia diagnosis in young people are **higher** in London than for England  
- All local authorities in London have **improved** their performance on reducing teenage pregnancy

### Infancy and early years
- The perinatal mortality rate for 2009-11 for London (7.9 per 1,000) **was higher than** the average for England (7.5 per 1,000)  
- In 2012, **519 babies** did not live to see their first birthday  
- About **9 in 10** mothers in London breastfed their baby at birth  
- **1 in 10** children living in London did not receive their third dose of DTaP/IPV/Hib at 12 months

- The percentage of 5 year olds with one or more decayed, missing or filled teeth in 2012 in London (32.9%) **was higher than** the England average (27.9%)  
- Nearly **1 in 4** children (23.0%) in London aged 4-5 years are overweight or obese  
- Only **6 out of 10** children in London are a healthy weight when they start secondary school

### Adolescence

### Childhood

---

**Executive summary:**

**Children and young people living in London – Key facts**

- Nearly 1 in 4 (2,039,600) of all people in London are children and young people under 20 years.
- Over 300 languages are spoken by London pupils.
- Children in London are more likely to reach required levels of educational attainment at ages 11, 16, and 19 than children in the rest of England.
- About 3 in 10 children in London live in poverty.
- 1 in 7 (291,000) children in London live in poor housing and 1 in 4 (510,000) children live in overcrowded houses.

**Preconception and pregnancy**

- In 2011, the percentage of mothers smoking at delivery in London (6.1%) was about half that of England (13.4%).
- About 3 in 10 babies born at term in London have a low birth weight.
- At least 1 in 10 women (about 13,400 new mothers in London) will suffer from a perinatal mental illness.
- In 2011-12 HPV immunisation uptake in London (78.9%) was lower than that of England (86.8%).
- At least 1 in 10 (111,000) children aged 5-16 have a clinically significant mental health problem.
- Each day 67 children, more than two classrooms full, start smoking in London.
- The average admission rate for alcohol or substance misuse is significantly lower in London than England.
- Rates of chlamydia diagnosis in young people are higher in London than for England.
- All local authorities in London have improved their performance on reducing teenage pregnancy.

**Infancy and early years**

- The perinatal mortality rate for 2009-11 for London (7.9 per 1,000) was higher than the average for England (7.5 per 1,000).
- In 2012, 519 babies did not live to see their first birthday.
- About 9 in 10 mothers in London breastfed their baby at birth.
- 1 in 10 children living in London did not receive their third dose of DTaP/IPV/Hib at 12 months.
- The percentage of 5 year olds with one or more decayed, missing or filled teeth in 2012 in London (32.9%) was higher than the England average (27.9%).
- Nearly 1 in 4 children (23.0%) in London aged 4-5 years are overweight or obese.
- Only 6 out of 10 children in London are a healthy weight when they start secondary school.

**Adolescence**

**Childhood**
Executive summary:
Children and young people living in London – Why invest

The impacts of childhood psychiatric disorders cost London’s education system approximately £200 million per year.

An obese child in London is likely to cost around £31 a year in direct costs, which could rise to a total (direct and indirect) of £611 a year if they continue to be obese into adulthood.

The treatment costs of childhood obesity in London was between £30 million - £195 million in 2007/08.

Every £1 spent on young people’s drug and alcohol interventions brings a benefit of £5-£8.

The cost of smoking in pregnancy in London is about £1.3 million - £10.5 million per year.

The wider societal costs of smoking in pregnancy in London contributing to preterm births is estimated to be £24 million - £38 million.

For every £1 spent on contraception £11 is saved in other healthcare costs.

In the first five years of life, each birth to a teenage parent imparts a public sector cost of £57,900. This is about £53 million in London.

Targeted parenting programmes to prevent conduct disorders pay back £8 over six years for every £1 invested with savings to the NHS, education and criminal justice system.
“The state of London’s children today determines the state of London tomorrow”  
(Mayor of London Report, 2007)

“What a child experiences in its early years lays down the foundation for its whole life”  
(Marmot Review, 2010)

Aims

Measuring and reporting the circumstances of children is key to improving their wellbeing. The purpose of this report is to:

• Provide a descriptive analysis of the health and wellbeing of children and young people living in London.
• Describe the economic case for investment in children and young people living in London.
• Support local authorities to identify key priority areas to improve the health and wellbeing of children and young people in order to improve outcomes and reduce health inequalities.
Background

Children’s health and wellbeing

There is considerable evidence that what happens before pregnancy, in the early years and childhood affects children’s health and wellbeing in later life and has a major impact on their life chances as adults:

• The total duration and number of hospital admissions for infants born <28 weeks and 28 to 31 weeks gestation is 85 and \textbf{16 times} that for term infants.\(^1\)

• A child’s early development score at 22 months \textbf{is an accurate predictor of} educational outcomes at age 26, which in turn is related to long-term health outcomes.\(^2\)

• \textbf{Roughly half} of the gradient in socio-economic mortality in later life can be explained by early life experience, including its influence on adult smoking rates.\(^2\)

• Adverse experiences in the early years such as excess exposure to alcohol and cocaine use pre-birth, and neglect during the early years, lead to poor development, which affects later life chances. For example, a single reported experience increases the risk of attempted suicide between \textbf{two and five times}.\(^2\)

• \textbf{One in four} children is overweight or obese when they start school, which puts them at greater risk of cardiovascular disease and diabetes in later life.\(^2\)

\(^1\) Department of Health (2007) \textit{Review of the health inequalities infant mortality PSA target}
\(^2\) King’s Fund (2013) \textit{Improving the public’s health: A resource for local authorities}
Economic case for investment in children and young people

Improving the health of children and young people in London has potential economic benefits. Evidence shows that many early intervention programmes can provide good returns on investment. For example:

• Health visitors identifying and treating postnatal depression improves productivity and leads to cost savings in the medium to short term.
• Targeted parenting programmes to prevent conduct disorders pay back £8 over six years for every £1 invested with savings to the NHS, education and criminal justice systems.
• The direct costs to the public of children with severe conduct disorders is estimated to be £70,000 per head, compared with a £600 per child cost of parent training programmes.
• In the first five years of life, each birth to a teenage parent imparts an average public sector cost of £57,900. In London in 2012 there were 924 babies born to a mother aged under 18 each giving a public sector cost of about £53 million.
• If further investment was directed towards the early years and ‘getting it right first time’ then some of the remedial costs later in life (for example, in relation to truancy, anti-social behaviour or crime) could be alleviated.
• Reviews of child and family interventions that include, more or less, the same cost-benefit evaluations of early years interventions have investigated the long-term economic impact of these programmes. The returns to society for each dollar invested vary considerably, from $1.26 to $17.07. Overall, however, they indicate the potential for efficient early years interventions to provide returns to society substantially larger than the resources invested in programme delivery.¹

¹ GLA (2011) Early years interventions to address health inequalities in London – The economic case
London’s child population

More than two million children and young people live in London, representing nearly 1 in 4 (24.5%) of all people in London.

There are wide variations in the proportions of children living in different London boroughs. In Barking and Dagenham almost 1 in 3 (31.8%) of the population is aged under 20 years, whilst in the City of London less than 1 in 8 (11.8%) are aged under 20 years.

The numbers of children and young people living in London are estimated to rise by 11% from 2,039,000 in 2012 to 2,269,974 in 2020.
**Background**

**Ethnicity of children and young people living in London**

The ethnic background of children and young people in London is different from that of England as a whole. In 2011, 68.2% of school children aged 5-16 years in London were from black and minority ethnic groups compared to 25.6% in England.\(^1\) Brent, the most ethnically diverse borough in the country, has the highest percentage of non-white British pupils in secondary school at 94.5%.

**Languages spoken at school**

Over 300 languages are spoken by London pupils, around 40% of London’s school pupils do not have English as their first language; there are over 40 languages spoken by more than 1,000 pupils. Bengali, Urdu and Somali are the top three languages spoken in London, other than English.

English is the predominant language spoken in most of Outer London, whereas languages other than English are most common in Inner London.\(^2\)

---

2. Languages, ethnicity and education in London DoQSS Working Paper No.10-12 June 2010
Summary: Wider determinants

- Children in London are **more likely to reach** required levels of educational attainment at ages 11, 16 and 19 than children in the rest of England.
- About **3 in 10** children in London live in poverty.
- **1 in 7** (291,000) children in London live in poor housing.
- **1 in 4** (510,000) children in London live in overcrowded houses. Of the 15 most overcrowded wards, 13 are in London.
Increasing educational attainment

Background

The positive association between education and health is well documented:
• High educational attainment improves health directly but also indirectly through work, economic conditions, social-psychological resources and health life style choices. One extra year in education increases life expectancy in the USA by 1.7 years.
• Poor health inhibits learning and good health results in better educational attainment. Health and attainment are, confounded by factors such as poverty which is strongly linked to poor health, which in turn has a negative impact on learning.

Additional evidence shows that:
• Physical activity and exercise is associated with improved motivation at school, reducing anxiety and depression and has a positive effect on studying in school.
• Poor mental health can lead to a range of problem behaviours that affect concentration, causing difficulties and low achievement at school.
• Low income is a strong predictor of low educational performance. This feeds into disadvantage in adulthood and transmits poverty across generations. A primary cause of child poverty is a lack of opportunities among parents with low skills and low qualifications.
• After having a free school meal, primary school pupils, made between four and eight weeks’ more progress than similar pupils in comparison areas.

Children in London are more likely to reach required levels of educational attainment at ages 11, 16 and 19 than children in the rest of England.

Since 2004 London schools have outperformed the rest of the country for achievement of good GCSEs at Key Stage 4: 62% in London compared to the England average of 58%.  

The proportion of pupils achieving 5+ A*-C GCSE results ranged from 55.2% in Islington to 70.4% in Bromley and Redbridge.

1. Educational attainment across London Boroughs 2012 accessed from anewdirection.org.uk
Background

Health and life expectancy are still linked to social circumstances and child poverty. Poverty is associated with a higher risk of illness and premature death and the effects on health may persist throughout the life course. In addition, poverty has significant consequences in terms of both the physical health of preschool children and their wider functioning (e.g. language development). The effects of poverty on health are summarised below:\(^1\):

<table>
<thead>
<tr>
<th>Pregnancy</th>
<th>Mothers are more likely to be in poor health, have more psychological problems in pregnancy, gain less weight, smoke more and have more genital infections, and their babies to weigh less and be born early, with increased risk of infant mortality.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infancy</td>
<td>Those in the lowest social economic group are nine times more at risk of sudden unexpected death in infancy. Death rates from injury and poisoning have fallen in all groups except this one and are now 13 times higher than those for more privileged children.</td>
</tr>
<tr>
<td>Children</td>
<td>Poorer children are more likely to be admitted to hospital and to be smaller.</td>
</tr>
<tr>
<td>Mental health</td>
<td>There is evidence of more attention deficit hyperactivity disorder, bed wetting, suicide and deliberate self-harm among younger children.</td>
</tr>
</tbody>
</table>
The distribution of poverty over time

The distribution of poverty and ill health has persisted in east London for more than 100 years. Results of mapping of the population at risk of type 2 diabetes, associated with poverty and South Asian ethnicity, showed a similar distribution to mapping of poverty by Charles Booth in the late 19th Century.

Trend data over the last 12 years show that national improvements in child poverty rates have not in general been evident in London.¹


¹ GLA (2011) Early years interventions to address health inequalities in London – The economic case
Child poverty in 2011 was **significantly higher** in London (26.7%) than in England (20.1%).

There is a wide variation in child poverty levels within London, with child poverty in Tower Hamlets, the highest in the country at nearly 50%, **almost five times as high** as in Richmond upon Thames.

Over the last four years, most boroughs have seen decreases in the percentage of children in poverty, although Bromley has seen virtually no change, while Havering and Bexley have seen increases in most years.¹

---

Housing and health

Living in substandard housing can have a profound impact on a child's physical and mental development with implications for both their immediate and future life chances.¹

One in 7 children in England live in poor housing – this equates to about 291,000 children in London. The impact of poor housing on health is summarised below²:

<table>
<thead>
<tr>
<th>Poor housing</th>
<th>Overcrowding</th>
<th>Fuel poverty</th>
<th>Homelessness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increases the risk of severe ill health or disability by up to 25%</td>
<td>Is associated with 10 times the likelihood of childhood meningitis</td>
<td>Increases the risk of mental health problems in adolescents</td>
<td>Increases the likelihood of hospital admission</td>
</tr>
<tr>
<td>Is associated with 3-4 times the level of mental health problems</td>
<td>Increases the risk of infant mortality</td>
<td>Increases the likelihood of hospital admission</td>
<td>Increases the risk of worse access to care</td>
</tr>
<tr>
<td>Results in more school absence</td>
<td>Causes children to miss school more frequently due to ill health</td>
<td>Increases the risk of accidents in the home</td>
<td>Increases the likelihood of school absenteeism two-three fold</td>
</tr>
<tr>
<td>Children who live in damp, mouldy homes to be 1.5-3 times more prone to coughing and wheezing</td>
<td>Is associated with poor weight gain in infants</td>
<td>Is associated with delayed development in communication skills</td>
<td>Is associated with behavioural problems</td>
</tr>
<tr>
<td></td>
<td>Is related to decreased educational attainment, emotional wellbeing and resilience</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Improving housing

**Housing and health**

*1 in 4* London children (about 510,000) live in overcrowded conditions. This increases to 43% of children living in the social rented sector.¹

About *62,394* children in London live in temporary accommodation

Of the 15 most overcrowded wards, 13 are in London. Overcrowding is concentrated geographically in certain areas of London, so the costs of overcrowding are borne disproportionately by certain local authorities.²

Overcrowding is associated with increased costs to health and local government. These include providing additional health services, the cost of welfare support resulting from poor educational achievement and the resulting impact on employability and even the costs of antisocial behaviour that are linked with overcrowding.²

---


² London Assembly (2011) *Crowded housing: Overcrowding in London’s social rented housing*
• The percentage of mothers smoking at delivery in Q3 2011-12 in London (6.1%) was about half that of England (13.4%)
• The cost of smoking in pregnancy in London is about £1.3 million - £10.5 million per year. The wider societal costs of smoking in pregnancy in London contributing to preterm births is estimated to be £24 million - £38 million
• About 3 in 10 babies born at term in London have a low birth weight
• At least 1 in 10 women (about 13,400 new mothers in London) will suffer from a perinatal mental illness
Reducing smoking in pregnancy

Background

Much of the foundation for good physical health occurs in pregnancy and infancy. Smoking in pregnancy is a cause of ill health for the mother and baby and is the single most important modifiable risk factor in pregnancy. Reducing smoking during pregnancy is one of the three national ambitions in the Tobacco Control Plan published in March 2011, which is “to reduce rates of smoking throughout pregnancy to 11% or less by the end of 2015 (measured at time of giving birth).

<table>
<thead>
<tr>
<th>Effects on health</th>
<th>Smoking in pregnancy accounts for:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• 5 - 8% of premature births</td>
</tr>
<tr>
<td></td>
<td>• 13 - 19% of cases of low birth weight in babies carried to full term</td>
</tr>
<tr>
<td></td>
<td>• 5 - 7% of preterm-related deaths</td>
</tr>
<tr>
<td></td>
<td>• 23 - 34% of sudden unexpected deaths in infancy (SUDI).¹</td>
</tr>
</tbody>
</table>

Children of mothers who smoked in pregnancy are at increased risk of:
• infant mortality
• congenital malformations
• a number of respiratory conditions
• attention and hyperactivity difficulties
• learning difficulties
• problems of the ear, nose and throat.²

¹ Dietz PM, England LJ, Shapiro-Mendoza CK Ton VT et al. Infant morbidity and mortality attributable to prenatal smoking in the U.S. American Journal of Preventative Medicine Published online June 8, 2010
The cost of smoking, to the NHS in the UK, is estimated to be in the range of £8 million - £64 million per year based on different costing methodologies.

The cost of smoking in pregnancy for infants during the first year following birth is estimated to range between £12 million and £23.5 million per year. The care of low birth weight and preterm infants accounts for most of the costs.

If the number of births is used as a crude proxy, the proportion of pregnancies in London in 2011 was 16.4% of UK pregnancies, the cost to the NHS of smoking during pregnancy in London can be calculated at between an estimated £1.3 million and £10.5 million per year.

Similarly, if the proportion of births in London is 16.4% of UK births, then a crude estimated total cost to the NHS of smoking during pregnancy for infants (0-12 months) in London can be calculated at between an estimated £2 million and £3.9 million.

Cost estimates are limited to NHS costs during pregnancy and the first year of life, but smoking in pregnancy has long-term effects on health and may therefore have wider costs to education, social work and judicial systems. The real costs to society could be much higher.

Positive economic cost savings could be generated with low-cost smoking cessation interventions: it is estimated that spending between £13.60-£37.00 per pregnant smoker would yield positive cost savings for the NHS. These cost estimates are conservative, being limited to NHS costs during pregnancy and the first year of life.

---

Societal costs of smoking in pregnancy in London

Smoking in pregnancy accounts for 5-8% of preterm births. The consequences of being born preterm can be substantial and include a range of physical, neurodevelopmental and behavioural sequelae. The Chief Medical Officer’s recent Report estimated the wider societal costs of preterm birth including health and social care, education and parental expenses and lost of productivity to be £51,656 per child.

Using this estimate the **wider societal cost** of smoking in pregnancy in London contributing to preterm births is estimated between **£24 million - £38 million**.

<table>
<thead>
<tr>
<th>Rate of babies born preterm in the England and Wales (2010/11):</th>
<th>7.0%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbers of babies born in London in 2011:</td>
<td>132,843</td>
</tr>
<tr>
<td>Numbers of preterm babies born in London (applying England and Wales proportion):</td>
<td>9,300</td>
</tr>
<tr>
<td>Smoking in pregnancy accounts for 5-8% of preterm births:</td>
<td>465-744</td>
</tr>
<tr>
<td>Incremental societal costs of all preterm birth from delivery to age 18</td>
<td>£51,656 per child</td>
</tr>
<tr>
<td>Incremental societal costs of smoking in pregnancy in London</td>
<td><strong>£24 million - £38 million</strong></td>
</tr>
</tbody>
</table>
In England, the percentage of mothers smoking at delivery has fallen since 2006. The percentage of mothers smoking at delivery in London (1,890 mothers, 6.1% in Q3 2011-12) is about half that of England (13.4%), but there are wide variations. Mothers smoking at time of delivery was more than 5 times higher in Havering PCT (15.2%) in Q3 2011-12 compared to Westminster and Brent PCTs (2.8%).
Reducing low birth weight

Background

Low birth weight (less than 2500g) may highlight the state of maternal health and nutrition, as well as the quality of antenatal care.

Low birth weight may simply be constitutional, but is more often the result of other factors such as poor maternal nutrition, maternal hypertension, smoking, substance misuse or congenital infection. In those circumstances, low birth weight is associated with higher perinatal mortality, lower educational attainment and increased risk of cardiovascular disease and diabetes. In some ethnic groups differences in birth weight can be explained by socioeconomic disadvantage, whilst maternal factors are important in other ethnic groups.

The proportion of low birth weight term babies in 2011 was significantly higher in London (3.2%) than the average for England (2.8%).

There is a wide variation across London in the proportion low birth weight term babies, the highest proportion in Newham (4.4%) being more than twice as high as the lowest in Westminster (2.0%).
One of the strongest predictors of wellbeing in early years is the mental health and wellbeing of the mother or caregiver.\textsuperscript{1}

During pregnancy and in the first year after birth, mothers can be affected by a range of mental disorders. Collectively, these issues are termed perinatal mental disorders. Prevalence of these disorders vary according to type:

- At least \textbf{1 in 10 women} (about 13,400 new mothers in London) will suffer from a perinatal mental illness.\textsuperscript{2}
- Fewer than 300 new mothers in London experience postpartum psychosis.\textsuperscript{1}
- About 4,000 new mothers experience severe depressive illness.\textsuperscript{1}

Perinatal mental disorders are particularly significant as they have the potential to interfere with or prevent the development of mother-child attachment and the caregiving relationship. This can lead to longstanding, harmful effects on the child’s emotional, social and cognitive development.\textsuperscript{1}

The economic argument for improved perinatal mental health services is developing. It is estimated that in England the total benefit to mothers with postnatal depression, receiving a targeted health visitor intervention would be about £770 million in present value terms. This is based upon the number of women giving birth in 2009 and 50\%\% of the 86,000 women affected receiving a targeted intervention. If all such women could be targeted figures could double and up to £1.54 billion of ‘reactive’ later spend could be prevented.\textsuperscript{3}

---

3. Sheppard A (2011) \textit{Improving outcomes and ensuring quality: A guide for commissioners and providers of perinatal mental health services}
Summary: Infancy and early years

• The perinatal mortality rate for 2009-11 for London (7.9 per 1,000) was higher than the average for England (7.5 per 1,000)
• In 2012, 519 babies did not live to see their first birthday
• About 9 in 10 mothers in London breastfed their baby at birth
• In the UK, if just 1% of those who currently “never breastfed” were to initiate breastfeeding, it could be associated with a small increase in average IQ that in turn could result in over £278 million gains in economic productivity over the lifetime of each annual birth cohort
• 1 in 10 children living in London did not receive their third dose of DTaP/IPV/Hib at 12 months
• 13% of children living in London did not complete their MMR immunisation at 24 months
Reducing perinatal and infant mortality

Background

The Perinatal Mortality Rate (PMR), the number of still births and deaths within the first seven days of life, is a key outcome indicator for newborn care and directly reflects prenatal, intrapartum, and newborn care.

Infant mortality is a sensitive measure of the overall health of a population. It reflects the apparent association between the causes of infant mortality and other factors that are likely to influence the health status of whole populations, such as their economic development, general living conditions, social well being, rates of illness and the quality of the environment.

The infant mortality rate (IMR) is defined as the number of deaths under the age of one year, per 1,000 live births. It consists of two components:

• The neonatal mortality rate: The number of neonatal deaths (those occurring during the first 28 days of life) per 1,000 live births.
• The post-neonatal mortality rate: The number of infants who die between 28 days and less than one year, per 1,000 live births.

Mortality during the neonatal period is considered a good indicator of both maternal and newborn health and care.¹
What are the causes of perinatal and infant mortality?

The majority of deaths in the perinatal period and infancy are due to perinatal problems such as immaturity related conditions and congenital abnormalities. Immaturity due to preterm (<37 weeks gestation) birth remain the commonest cause of death in the first year of life.¹

Reducing perinatal and infant mortality²

Action on a number of interventions will reduce perinatal and infant mortality:

<table>
<thead>
<tr>
<th>Maternal</th>
<th>Infancy</th>
<th>Healthcare</th>
<th>Wider determinants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reducing smoking in pregnancy</td>
<td>Increasing breastfeeding</td>
<td>Ensuring access to antenatal care</td>
<td>Reducing overcrowding</td>
</tr>
<tr>
<td>Reducing maternal obesity</td>
<td></td>
<td>Ensuring high quality neonatal intensive care</td>
<td>Reducing child poverty</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Enhanced antenatal, paediatric and genetic services for certain ethnic minority groups</td>
<td>Improving maternal educational attainment</td>
</tr>
</tbody>
</table>
The perinatal mortality rate for 2009-11 for London (7.9 per 1,000 births) was higher than the average for England (7.5 per 1,000 births).

There is a wide variation in perinatal mortality rates within London. The highest rate in Lambeth being more than double the lowest rate, in Richmond upon Thames - which is amongst the lowest rate in England.
The infant mortality rate (IMR) in London (4.34 per 1,000 live births) was higher than that of England (4.29 per 1,000 live births).

There is a wide variation in infant mortality rates within London. The IMRs in Harrow and Lambeth were about three times higher than in Bromley and Sutton.
Background

Breastfeeding has clear health gains for both mother and baby. Breastfeeding protects children from a range of later problems including reducing the risk of ear (otitis media) and lung infections, asthma, obesity and diabetes, sudden unexpected death in infancy (SUDI), dermatitis, gastrointestinal disorders (coeliac and inflammatory bowel disease) and leukaemia, and may also have an impact on neurodevelopmental outcomes including intelligence.¹

Additionally, there are benefits for the mother, such as improved breast and ovarian cancer survival.

Investment in supporting women to breastfeed will improve the quality of life for women and for children through reducing acute and chronic diseases.²

Figure 1

Diagrammatic representation of the costs resulting from disease and developmental deficit resulting from low rates of breastfeeding in the UK (illustrative, not representative). Conceptually the costs estimated in section 4 are likely to be a small sub-set of the real NHS costs associated with low breastfeeding rates.

2. UNICEF UK (2012) Preventing disease and saving resources: The potential contribution of increasing breastfeeding rates in the UK
Cost effectiveness of breastfeeding promotion¹

Low breastfeeding rates lead to an increased incidence of illness that has a significant cost to the health service and society. Investment to increase and sustain breastfeeding rates will provide a rapid financial return on investment.

Modeling has shown that if 45% of women exclusively breastfed for four months and if 75% of babies in neonatal units were breastfed at discharge, every year in the UK there could be an estimated:

- 3,285 fewer gastrointestinal infection-related hospital admissions and 10,637 fewer GP consultations, with over £3.6 million saved in treatment costs annually.
- 5,916 fewer lower respiratory tract infection-related hospital admissions and 22,248 fewer GP consultations, with around £6.7 million saved in treatment costs annually.
- 21,045 fewer acute otitis media related GP consultations, with over £750,000 saved in treatment costs annually.
- 361 fewer cases of necrotising enterocolitis, with over £6 million saved in treatment costs annually.

In total, over £17 million could be gained annually by avoiding the costs of treating four acute diseases in infants. Increasing breastfeeding prevalence further would result in even greater cost savings.

1. UNICEF UK (2012) Preventing disease and saving resources: The potential contribution of increasing breastfeeding rates in the UK
Cost effectiveness of breastfeeding promotion

Modeling has shown that if half those mothers in the UK who currently do not breastfeed were to breastfeed for up to 18 months in their lifetime, for each annual cohort of around 313,000 first-time mothers there could be:

- 865 fewer breast cancer cases with cost savings to the health service of over £21 million
- 512 breast cancer-related quality adjusted life years (QALYs) gained, equating to a value of over £10 million.

This could result in an **incremental benefit of more than £31 million, over the lifetime of each annual cohort of first-time mothers**.

- If just 1% of those who currently “never breastfed” were to initiate breastfeeding, it could be associated with a small increase in average IQ that in turn could result in over £278 million gains in economic productivity over the lifetime of each annual birth cohort.
- A very modest increase in the rates of exclusive breastfeeding could be associated with the avoidance of at least three cases of SIDS annually, averting the profound consequences for families and avoiding an annual monetary loss of around £4.7 million and a loss of £1.3 million annually in QALYs.
- Increasing breastfeeding rates to a level compatible with reducing the rates of early years obesity by as little as 5%, would result in reducing annual health-care expenditures by more than £1.6 million.
Breastfeeding initiation in London (86.8%) was significantly higher than for England (73.9%).

Breastfeeding initiation was lower than the England average in three boroughs (Bexley, Havering and Barking and Dagenham).

Source: Calculated by Public Health England Knowledge and Intelligence Team (East) using Department of Health (DH), Integrated Performance Monitoring Return.
Breastfeeding at 6-8 weeks, 2012-13

There are no data for 15 London boroughs.

Breastfeeding continuation was significantly higher for London (68.5%) than for England (47.2%).

For all London boroughs for which data are available, there was a wide variation breastfeeding continuation rates, the breastfeeding continuation rate in Hackney (88.3%) being more than double the rate in Havering (41.6%).

Source: Calculated by Public Health England Knowledge and Intelligence Team (East) using Department of Health (DH), Integrated Performance Monitoring Return

http://www.phoutcomes.info
Background

Immunity is the ability of the body to protect itself from infectious disease. Immunisation is one of the most effective public health interventions; it provides protection to vaccinated individuals, can provide protection to the wider unvaccinated population and is highly cost effective.¹

Currently the European Region of the World Health Organisation (WHO) recommends that on a national basis at least 95% of children are immunised against diseases preventable by immunisation and targeted for elimination or control (specifically, diphtheria, tetanus, pertussis, polio, Hib, measles, mumps and rubella).¹

The use of vaccines to reduce disease in children has been one of the success stories of recent years. Incidents, including deaths, from vaccine preventable diseases such as measles, whooping cough, meningococcal serogroup C and tetanus have been greatly reduced since the implementation of the routine childhood immunisation programme.

Despite the longstanding availability of vaccines and a national health policy aiming at near universal coverage, actual coverage in London is widely incomplete. For example, in 2012-13:

- **1 in 10** children living in London **did not receive** their third dose of DTaP/IPV/Hib at 12 months.
- **13%** of children living in London **did not complete** their MMR immunisation at 24 months.
- **1 in 5** children living in London **did not receive** their DTaP/IPV/Hib booster at 5 years.²

Increasing immunisation uptake

DTaP/IPV/Hib coverage at 12 months (2012-13)

- North East: 96.5
- North West: 95.9
- Yorkshire & the Humber: 96.3
- East Midlands: 96.4
- West Midlands: 94.5
- East of England: 96.1
- London: 91.1
- South East Coast: 93.7
- South Central: 95.1
- South West: 96.1

DTaP/IPV/Hib coverage in London in 2012-13 was the lowest in England. 1 in 10 children had not completed the primary immunisation courses by their first birthday. This is unchanged from 2011-12.

Only 7 PCTs had immunisation coverage above the WHO target.

Source: COVER, Health and Social Care Information Centre.
MMR coverage in London in 2012-13 was the lowest in England. 13% of children had not completed the primary immunisation course by their second birthday.

No PCTs in London had immunisation coverage above the WHO target.

Source: COVER, Health and Social Care Information Centre.
Increasing immunisation uptake

Reported vaccinations for DTaP/IPV/Hib indicate that **1 in 5 children in London had not** received their booster at five years of age in 2012-13. Although no SHAs reached the WHO target of 95%, London had the lowest immunisation coverage.

Reported vaccinations for MMR indicate that **1 in 5 children in London had not** received their first and second dose by their fifth birthday in 2012-13. Although no SHAs reached the WHO target of 95%, London had the lowest immunisation coverage.

Source: COVER, Health and Social Care Information Centre.
Summary: Childhood

- Tooth decay is the **most common** chronic disease in childhood even though it is largely preventable and is the **top** cause for child non-emergency admissions in most London boroughs.
- The percentage of 5 year olds with one or more decayed, missing or filled teeth in 2012 in London (32.9%) **was higher** than the England average (27.9%).
- Nearly **1 in 4** children (23.0%) in London aged 4-5 years are overweight or obese.
- Only **6 out of 10** children in London are a healthy weight when they start secondary school.
- **An obese child** in London is likely to cost around £31 a year in direct costs, which could rise to a total (direct and indirect) of £611 a year if they continue to be obese into adulthood.
- The **treatment costs of childhood obesity** in London was between **£30 million - £195 million** in 2007-08.
Reducing tooth decay in children

Background

Good oral health is integral to a child’s general health and well-being. Oral health affects how children grow, enjoy life, look, speak, chew, taste food and socialise, as well as their feelings of social well-being. Poor oral health and associated pain and disease can lead to difficulties in eating, sleeping, concentrating and socialising, thereby affecting health-related quality of life with individual, family and societal consequences (school absence, time off work and financial impacts to the individual and society). **Tooth decay is the most common chronic disease in childhood even though it is largely preventable.**

Often dental treatment for young children (such as extractions of decayed teeth) may only be done under general anaesthetic, which is both distressing for the families concerned and carries a financial burden. **Tooth decay** accounts for high numbers of child general anaesthetics and in many London boroughs it is **the top cause for child non-emergency admissions.**

The oral health of children has been identified by the Government as a priority area with a public health outcome measure around tooth decay in children aged 5 years. This recognises the need for local areas to focus on and prioritise oral health and oral health improvement initiatives.
The percentage of 5 year old children with one or more decayed, missing or filled teeth for 2012 in London (32.9%) was **higher** than the England average (27.9%).

This has plateaued in London where other regions have seen promising reductions.

Similarly, the percentage of children with active decay for 2012 in London (28.8%) was **higher** than the England average (24.5%).

Despite some improvement in the rest of England, the level in London has plateaued.
Percentage of five year old children with tooth decay experience in London, 2012

**Prevalence**
There are wide inequalities in dental health across London. Five year olds living in Tower Hamlets and Brent are more than twice as likely to have a decayed, missing or filled tooth as those living in Richmond upon Thames.

**Severity**
The mean number of decayed, missing and filled teeth ($d_{3mft}$) in 5 year old children in London has fallen slightly from 1.31 in 2008 to 1.23 in 2012.

The percentage of 5 year old children with one or more decayed, missing or filled teeth in London has remained static between 2008 and 2012 (32.6% vs. 32.9%).

A similar situation exists for the percentage of 5 year old children with active decay in London between 2008 and 2012 (29.0% vs. 28.8%).
Reducing childhood obesity

**Background**

Body Mass Index (BMI) is a tool used to classify whether a person is a healthy weight for their height. It is calculated by dividing weight in kilograms by the square of height in metres (BMI = weight (kg)/height (m)^2). Normal BMI ranges between 18.5 and 24.9. Obesity is defined as excess body fat accumulation that may impair health. The foundations of obesity start in childhood. The prevalence of obesity has trebled since the 1980s and well over half of all adults are either overweight or obese.¹

In the UK, the classification of a child as obese is determined on the basis of a growth chart and defined as a BMI greater than or equal to the 95th percentile for age.²

Health and psychosocial problems associated with childhood obesity include²:

<table>
<thead>
<tr>
<th>Health</th>
<th>Psychosocial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory disorders</td>
<td>Low self esteem</td>
</tr>
<tr>
<td>High blood pressure</td>
<td>Depression</td>
</tr>
<tr>
<td>Sleep apnoea</td>
<td>Conduct disorders</td>
</tr>
<tr>
<td>Musculoskeletal disorders</td>
<td>Reduced school performance and social functioning</td>
</tr>
<tr>
<td>Elevated risk of developing type 1 or type 2 diabetes</td>
<td></td>
</tr>
</tbody>
</table>

There are few examples of child obesity programmes that have been subject to economic evaluation. Clinical studies can show what interventions are effective in terms of weight loss and improved health outcomes, but they do not provide insights into which programmes offer the best value for money.\(^1\) In 2011, the Greater London Authority calculated the costs of childhood obesity in London and estimated that:

- The **treatment cost of overweight children** in London was between £19 million and £80 million in 2007. This represents 0.1% to 0.6% of total identifiable health services expenditure on services in London in 2007.
- The **treatment cost of childhood obesity** in London of between £29.73 million and £156.65 million in 2007/8. This represents around 0.22% to 1.14% of total identifiable health expenditure on services in London in 2007/8.
- The **future costs** of childhood obesity in London could rise to between £32.2 million and £169.6 million a year in 2010 and £36.97 million and £194.76 million a year in 2015.
- An **obese child** in London is likely to cost around £31 a year in direct costs which could rise to a **total (direct and indirect) cost of £611 a year** if they continue to be obese in adulthood. This projection is likely to be an underestimate, because of the probability that prolonged obesity – that is, if an adult has been obese since early childhood – has more serious health and other consequences.\(^1\)

**Note:** The likely future costs have been proxied by the current costs of adult obesity in London. Not every obese child will grow up to be an obese adult so the future costs presented here can not be assumed to apply to every obese child in London.

---

1. GLA Intelligence Unit (2011) *Childhood obesity in London*
Only 6 out of 10 children in London are a healthy weight when they start secondary school. Rates of childhood overweight and obesity are higher in London than in the rest of England. Some of London’s boroughs have the highest rates in the country.

In 2011/12:
- The proportion of obese children living in London was 1.2 times higher than England.
- The proportion of obese children living in London and England aged 10-11 years is double that of those aged 4-5 years (Table 1).

### Table 1: Overall prevalence of overweight and obese children in London, 2011/12

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Prevalence of overweight and obese (%)</th>
<th>Prevalence of obesity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>London</td>
<td>England</td>
</tr>
<tr>
<td>4-5</td>
<td>23.3</td>
<td>22.6</td>
</tr>
<tr>
<td>10-11</td>
<td>37.5</td>
<td>33.9</td>
</tr>
</tbody>
</table>
Nearly 1 in 4 children (23.0%) in London aged 4-5 years are overweight or obese.

There is a wide variation in London, the proportion of children aged 4-5 years overweight or obese in Bexley (26.8%), Greenwhich (26.7%) and Southwark (26.7%) was nearly double that in Kingston upon Thames (16.1%) and Richmond upon Thames (16.3%).

The proportion of overweight or obese children was significantly worse than the London average in 5 boroughs: Brent, Hackney, Newham, Tower Hamlets and Southwark.

Source: Health and Social Care Information Centre, National Child Measurement Programme
Nearly **2 in 5** children aged 10-11 living in London are overweight or obese. The prevalence of overweight and obesity was **significantly higher** in London (37.4%) than England (33.3%).

There is a wide variation in London, the proportion of children aged 10-11 years overweight or obese in Southwark (44.2%) was **1.7 times higher** than that in Richmond upon Thames (26.1%).

The proportion of overweight or obese children was worse than the London average in 9 boroughs.
Summary: Adolescence

- In 2011-12 HPV immunisation uptake in London (78.9%) was lower than that of England (86.8%)
- At least 1 in 10 (111,000) children aged 5-16 have a clinically significant mental health problem
- The impacts of childhood psychiatric disorders cost London’s education system approximately £200 million per year
- Each day 67 children, more than two classrooms full start smoking in London
- The average admission rate for alcohol or substance misuse is significantly lower in London than England
- Every £1 spent on young people’s drug and alcohol interventions brings a benefit of £5 - £8
- Rates of chlamydia diagnosis in young people are higher in London than for England
- For every £1 spent on contraception £11 is saved in other healthcare costs
- All local authorities in London have improved their performance on reducing teenage pregnancy
Background

Adolescence (defined by the World Health Organisation as young people aged 10-19 years) is a critical period of transition from childhood to adulthood. There are now as many young people in the second decade of life (10-19 years) in the UK as children in the first (0-9 years).

Adolescence is a period when significant physical, psychological, and behavioural changes occur and when young people develop many of the habits, behavioural patterns and relationships they will carry into their adult lives, for example:

• Smoking in the UK increases from a population prevalence of 1% at age 11 years to around 20% at 15 years. Nearly 90% of lifetime smoking is initiated between the ages of 10 and 20 years in the UK.
• About 80% of lifetime alcohol or cannabis use is initiated <20 years.
• Five of the 10 key risk factors for adult disease burden identified in the WHO Global Burden of Disease Study (tobacco, physical activity, overweight, unsafe sex and alcohol use) are problems that are usually initiated or heavily shaped (e.g. physical activity) in adolescence.
• Nearly two-thirds of premature deaths and one-third of the total disease burden in adults are associated with conditions or behaviours that began in their youth, including: tobacco use, a lack of physical activity, unprotected sex or exposure to violence.

Most young people are healthy, however:
• All cause mortality among adolescents is now higher than for other periods of childhood except the newborn period. Injuries are the main cause of adolescent mortality.
• Morbidity due to disability and long-term conditions is higher among adolescents than children.
• About 75% of lifetime mental health disorders have their onset before 18 years of age, with the peak onset of most conditions being from 8 to 15 years. About 10% of adolescents suffer from a mental health problem at any one time.

Promoting healthy practices during adolescence and taking steps to better protect young people from health risks is critical to the future of London’s health and social infrastructure and to the prevention of health problems in adulthood.
**Increasing HPV immunisation uptake**

**Background**

Human papillomaviruses (HPV) are responsible for nearly 3,000 cases of cervical cancer and more than 100,000 diagnosed cases of anogenital warts in the United Kingdom every year, despite a decrease in the incidence of cervical cancer as a result of regular cytological screening. In particular, HPV types 16 and 18 are associated with 70% of cervical cancers, whereas 90% of anogenital warts are linked to HPV types 6 and 11. HPV has also been linked to anal, vulval, vaginal, penile, and oropharyngeal cancers.¹

In the UK, all girls aged 12 to 13 are offered the Gardasil HPV vaccine as part of the childhood vaccination programme. Gardasil is quadrivalent, providing protection against vulval, cervical, anal and throat cancer, anogenital warts and recurrent respiratory papillomattoses.² It is estimated that HPV vaccination could save about 400 deaths per year.³

Gardasil is cost effective at a threshold of £30,000 per QALY gained. The incremental cost effectiveness ratio of quadrivalent vaccination (compared with no vaccination) ranges from £12,000 (£11,000 - £14,000) to £19,000 (£17,000 - £22,000) when protection against anal, penile, and oropharyngeal cancers is assumed and up to £22,000 (£19,000 - £25,000) when only protection against licensed end points is assumed.²

---

In 2011-12, HPV uptake in London (78.9%) was significantly lower than that of England (86.8%).

There is a wide variation in HPV uptake across London. In 2012-13 the highest uptake in Newham (90.3%) was 1.5 times higher than Barnet, the lowest (62.1%).

http://fingertips.phe.org.uk/profile/cyphof/
Background

Good mental health and resilience is fundamental to physical health, relationships, education, work and to individuals achieving their potential. Mental illness is the largest single source of burden of disease in the UK. Mental ill health has a significant impact on a range of outcomes. In the case of children and young people, this includes poor educational achievement and a greater risk of suicide and substance misuse, antisocial behaviour, offending and early pregnancy. Poor mental health in childhood and adolescence is further associated with a broad range of poor health outcomes in adulthood. About 75% of lifetime mental health disorders have their onset before 18 years of age, with the peak onset of most conditions being from 8 to 15 years. Estimates show that:

- At least 1 in 10 children aged 5-16 have a clinically significant mental health problem. There are currently 1.1 million people in London between the ages of 5 and 16, so mental ill health affects about 111,000 children aged 5-16 living in London.
- National estimates suggest that 45% of looked after children aged 5-17 years experience a mental health disorder, 37% have clinically significant conduct disorders, 12% have emotional disorders, such as anxiety or depression, and that 7% were are hyperkinetic.

Young people with mental ill health who have poorer educational outcomes and are more likely to find themselves not in education, employment or training (NEET). Poor mental health is associated with an increased probability of being NEET of 2.7 percentage points for girls and 3.3 percentage points for boys (though this effect is not statistically significant). It is estimated that the lifetime resource cost of being NEET at around £104,000, most of which is due to reduced employment and productivity, future worklessness of children with mental health problems could lead to substantial output losses.

### Common mental health disorders in children

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage of London children aged 5-16</th>
<th>Number of affected children in London</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anxiety disorder</td>
<td>3.3</td>
<td>38,000</td>
</tr>
<tr>
<td>Depression</td>
<td>0.9</td>
<td>10,000</td>
</tr>
<tr>
<td>Conduct disorder</td>
<td>5.8</td>
<td>67,000</td>
</tr>
<tr>
<td>Attention deficit hyperactivity disorder</td>
<td>1.5</td>
<td>17,000</td>
</tr>
<tr>
<td>Any disorder</td>
<td>9.7</td>
<td>111,000</td>
</tr>
</tbody>
</table>

NB: Columns do not add up as individuals may meet the criteria for more than one category. Source: Child and Adolescent Mental Health Survey, 2004

Suicide and self-harm in adolescents is relatively low compared to adults:
- 7.2% of children aged 11-16 in the UK reported that they had tried to harm or kill themselves at some point. This is about 38,900 children in London.
- 1.7% UK parents with children aged 5-10 years old said their child had tried to harm or kill themselves. This is about 10,400 children in London.
- At least 1 in 15 young people aged 11 to 25 deliberately self harm. In London, this translates to 108,000 young people.\(^1\)
Good mental health and wellbeing also bring wider social and economic benefits. For example:

- The impacts of childhood psychiatric disorders cost London’s education system approximately £200 million per year.\(^1\)
- A review of economic evaluations of mental illness in childhood and adolescence, such as emotional and behavioural disturbances or antisocial behaviour, found mean costs to UK society to range from £11,030 to £59,130 annually per child.\(^2\)
- Lifetime costs of child conduct disorder in the UK for each 1-year cohort amount to £5.2 billion and for child sub threshold conduct disorder they amount to £23.6 billion.\(^2\)
- The annual cost of physical and emotional harm of crime related to conduct disorder in London is estimated to be £0.32bn to £0.37bn.\(^1\)
- Parenting interventions for parents who have children with conduct disorder cost about £1,200 per child. They have been shown to produce savings of around £8,000 for each child over a 25-year period (14% of the savings are in the NHS, 5% in the education system and 17% in the criminal justice system).\(^3\)
- Because half of lifetime mental illness arises by the age of 14, prevention and promotion interventions during childhood and adolescence are particularly cost-effective, with economic returns of early childhood intervention programmes exceeding cost by an average ratio of 1:6.\(^2\)
- Around £0.8bn was spent on mental health related secondary and tertiary care services for children in England in 2010/11.\(^1\)

---

2. Royal College of Psychiatrists (2010) No health without public mental health: The case for action
3. HMG/DH (2011) No health without mental health: A cross-government mental health outcomes strategy for people of all ages
Hospital admissions for mental health disorders in children aged 0-17 years, 2011-12

Hospital admissions for mental health disorders were lower in London (87.8 per 100,000) than England (91.3 per 100,000).

There was a wide variation in admission rates in London. Admission rates in Islington (172.0 per 100,000) were about four times higher than Harrow (43.4 per 100,000).

Local Authority   | Admission rate
------------------|-----------------|
City of London    | -               |
Harrow            | 43.4            |
Kingston upon Thames | 59.1         |
Greenwich         | 64.8            |
Westminster       | 65.9            |
Wandsworth        | 67.3            |
Bromley           | 68.4            |
Ealing            | 70.1            |
Southwark         | 70.4            |
Havering          | 70.7            |
Richmond upon Thames | 71.8         |
Hackney           | 75.4            |
Brent             | 75.5            |
Kensington and Chelsea | 75.8       |
Lewisham          | 79.0            |
Hammersmith and Fulham | 81.4       |
Hounslow          | 81.5            |
Bexley            | 82.6            |
Croydon           | 86.3            |
Sutton            | 91.3            |
Hillingdon        | 92.0            |
Merton            | 93.1            |
Enfield           | 94.4            |
Newham            | 95.0            |
Lambeth           | 101.0           |
Barking and Dagenham | 103.0       |
Waltham Forest    | 115.5           |
Haringey          | 122.2           |
Redbridge         | 124.3           |
Barnet            | 144.3           |
Camden            | 153.3           |
Tower Hamlets     | 160.9           |
Islington         | 172.0           |

Source: PHE/CHIMAT

http://atlas.chimat.org.uk/IAS/dataviews/view?viewId=320
Emergency hospital admissions as a result of self harm were lower in London (76.3 per 100,000) than England (124.8 per 100,000).

Although there was a wide variation in admission rates, ranging from 27.1 per 100,000 in Southwark to 110.0 per 100,000 in Haringey, this is based on small numbers and should be treated with caution.
Reducing smoking

Background

Nearly 90% of lifetime smoking is initiated between the ages of 10 and 20 years in the UK.¹

There is compelling evidence demonstrating the negative effects of smoking on health. This is even more so for smokers who start at a young age:

- Lung development is affected meaning that subsequent decline in lung function starts from a lower base increasing the risk of chronic obstructive pulmonary disease in later life.
- There is a higher risk for all types of tobacco related cancers, linked primarily to earlier exposure to the harmful toxin from cigarettes.²,³

Although the trend for smoking in children is downwards, the figure is still high and pressure needs to be maintained to reduce it. The White Paper Healthy Lives, Healthy People: A Tobacco Control Plan for England, identified an ambition to reduce the proportion of 15 year olds who are regular smokers from 15% in 2009 to 12% or less by the end of 2015. Each day, 67 children, more than two classrooms full, start smoking in London.³

---

Reducing drinking and substance misuse

Background

Alcohol consumption and substance misuse comprise a set of risk-taking behaviours, which cluster together, with shared risk factors (e.g. social deprivation) and shared consequences for ill health\(^1\). In addition young people who misuse alcohol or drugs may be more likely to engage in risk taking (e.g. unprotected sex) and criminal behaviour.

Although the prevalence of both behaviours is decreasing in children and young people they remain an important concern for public health, as they have the biggest impact on those with the most vulnerabilities.

About 80% of lifetime alcohol or cannabis use is initiated <20 years, with the proportions initiating other illicit drugs in adolescence closer to 50%. Once initiated, these behaviours track strongly into adult life, highlighting the importance of intervention in adolescence to prevent health burden.\(^1,2\)

The focus for all activity with young drug or alcohol misusers should be preventing the escalation of use and harm, including stopping young people from becoming drug or alcohol dependent adults. Drug and alcohol interventions need to respond incrementally to the risks in terms of drug use, vulnerability and particularly age. Young people with substance misuse problems have a range of vulnerabilities which must be addressed by collaborative work across local health, social care, family services, housing, youth justice, education and employment services.\(^3\)

Alcohol – what needs to be done

1. Improve awareness of alcohol harm among young people and delay the age of first use
2. For people who drink, make lower risk drinking the norm and an easy choice to make
3. Target those who are most at risk
4. Respond to and reduce the harm experienced by those who have already developed problems

Drugs – what needs to be done

1. Prevention measures to build resilience among young people and to promote drug-free environments
2. Develop effective responses to the harm of new drugs, and help people who are addicted to medicines
3. Respond to the growing number of older drug users, many of whom have serious addiction and health problems
4. A package of support (treatment, housing, employment, positive social networks) to help people recover and rebuild families and communities

PHE (2013) Alcohol and drugs prevention, treatment and recovery: Why invest

The proportion of pupils who had ever drunk alcohol is lower in London than the rest of the country. In 2011/12, less than a third (31%) of pupils in London had ever drunk alcohol compared to the highest proportion of 51% in the North East.

The proportions of pupils who had ever tried drugs were generally higher in the south of England than elsewhere. In the North and Midlands, between 15% and 17% of pupils reported having tried drugs. In the south, the proportion who had ever taken drugs varied between 18% (the South West) and 20% (London).

The limitations of this survey are that it is only conducted with children in school and so misses cohorts who may be more likely to have problems with drinking and drugs (e.g. those in pupil referral units or who are truanting etc.).

Alcohol and drugs prevention treatment and recovery: Why invest

Intervening early works and saves money

- Young people’s drug and alcohol interventions result in £4.3m health savings and £100m crime savings per year.
- Drug and alcohol interventions can help young people get into education, employment and training, bringing a total lifetime benefit of up to £159m.
- Every £1 spent on young people’s drug and alcohol interventions brings a benefit of £5-£8.

1. PHE (2013) Alcohol and drugs prevention, treatment and recovery: Why invest
Hospital admissions due to alcohol specific conditions in children and young people aged under 18 years, 2008-9 to 2010-11

These rates are based on small numbers, the largest total over the three year period being 96 admissions in Croydon – an average of 32 a year. The total number of admissions in Southwark for the three year period was 28.

The average hospital admission rate due to alcohol specific causes in people aged under 18 years over the period 2008-9 to 2010-1 was significantly lower for London (35.7 per 100,000) than for England (55.8 per 100,000). Rates are generally lower for London boroughs and all but nine London boroughs have rates that are significantly lower than for England. No London boroughs have rates that are significantly higher than for England.

There is a wide range of admission rates within London, the rate in Islington being over four times greater than that in Southwark. However this amounts to just under 15 more admissions on average per year in Islington than in Southwark - just over one a month.
These rates are based on small numbers, the largest total over the three year period being 91 admissions in Barking and Dagenham – an average of 30 a year. The total number of admissions in Kensington and Chelsea for the three year period was 16.

The average hospital admission rate due to substance misuse in people aged 15-24 years over the period 2008-9 to 2010-11 was lower for London (49.3 per 100,000) than for England (63.5 per 100,000).

There is a wide range of admission rates within London. The rate for Barking and Dagenham is markedly higher than for any other London borough and is five times greater than that in Merton. However, this difference amounts to 24 more admissions on average per year in Merton than in Barking and Dagenham - or two a month.
Background

Good sexual health matters to individuals, but it is also a key public health issue. Most people become sexually active and start forming relationships between the ages of 16 and 24. Young people in these age groups have significantly higher rates of poor sexual health, including sexually transmitted infections (STIs) and abortions, than older people.\(^1\)

Since 1998, diagnosis rates of almost all STIs among young people attending genitourinary medicine clinics have risen in the UK.\(^2\)

Chlamydia is among the commonest bacterial STIs in England and particularly prevalent in young sexually active adults. Because it is often asymptomatic, many infections remain undetected, and can go on to cause long-term health problems such as pelvic inflammatory disease, ectopic pregnancy and subfertility. Once diagnosed, it can be treated with a course of antibiotics.\(^3\)

---

Rates chlamydia diagnoses per 100,000 population aged 15-24 are derived from tests reported via the National Chlamydia Screening Programme. High rates are considered to be good as they demonstrate an improvement in detection.

The average rate for London was higher than the rate for England.

There is a wide range of results across London boroughs. The rate of chlamydia diagnoses in 15-24 years olds in Lambeth was the highest in England, and is over six times higher than the rate in Harrow.
Background

Although teenage pregnancy rates have fallen to their lowest levels since records began continuing to reduce under-18 pregnancies is a high priority, because:

• Of all young people not in education, training or employment, 15% are teenage mothers or pregnant teenagers.
• Teenage parents are 20% more likely to have no qualifications at age 30.
• Teenage mothers are 22% more likely to be living in poverty at 30.
• Teenage mothers have three times the rate of postnatal depression and a higher risk of poor mental health for three years after the birth.¹

Outcomes are also worse for children of teenage mothers:

• Children of teenage mothers have a 63% increased risk of being born into poverty and are more likely to have accidents and behavioural problems.
• The infant mortality rate for babies born to teenage mothers is 44% higher than mothers aged 20-39.
• Teenage mothers are three times more likely to smoke throughout their pregnancy and 50% less likely to breastfeeding, with negative health consequences for the child.¹

Around 20% of births conceived by under 18s are to young women who are already teenage mothers.

Evidence demonstrates that spending on reducing teenage pregnancy is cost effective: For every £1 spent on contraception, £11 is saved in other healthcare costs. More work is needed to assess the impact that reducing teenage pregnancies can have on wider local authority and other budgets.¹

¹ Department of Health (2013) A framework for sexual health improvement in England
In 2012 there were 3,504 conceptions in women aged 15-17 years in London. The conception rate in London (25.9 per 1,000) was lower than that of England (27.7 per 1,000).

There is a significant variation in teenage conception rates at a local level. The conception rate in Lewisham (42.0 per 1,000) is 2.4 times higher than that in Kensington and Chelsea (17.7 per 1,000).
All local authorities in London have improved their performance on reducing teenage pregnancy. Wandsworth has achieved the biggest reduction with a rate that is now less than 64.1% of its rate in 1998.
Public health challenges associated with children, young people and families living in London are significant.

There are wide health inequalities in the health and wellbeing of children and young people across London.

Improving the health and wellbeing of children living in London is important not only for health and social policy outcomes but also for the economic success of the city.

The scale of the challenge emphasises the importance of early intervention and cross agency approaches to maximise the benefits of investment and break intergenerational cycles of poverty and poor health outcomes.

We need to ensure that services provide a seamless service across the care pathway.

There are opportunities in the new public health system and NHS to address these issues more effectively.