

Protecting and improving the nation's health

# Health inequalities briefing for London Tobacco (use): Inequalities by protected characteristics and socioeconomic factors

Public Health England (London): key facts on social inequalities in tobacco (use).

# About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing, and reduce health inequalities. It does this through world-class science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. PHE is an operationally autonomous executive agency of the Department of Health.

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# Contents

About Public Health England Background	
Tobacco (use): Inequalities by protected characteristics and socioeconomic factors	
Age Disability Gender reassignment Marriage and civil partnership Pregnancy and maternity Race Religion and belief Sex Sexual orientation Socioeconomic factors	6 7 7 8 9 9 10 10
Other	10

# Background

Public Health England's (PHE) mission is to improve and protect the nation's health and wellbeing and improve the health of the poorest fastest. This includes PHE's core aim of reducing health inequalities. Health inequalities are systematic, avoidable differences in health between different groups of people. Health inequalities arise from social inequalities in factors that influence health like housing, the environment, income, employment and education.

Complementary to work on health inequalities is a focus on advancing equality, which is underpinned by provisions in the Equality Act 2010. Work on equality and diversity focuses on having due regard to eliminating discrimination, advancing equality of opportunity and fostering good relations between people or persons in relation to certain "protected characteristics" set out in the Equality Act 2010<sup>1</sup>. Legislation exists to protect the rights of individuals and promote equality of opportunity for all. The Act includes a public sector Equality Duty which requires "public authorities", such as Public Health England, to have due regard to the following in their work:

- eliminate unlawful discrimination, harassment and victimisation and other conduct prohibited by the Act
- advance equality of opportunity between people who share a protected characteristic and people who do not
- foster good relations between people who share a protected characteristic and those who do not

# Purpose of the briefings

This initial suite of briefings provides a summary description of inequalities in relation to protected characteristics (under the Equality Act) and socioeconomic factors. They will be updated for new data and evidence, periodically. The aim is to:

- increase awareness of health equality and socioeconomic differences across PHE London's five priority areas, as well as tobacco and Health Checks
- inform decision making in the implementation of plans to reduce health inequalities and support compliance with the Equality Act 2010

This briefing provides a summary description of inequalities in tobacco use in the Equality Act in relation to the protected characteristics and socioeconomic factors. They are not systematic reviews but they have been developed with local, regional and national experts in the field. This equalities briefing contains descriptive information. We hope that providing background information on what we know about how tobacco use might impact upon key equalities groups will be helpful to public health teams in shaping

how they design and implement their local programmes. PHE London is using the information to inform our support work.

The protected characteristics include:

- age
- disability
- gender reassignment
- marriage and civil partnership
- pregnancy and maternity
- race
- religion and belief
- sex
- sexual orientation
- socioeconomic factors

The socioeconomic factors include, for example, deprivation, employment status, educational attainment level, housing status.

#### Context

Tobacco control is central to any strategy to reduce health inequalities as smoking accounts for approximately half of the difference in life expectancy between the lowest and highest income groups. Smoking-related death rates are two to three times higher in low-income groups than in wealthier social groups<sup>2</sup>.

Nationally smoking prevalence among adults (aged 16 and over) has been declining. Regionally, London has a lower smoking prevalence than England (18% vs 19.5% respectively<sup>3</sup>). In London, there are currently around 1.2 million smokers; however there are marked differences in smoking rates in different parts of the capital's population.

The age-standardised death rate for causes attributable to smoking is statistically significantly lower in London than England (279.3 vs. 291.9 per 100,000, respectively<sup>4</sup>). Smoking has a direct impact on four of the top five biggest killers in London: heart disease, stroke, lung cancer and COPD<sup>4</sup>. Therefore it is essential to reduce smoking prevalence and target resources proportionately.

# Tobacco (use): Inequalities by protected characteristics and socioeconomic factors

## Age

Children growing up with parents or siblings who smoke are 90% more likely to become smokers themselves than those who do not<sup>5</sup>. Every year, over 160,000 children are adversely affected by second-hand smoke costing the NHS in England over £23 million<sup>5</sup>. Within a sample of London children aged 4-15 years in 2006-2008 who did not smoke, 51% of boys and 61% of girls had recently been exposed to second hand smoke<sup>6</sup>.

Two-thirds of smokers start smoking before age 18 and more than 80% before the age of  $20^7$ .

Nationally it was estimated that more than 200,000 children aged 11- 15 years old started smoking in 2011<sup>8</sup>. Between 2006-2008, 31% of London's young people aged 11-15 tried smoking at least once, while 5% smoked regularly<sup>9</sup>.

There are approximately 10 million adults, 18 years and above, who smoke cigarettes in Great Britain, approximately a sixth of the total population<sup>8</sup>. Smoking caused 8,406 deaths among Londoners aged 35 and over during the period 2008-10<sup>9</sup>.

Many young people come into the care system as smokers. Others become smokers while being looked after in care<sup>10</sup>. A survey of the mental health of looked after children by local authorities in England) reported that 32% of the 11- to 17 year-old looked after children questioned were, at the time of publication, current smokers<sup>11</sup>.

Nationally, smoking is lowest among people aged 60 and over and highest in 25-35 year olds<sup>12</sup>, however, they are more likely than younger people to have ever been smokers<sup>8</sup>.

#### Disability

At the time of writing we found limited published data on smoking and disability on a London wide basis. However, one in three of the UK's 10 million current smokers have a mental health disorder. Approximately 40% of people diagnosed with a mental health disorder smoke, they smoke more cigarettes than the general population and are more addicted to nicotine<sup>13</sup>.

Tobacco use contributes significantly to the main causes of ill-health and death in people with mental health disorders<sup>14</sup>. People with schizophrenia have life expectancy 20% shorter than the general population<sup>15</sup>, a ten-fold increase in risk of dying from respiratory disease<sup>16</sup> and two thirds will die of cardiovascular disease<sup>14</sup>.

Adults with learning disabilities who use learning disability services smoke less than the general population<sup>17</sup>. However, people with asthma and learning disabilities are twice as likely to be smokers as those with learning disabilities who do not have asthma<sup>18</sup>. Rates of smoking among adolescents with mild learning disabilities are higher than among their peers<sup>19</sup>.

## Gender reassignment

At the time of writing we found little published evidence regarding the presence of inequalities and tobacco use among people who have undergone gender reassignment or are in the process of doing so. However, a European study assessing death, ill health and criminal activity after sex reassignment in transsexual persons concluded that persons with transsexualism, after sex reassignment, have considerably higher risks for death than the general population<sup>20</sup>. The study found that deaths due to cardiovascular disease was significantly increased among sex reassigned individuals, albeit these results should be interpreted with caution due to the low number of events<sup>20</sup>.

In a separate study, the prevalence of smoking was reported at 50% by males-tofemales and almost 20% by female-to-males<sup>21</sup>, which may possibly explain the increase in deaths due to cardiovascular disease. However, again, the numbers in the study were small and caution should be taken in the generalisation of results.

#### Marriage and civil partnership

At the time of writing we found little published evidence regarding the presence of inequalities and tobacco use among individuals in a same sex marriage or civil partnership. Nationally the prevalence of cigarette smoking varies according to marital status. Smoking prevalence was lower among individuals who are in an opposite sex marriage (13%) than among those who were single (27%); cohabiting (29%); widowed, divorced or separated (21%)<sup>12</sup>. There is no current evidence relating to tobacco usage and civil partnership.

Those who were divorced or separated were around twice as likely to be heavy smokers (20 or more cigarettes a day) than those who were single<sup>22</sup>.

## Pregnancy and maternity

Smoking in pregnancy harms both the mother and unborn child. Maternal smoking is a major risk factor for low birth weight and babies who are small for their gestational age<sup>23</sup>. A recent study in the USA concluded that smoking remains a major cause of still-births, neonatal deaths, premature births and babies born with low birth weight<sup>13</sup>.

Maternal smoking increases the risk of perinatal death (if it occurs between 20-24 weeks of pregnancy and the first week of life) by 26% and, according to one study, 3% to 7.5% of all miscarriages could be attributable to smoking<sup>5</sup>. Babies born to mothers who smoke during pregnancy are 40% more likely to die in their first year of life<sup>24</sup>.

This means that nationally smoking in pregnancy causes up to 5,000 miscarriages, 300 perinatal deaths and also around 2,200 premature births each year<sup>5</sup>. Nationally, at least 300 babies die suddenly and unexpectedly every year from what is called Sudden Infant Death Syndrome. Smoking is one of the risk factors for SIDS and parents can reduce the risk of this by not smoking while pregnant or after the baby is born<sup>25</sup>.

Smoking during pregnancy accounts for about a third of the difference in infant deaths between the most and least deprived groups in the population<sup>26</sup>. Mothers in routine and manual occupations had the highest levels of smoking in 2010 (40%) and mothers under the age of 20 were nearly four times as likely to smoke before or during pregnancy than mothers aged 35 or over (57% compared with 15%)<sup>27</sup>.

Nationally 11% of women (16-49 years) smoke during pregnancy<sup>12</sup>. London region has the lowest smoking in pregnancy rate in the country, approximately one in 17 (5.7% during 2012-13), the lowest in the last six years<sup>8</sup>. However smoking status at the time of delivery varies between London boroughs, with Westminster having the lowest prevalence (2.3%) and Barking and Dagenham the highest (14.2%)<sup>28</sup>. Barking and Dagenham is the only London borough with a prevalence higher than the England average, which is  $12.7\%^{28}$ .

To note, it is possible that these smoking rates for pregnant women are underestimated. Given the health risks associated with smoking while pregnant, it may be perceived to be less socially acceptable and as a result respondents may be less likely to admit smoking when pregnant.

#### Race

Smoking rates vary considerably between ethnic groups but are generally lower among people from ethnic minorities, although there are gender differences.

While smoking rates have decreased in the general population, this pattern is not reflected among black and minority ethnic communities<sup>29</sup>.

Nationally, smoking rates among men are particularly high in Black Caribbean (37%), Bangladeshi (36%) and Chinese men (31%) The rate for White English men is 27%. Indian men have lower smoking rates  $(15\%)^{30}$ .

Nationally among women, smoking rates among minority ethnic groups are low compared to the general population (at 8% or below) with the exception of Black Caribbean (24%) and Irish (26%).

# Religion and belief

Religion and cultural beliefs may have an influence on some communities' attitudes towards tobacco use<sup>30</sup>.

The use of smokeless tobacco is embedded in many aspects of South Asian culture and cultural beliefs, in particular chewing tobacco which is either chewed alone or with betel quid/paan. It has symbolic implications at religious and cultural ceremonies<sup>30</sup>. Chewing tobacco is most commonly used by the Bangladeshi community with 9% of men and 19% of women reporting that they use chewing tobacco<sup>31</sup>. However these figures may reflect a degree of under-reporting by some respondents.

Cancer Research UK cites chewing tobacco as a risk factor for cancer<sup>32</sup>, and furthermore one systematic review of health effects associated with smokeless tobacco concluded that evidence (in India) showed an association between chewing betel quid and tobacco with a risk of oral cancers<sup>33</sup>.

Some Islamic religious leaders believe that smoking and the sale of tobacco should be prohibited by Islam<sup>34</sup>. Haredi Jewish men have a lower prevalence of smoking compared with the general population<sup>35</sup>.

#### Sex

In 2012 nationally the prevalence of smoking was 22% in men and 19% in women<sup>36</sup>. Nationally smoking prevalence among men is highest in the 25-34 age group at 32%. Smoking is highest among women at 29% in the 20-24 year old age group<sup>8</sup>.

Nationally, of those who smoke, more men (40%) smoke hand-rolled cigarettes than women  $(23\%)^{12}$ .

# Sexual orientation

Lesbian, Gay, Bisexual and Transgender people over the age of 16 are more likely to be current smokers, less likely to have never smoked, and less likely to have given up smoking<sup>37</sup> than the general population.

Nationally 67% of gay and bisexual men have smoked at some time in their life compared to half (50%) of heterosexual men. 26% of gay and bisexual men currently smoke compared to 22% of men in the general population<sup>38</sup>. Smoking rates are higher for men who have sex with men compared to their heterosexual counterparts<sup>39</sup>.

Nationally two thirds of lesbian and bisexual women have smoked compared to half of heterosexual women. Just over a quarter currently smoke<sup>40</sup>.

#### Socioeconomic factors

Smoking is the primary behavioural reason for the gap in healthy life expectancy between rich and poor in communities. Smoking-related death rates are two to three times higher in low-income groups than in wealthier social groups<sup>41</sup>.

There is a strong association between cigarette smoking and socio-economic group. Nationally, 29.7% of routine and manual workers smoke compared to 14% of managerial and professional occupations<sup>12</sup>. In London 25.7% of routine and manual workers smoke<sup>4</sup>.

There is significant variation between London boroughs, with the lowest routine and manual smoking prevalence in Brent (14.2%) and highest in Waltham Forest (39.3%).

Although there is limited evidence of the health of Gypsies and travellers, studies have found that their health status is much poorer than that of the general population and other marginalised groups<sup>42</sup>. An Ipsos MORI poll found that that 47% of Gypsies and travellers smoke<sup>43</sup>, statistically significantly higher than the general population.

#### Other

There is a connection between smoking cannabis and infective lung conditions such as tuberculosis (TB) and Legionnaires' disease<sup>44</sup>.

Approximately a third of adults in the UK have tried cannabis<sup>1</sup> and an estimated 2.2 million people have used cannabis during 2010 and 2011. Among young people,

cannabis is the most commonly used illicit drug  $(17.1 \text{ per cent of } 16 \text{ to } 24 \text{ -year olds in } 2010 \text{ -} 2011)^2$ .

Evidence of the use of waterpipe (Shisha, Narghille, Hookah) is still emerging and regular use among adults in Great Britain is low (roughly 1% of adults >18 years). Females, those in the lowest social grade and White ethnic groups are less likely to have ever used waterpipes. Ever smoking cigarettes and being Asian or mixed ethnicity increased the odds of ever using a waterpipe.

Further information on tobacco control data across London and nationally can be found in the local tobacco profiles: http://www.tobaccoprofiles.info/profile/tobacco-control/data

http://www.ash.org.uk/files/documents/ASH\_93.pdf. (internet) (accessed 7 July 2014).

<sup>9</sup>Public Health England. (2013) London Knowledge and Intelligence Team at Public Health England. Available from:

http://www.lho.org.uk/LHO\_Topics/National\_Lead\_Areas/SmokinginLondon.aspx#Secondhandsmoke.(online) (accessed 7 July 2014).

<sup>&</sup>lt;sup>1</sup>Great Britain (2010) (c.15) Equality Ac. London: HMSO

<sup>&</sup>lt;sup>2</sup>Marmot, M. (2010). Fair Society, Healthy Lives: Strategic review of health inequalities in England post-2010.London: Marmot review secretariat.

<sup>&</sup>lt;sup>3</sup> Public Health England (2014) London Tobacco Control Profiles. Available

from:http://www.tobaccoprofiles.info/profile/tobaccocontrol/data#gid/1000110/pat/6/ati/102/page/3/par/E12000007/are/E090000 02. (internet) (accessed 7 July 2014)

<sup>&</sup>lt;sup>4</sup>Public Health England London. (2014) Local Tobacco Control Profiles 2014 London Summary. London: Public Health England.

<sup>&</sup>lt;sup>5</sup>Royal College of Physicians (2012) Royal College of Physicians Parliamentary Briefing Passive smoking and children. London: Royal College of Physicians.

<sup>&</sup>lt;sup>6</sup> Health and Social Care Information Centre (2009) Health Survey for England-2008: Physical activity and fitness. UK: Health and Social care information centre.

<sup>&</sup>lt;sup>7</sup>Action on Smoking and Health (2014) Ash facts sheet: Young People and Smoking. Available from:

http://ash.org.uk/files/documents/ASH\_108.pdf.(internet) (accessed on 7 July 2014).

<sup>&</sup>lt;sup>8</sup> Action on smoking and health (2014) Ash facts at a glance: Smoking statistics. Available from:

<sup>&</sup>lt;sup>10</sup>Mooney M. Statham J. Monck E. (2009) Promoting the Health of Looked After Children: A Study to Inform Revision of the 2002 Guidance. London: Department for children, schools and families

 <sup>&</sup>lt;sup>11</sup> Meltzer et al (2002), The mental health of young people looked after by local authorities in England. Summary Report ONS
<sup>12</sup> Office for National Statistics (2014) Statistical Bulletin. Adult Smoking habits in Great Britain, 2013. Available from

http://www.ons.gov.uk/ons/dcp171778\_386291.pdf. (internet) (accessed 10 December 2014).

<sup>&</sup>lt;sup>13</sup>Action on smoking and health (2013) Smoking and reproduction. Available from:

http://ash.org.uk/files/documents/ASH\_112.pdf. (internet) (accessed 8 July 2014).

<sup>&</sup>lt;sup>14</sup> Champion J. Checinski K. Nurse J. McNeill A. (2008) Smoking by people with mental illness and benefits of smoke-free mental health services. Advances in Psychiatric Treatment, 14pp217-228.

<sup>&</sup>lt;sup>15</sup> Hennekens C.H. Hennekens A.R. Hollar D. (2005) Schizophrenia and increased risk of cardiovascular disease. American Heart Journal, 150, pp.1115-1121.

 <sup>&</sup>lt;sup>16</sup>Joukamaa M. Heliovaara M. Knekt P. (2001) Mental disorders and cause-specific mortality. British Journal Psychiatry, 179; pp.498-502.
<sup>17</sup> Robertson L. Emerson E. Creaser M. Herter, O. T. et al. (2011) Annual Psychiatry (2011) Annual Psychia

<sup>&</sup>lt;sup>17</sup> Robertson J. Emerson E. Gregory N.Hatton, C. Turner, S. Kessissoglou, (2000) Lifestyle related risk factors for poor health in residential settings for people with intellectual disabilities. Research in Developmental Disabilities. 21(6), pp.469-86.

<sup>18</sup>Emerson E. Baines S. (2010) Health Inequalities and people with learning disabilities in the UK: 2010. Learning Disability Observatory.

<sup>19</sup> Emerson S. Turnbull L. (2005) Self-reported smoking and alcohol use by adolescents with and without intellectual disabilities. Journal of Intellectual Disabilities. 9 (1), pp58-69. <sup>20</sup>Dhejne C. Boman M. Johansson A. Langstrom N. Landen M. (2011) Long-Term Follow-Up of Transsexual Persons

Undergoing Sex Reassignment Surgery: Cohort Study in Sweden. PloS ONE, 6, (2).

<sup>21</sup>De Cuypere G. T'Sjoen G. Beerten R. Selvaggi G. De Sutter P. (2005) Sexual and physical health after sex reassignment surgery. Arch Sex Behav 34: 679-690.

<sup>22</sup> Health and Social Care Information Centre (2012) Statistics on Smoking: England, 2012.UK: Health and Social Care Information Centre

<sup>23</sup> Department of Health. (2011) Local Stop Smoking Services: Service delivery and monitoring and guidance 2011/12. London: OH.

<sup>24</sup> Department of Health (2010) Tackling health inequalities in infant and maternal health outcomes

Report of the infant mortality national support team. December 2010. London

<sup>25</sup>NHS Choices, Sudden Infant Death Syndrome (SIDS). Available from: http://www.nhs.uk/conditions/Sudden-infant-deathsyndrome/Pages/Introduction.aspx (internet) (accessed 8 July 2014).

<sup>26</sup>Grav R. Bonellie S. Chalmers J. Greer I. Jarvis S. Kurinczuk JJ. Williams C.I. Contribution of smoking during pregnancy to inequalities in stillbirth and infant death in Scotland 1994-2003;retrospective population based study using hospital maternity records BMJ 2009;339:b3754

<sup>27</sup> Health and Social Care Information Centre (2012) Infant feeding survey 2010. Available from:

http://www.hscic.gov.uk/catalogue/PUB08694/Infant-Feeding-Survey-2010-Consolidated-Report.pdf (internet) (accessed 15 December 2014).

<sup>28</sup>Public Health England London. (2014) Public Health Outcomes Framework. Available at: http://www.phoutcomes.info/publichealth-outcomes.-framework#gid/1000042/pat/6/ati/102/page/3/par/E12000007/are/E09000002 (internet) (accessed 28 July 2014).

<sup>29</sup>Milward D. Karlsen S. (2011) Tobacco use among minority ethnic populations and cessation interventions. Race Equality Foundation.

<sup>30</sup>Action on smoking and health (2011) Tobacco and ethnic minorities. Available from:

http://ash.org.uk/files/documents/ASH\_131.pdf. (internet) (accessed 10 July 2014).

<sup>31</sup>Sproston K. Mindell J. (2004) Health Survey for England: The health of minority ethnic groups. Leeds: The Information Centre.

<sup>32</sup> Cancer Research UK. E-cigarettes, smokeless tobacco and shisha. Available from: http://www.cancerresearchuk.org/cancerinfo/healthyliving/smoking-and-cancer/e-cigarettes-smokeless-tobacco-shisha/ (internet) (accessed 9 September 2014).

<sup>33</sup>J A Critchley. Unal B. (2003) Health effects associated with smokeless tobacco: a systematic review, Thorax 2003;58:435– 443

<sup>34</sup> World Health Organization Regional Office for the Eastern Mediterranean (2000) Islamic ruling on smoking. Alexandria: WHO.

<sup>35</sup> Kope E. Keinan-Boker L. Enav T. Dichtiar R. Shohat T. (2013) Cigarette smoking and correlates among ultra-orthodox Jewish males. Nicotine and tobacco research. Vol15, pp.562-566.

<sup>36</sup>Action on smoking and health (2013) Smoking statistics who smokes and how much. . Available from: http://www.ash.org.uk. (internet) (accessed 17 July 2014).

<sup>37</sup> The Lesbian and Gay Foundation. (2012) I Exist. Manchester. The Lesbian and Gay Foundation.

<sup>38</sup>Guasp A. (2011) Gay and Bisexual Men's Health Survey. UK: Stonewall.

<sup>39</sup> Public Health England. (2014) Promoting the health and wellbeing of gay, bisexual and other men who have sex with men. London: PHE.

<sup>40</sup>Hunt R. Fish J. (2008) Prescription for change lesbian and bisexual women's health check 2008. UK: Stonewall.

<sup>41</sup>Department of Health (2012) Consultation on standardised packing on tobacco products Equality Impact Assessment. London: DOH.

<sup>42</sup>Department for Communities and Local Government. (2012) Progress report by the ministerial working group on tackling inequalities experienced by Gypsies and Travellers. April, 2012

<sup>43</sup>Ipsos Mori (2009) Lifestyle Survey-Gypsies and Travellers Draft Report. UK: NHS East England and Ipsos Mori 44 British Lung Foundation (2012) The Impact of Cannabis on your Lungs. London. British Lung Foundation.