# **Tobacco technical document**

November 2012

Intelligence for Healthy Lancashire (JSNA)



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# Introduction

Tobacco use remains one of the most significant global public health challenges today. Smoking is the most harmful form of tobacco use and continues to be the major cause of preventable morbidity and premature death. In England, there are more than 80,000 deaths per year from active smoking, 18% of all deaths of adults aged 35 and over. With up to 10,000 dying from the effects of inhaling secondhand smoke, tobacco is killing more people per year than the next six most common causes of preventable deaths combined (i.e. drug use, road accidents, other accidents and falls, preventable diabetes, suicide and alcohol abuse).<sup>1</sup>

The challenge for healthcare planners is how to allocate scarce resources in the face of numerous public health priorities. In recent times, obesity, alcohol and physical activity have all been the focus of attention and additional investment. However, it should be remembered that amongst the challenges facing public health, smoking remains the major contributor to ill-health and inequalities and furthermore, the level of evidence available to support interventions to reduce smoking is more robust than for many other alternative uses of healthcare funds.

Smoking rates are much higher in some social groups, including those with the lowest incomes. These groups suffer the highest burden of smoking-related illness and death. Smoking is the single biggest cause of inequalities in death rates between the richest and poorest in our communities.<sup>2</sup> Sir Michael Marmot, in his independent review of health inequalities in England,<sup>3</sup> stated that:

"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."

In Lancashire, a county with areas of extreme deprivation and poverty as well as areas of affluence and wealth, large inequalities exist in terms of tobacco use, as well as health outcomes between the affluent and the deprived. Many of these inequalities, including numerous cancers, coronary heart disease and respiratory disease, are related to the use of tobacco. Tobacco control has therefore been identified as a goal to address these inequalities and improve the health and wellbeing of Lancashire residents. <sup>4</sup>

It is anticipated that this joint strategic needs assessment (JSNA) will provide data, analysis and recommendations to aid commissioners to make informed decisions about tobacco control across Lancashire. This JSNA also provides an opportunity to inform how Lancashire responds to changes in national policies, such as those outlined in Healthy Lives, Healthy People: A Tobacco Control Plan for England, <sup>5</sup> published in March 2011. It also provides an opportunity to assess and identify how to respond to the changing demographics of those who use tobacco. Specifically, the JSNA is designed to provide a focus for commissioners from a variety of organisations so that the services they commission complement and enhance each other, rather than work in isolation. This holistic approach – commissioning based on need rather than organisational boundaries – is one of the strengths of the JSNA approach.

### Key Facts:

Smoking is recognised as a key public health challenge and remains one of the governments key public health priorities, key facts:

- Tobacco is the only legally available consumer product that kills people when it is used entirely as intended<sup>6</sup>;
- Smoking is the primary cause of premature mortality and preventable illness<sup>7</sup>;
- Smoking kills half of all life long users; an average 20 years prematurely<sup>8</sup>;
- People on low incomes are twice as likely to smoke as the more affluent, to have started younger and to be more heavily addicted<sup>9</sup>;
- People on the lowest incomes who smoke spend up to 15% of their total weekly income on tobacco<sup>10</sup>;
- More than 40% of total tobacco consumption is by those with mental illness<sup>11</sup>;
- Passive (secondhand) smoking in the home is a major hazard to the health of millions of children in the UK who live with smokers<sup>12</sup>;
- Children with a mother or both parents who smoke are 2-3 times more likely to take up smoking themselves<sup>13</sup>;
- More than 70% of smokers want to quit <sup>14</sup>;

- Only 8% of smokers access a stop smoking service when they try to quit<sup>15</sup>;
- There is strong evidence for the effectiveness of comprehensive tobacco control programmes. <sup>16</sup>

# **Policy Context**

Smoking remains one of the most significant contributors to premature mortality and ill health. Reducing the number of people who smoke remains a key public health priority.

**The Health and Social Care Bill 2011**<sup>17</sup> - has prompted one of the most extensive reorganisations of the National Health Service in England to date. The proposals include the abolition of Primary Care Trust (PCTs) and the transfer of commissioning responsibilities to GP-led Clinical Commissioning Groups (CCGs). A new public health system will be established located within local authorities and funded by a dedicated budget. TheDirector of Public Health will be democratically accountable to a Health and Wellbeing Board. From 2013 local authorities will take on the commissioning of population-based health services including tobacco and smoking cessation services. Local authorities will be supported in carrying out these functions by the newly established Public Health England, an executive agency of the Department of Health.

**Tobacco Free Lancashire's** *A Draft 5-Year Tobacco Control Strategy for Lancashire 2011-2016* - complements the national strategy, and aims to "make tobacco less desirable, acceptable and accessible in Lancashire" (Tobacco Free Lancashire, 2012) to reduce the harm caused by tobacco. It outlines how Tobacco Free Lancashire and its partners will work to reduce tobacco use in Lancashire. The strategy complements and supports local tobacco control strategies.<sup>18</sup>

Healthy Lives, Healthy People: A Tobacco Control Plan for England<sup>19</sup>, (Department of Health, 2011) published in March 2011, outlines the government's strategy to reduce smoking prevalence and tobacco use over the next five years,. The plan focuses on national policy and action, such as investigating the effectiveness of plain packaging, the removal of tobacco displays in shops, and making tobacco less affordable. This tobacco plan sets out how tobacco control will be achieved within the new public health system. With a focus on reducing prevalence and supporting local areas to achieve tobacco control it sets out a set of national ambitions:

- To reduce adult (aged 18 or over) smoking prevalence in England to 18.5 per cent or less by the end of 2015 (from 21.2 per cent), meaning around 210,000 fewer smokers a year.
- To reduce rates of regular smoking among 15 year olds in England to 12 per cent or less (from 15 per cent) by the end of 2015.
- To reduce rates of smoking throughout pregnancy to 11 per cent or less (from 14 per cent) by the end of 2015 (measured at time of giving birth).

A smokefree future: a comprehensive tobacco control strategy for England<sup>20</sup> (Department of Health, 2010) established a vision of eradicating tobacco harms and creating a smokefree future, so that we can support people to live healthier and longer lives. The strategy sets out three overarching objectives to make significant progress towards a smokefree society:

- 1. To stop the inflow of young people recruited as smokers.
- 2. To motivate and assist every smoker to quit.
- 3. To protect families and communities.

Maternity matters: Choice, access and continuity of care in a safe service<sup>21</sup> (Department of Health, 2007) describe a

comprehensive programme for improving choice, access and continuity of care for maternity service provision to meet the needs of women and their families. It focusses on achieving reductions in the proportion of women who continue to smoke throughout pregnancy, particularly smokers from disadvantaged groups.

National service framework for children, young people and maternity services<sup>22</sup> (Department of Health, 2004) is aimed at everyone who comes into contact with – or delivers services to – children, young people or pregnant women. The National Service Framework establishes clear standards for promoting health and wellbeing and the commissioning of high quality services. It highlights the contribution that stopping smoking can make to the improved health and well being of children and young people.

**Securing good health for the whole population**<sup>23</sup> (Wanless, 2004) focuses on the cost effectiveness of activities to prevent ill health (including tackling the wider determinants of health), improve health and reduce health inequalities. Reducing smoking prevalence is highlighted as a key action in achieving reduction of inequalities.

**Standards for Better Health**<sup>24</sup> (**Department of Health, 2004**) sets out quality standards for providers of NHS care. Standard C23 makes an explicit recommendation for healthcare organisations to have preventative programmes to tackle smoking, in line with National Service Frameworks and national plans. Developmental standard D13 was updated in 2006 to reflect the newly introduced NICE public health guidance. Developmental standard D13 states that healthcare organisations should work towards implementing 'effective programmes to improve health and reduce health inequalities, conforming to nationally agreed best practice, particularly as defined in NICE guidance and agreed national guidance on public health'.

**World Health Organisation (WHO) Framework Convention on Tobacco Control**<sup>25</sup>(**FCTC) (2003)** is the first international treaty negotiated under the auspices of WHO. The WHO FCTC was developed in response to the globalization of the tobacco epidemic. It is an evidence-based treaty that reaffirms the right of all people to the highest standard of health. The main provisions of the WHO FCTC include: (1) Reduction of demand for tobacco (including price and tax measures; protection from exposure to tobacco smoke; packaging and labelling of tobacco products; education, and communication: tobacco advertising, promotion and sponsorship; and measures concerning tobacco dependence and cessation) and (2) Reduction of the supply of tobacco (including illicit trade in tobacco products; underage sales; and provision of support for economically viable alternative activities).

**Every Child Matters (2003)**<sup>26</sup> is a UK policy initiative for England and Wales launched in 2003 setting out framework for multi-agency approach to supporting children and family's agenda.

The NHS Cancer Plan (2000)<sup>27</sup> presents the Labour government's strategy for investment and reform across the NHS, and gives cancer services high priority, including measures for reducing smoking and inequalities.

**Smoking Kills: A White Paper on Tobacco (1998)**<sup>28</sup> is a government plan of action to stop people smoking. It includes historical information on measures taken on tobacco advertising and taxation, efforts to reduce smoking among young people, establishes new cessation services for adults, and action to reduce smoking among pregnant women. It outlines proposals for abolishing tobacco advertising and promotion, altering public attitudes, preventing tobacco smuggling, and supporting research.

**The Tobacco and Primary Medical Services (Scotland) Act 2010<sup>29</sup>** was passed by the Scottish Parliament on 27th January 2010 and contains measures aimed specifically at reducing the attractiveness and availability of tobacco to under 18s.

# **Guidance and evidence**

**Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours (2011)**<sup>30</sup> is systematic review of 19 longitudinal studies involving 29,000 non-smokers evaluating the impact of advertising and promotion of tobacco.

WHO Report on Global Tobacco epidemic 2011 Warning about the dangers of tobacco (2011)<sup>31</sup> is a report detailing strategies on providing health warning: labels on tobacco product packaging, and anti-tobacco mass media campaigns.

Plain Tobacco Packaging: A Systematic Review (2011)<sup>32</sup> is a systematic review of 37 studies providing evidence of the impacts of plain tobacco packaging.

**Tobacco Displays at the Point of Sale**<sup>33</sup> Action on Smoking and Health, (ASH)provides information on the tobacco point of sale ban in the UK.

**Tobacco Vending Machines**<sup>34</sup> is a report produced by ASH (2011) on the legislation introduced by the Health and Social Care Act (2009) prohibiting the sales of tobacco products from vending machines.

The Effects of Increasing Tobacco Taxation: A Cost Benefit and Public Finances Analysis (2010)<sup>35</sup> provides an economic analysis of the impact of increasing the level of taxation on tobacco products in the UK.

### **Smoking Cessation**

A number of guidance documents have been produced by the National Institute of Health and Clinical Excellance (NICE)<sup>36</sup> relating to aspects of smoking cessation:

- NICE (2006) Brief Interventions and Referral for Smoking Cessation in Primary Care and other Settings;
- NICE (2010) Quitting Smoking in pregnancy and following childbirth;

- NICE (2008) Smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual working groups, pregnant women and hard to reach communities;
- NICE Guidance on the Use of NRT and Bupropion;
- NICE guidance on workplace interventions to promote smoking cessation;
- NICE Guidance on smoking cessation services;
- NICE Guidance on the use of Varenicline;
- NICE Guidance on Brief interventions and referral in primary care and other settings;
- NICE Guidance on workplace smoking; and
- NICE Guidance on smoking cessation services in primary care, pharmacies, local authorities and workplaces, particularly for manual groups, pregnant women and hard to reach communities.

# Guidance under development

**Smokeless tobacco cessation-South Asians**<sup>37</sup> will provide guidance on helping people of South Asian origin to stop using smokeless tobacco (date of issue September 2012);

Tobacco-harm reduction<sup>38</sup> will provide guidance on harm reduction approaches to smoking (date of issue May 2013);

**Smoking cessation-acute and maternity services**<sup>39</sup> will provide guidance on smoking cessation in secondary care-acute and maternity services (date of issue November 2012);

**Smoking cessation-mental health services**<sup>40</sup> will provide guidance on smoking cessation in secondary care-mental health services (date of issue November 2013);

**The British Thoracic Society** established to improve the care of people with respiratory disorders, produces a range of guidelines accredited by NHS Evidence<sup>41</sup>

# Map of Medicine

This is a collection of evidence based care maps (available by subscription) which connect knowledge and services around a clinical condition. Care maps can be customised to meet local needs and support the development of new care pathways.<sup>42</sup>

Maps include:

- Smoking cessation-motivation
- Smoking cessation-assistance
- Smoking cessation-relapse prevention

### Exposure to second hand smoke

ASH report 'Second hand smoke'<sup>43</sup> is a research report on the health effects of exposure to second hand smoke.

Public health interventions for the prevention and reduction of exposure to second-hand smoke: a review of reviews *Evidence* briefing (2205)<sup>44</sup>

The impact of smoke free legislation in England: evidence review (2011)<sup>45</sup> is a report summarising research evidence on the impact of England's smokefree legislation introduced on 1 July 2007. It also provides review of international evidence on key areas including exposure to secondhand smoke (SHS); changes in health and behaviour; and the impact of smokefree legislation on the hospitality industry.

**Reducing health inequalities through tobacco control a guide for councils (2007) Local Government Group**<sup>46</sup> provides guidance to councils to improve practice in reducing health inequalities through tobacco control, with an emphasis on routine and manual smokers, young people and pregnant smokers.

**Smokefree Playground Toolkit for Local Authorities**<sup>47</sup> is a toolkit produced by ASH Wales for local authorities. It includes an overview of the evidence on smoke free playgrounds including case studies of areas that have introduced them.

**Tobacconomics: How big tobacco uses dodgy data to throw sand in the gears of global health policy**<sup>48</sup> is a report produced by ASH exploring how the tobacco industry uses evidence to counter tobacco control measures.

**Coughing Up: Balancing tobacco income and costs in society**<sup>49</sup> provides an economic evaluation on tobacco taxation and cost to society

For further information or links to key documents and evidence sources - http://www.ash.org.uk/information/resources/information-sources

# **Tobacco Products**

Tobacco products include both smoking and smokeless tobacco. There is no safe level of tobacco use. All forms of tobacco products contain nicotine and can cause addiction and health problems. More than 4,000 different chemicals have been found in tobacco and tobacco smoke. According to the International Agency for Research into Cancer and the European Network for Smoking Prevention, at least 80 of these chemicals could cause cancer. Many of the other thousands of chemicals are toxic and harmful to health, including carbon monoxide, hydrogen cyanide and ammonia. Cigarettes contain at least 599 different additives including chocolate, vanilla, sugar, liquorice, herbs and spices. These are not toxic but they make cigarettes taste nicer and ensure that smokers want to continue smoking.<sup>50</sup>

# **Smoked tobacco:**51

**Machine manufactured cigarettes** account for over 80% of worldwide tobacco use and are the most common form of smoking tobacco. The overall reported number of cigarettes smoked per male and female smoker has changed little since the mid 1980s, averaging 13 cigarettes per smoker per day. As in previous years, men smoked slightly more per day on average than women, and there was an association between consumption and socio-economic group. In 2009, smokers in manual occupations smoked an average of 14 cigarettes a day compared with 12 a day for those in managerial or professional groups. <sup>52</sup>

The annual Government survey of smoking among secondary school pupils defines regular smoking as smoking at least one cigarette a week. However, in 2010 pupils classified as regular smokers smoked a mean (average) of 38.3 cigarettes a week, approximately six a day. Occasional smokers smoked on average 5.2 cigarettes a week. These averages have remained at similar levels since 2004.<sup>53</sup>

**Hand rolled cigarettes** - Since 1990 there has been a steady increase in the number of smokers using mainly hand-rolled tobacco. In 1990, 18% of male smokers and 2% of female smokers said they smoked mainly hand-rolled cigarettes but by 2010 this had risen to 39% and 23% respectively.<sup>54</sup>

Bidis are hand rolled products that are more commonly smoked by south east Asian communities.

Kreteks are hand rolled or machine produced that are more commonly smoked by south east Asian communities.

**Cigars** –are tobacco wrapped in tobacco leaf. They may be hand or machine made.

**Pipe Smoking** involves the use of different types of pipe, including portable hand-held pipes (Western-European pipe; *hookah & chillum* in India), and elaborate pipes with water chambers (e.g. *hookah, nargilah)* and long stems in the form of hoses. Portable pipes exist in different forms throughout the world, while water pipes are found mostly in South Asia and the Middle East. Hookah pipes are used to smoke shisha. Hookah pipes are popular, though not exclusively used, in Asian communities

## **Smokeless tobacco**

Smokeless tobacco is consumed in its unburned form. It is sniffed (e.g. snuff), sucked (dipping) or chewed. These products cause increased saliva production, which necessitates periodic spitting.

In South- and South-East Asia, smokeless tobacco products are commonly handmade, but commercial products are also available and widely marketed. Commercial products such as *gutkha, zarda, pan masala* variously consist of chewing tobacco combined with areca nut, slaked lime, and spices. Many of these preparations are available in small plastic and aluminium foil packets from shop vendors. In the Amazon region of South America, *chimo* is the most common form of chewing tobacco. Sold in tins and pouches, these products may be in the form of pre-packaged pouches or as lose tobacco.

# **Prevalence**

There are about 10 million adult cigarette smokers in Great Britain and about the same number of ex-smokers. Tobacco use varies widely according to race, sex, age, educational level and socio-economic status. In the UK since the mid 1970s and early 80's cigarette consumption amongst adults (16 plus) has fallen steadily among both men and women. Since 1982, the rate of decline has slowed, with prevalence falling by about one percentage point every two years until the early 1990's when it levelled out. Since 2000 overall adult smoking rates (16 plus) in England have declined by about 0.4% per annum, remained static at 21% between 2007-2009 before dropping to 20% in 2010. <sup>55</sup>

#### Figure 1: Prevalence of cigarette smoking by sex in Great Britain, 1974 to 2010

Prevalence of cigarette smoking by sex in Great Britain, 1974 to 2010 Percentage of adults smoking



1 For 1998 unweighted and weighted data are shown for comparison purposes. Weighted data are not available before this point.

2 The survey was not run in 1997/98 or 1999/00. A linear trend has been drawn between the data point before and after these years.

Source: General Lifestyle Survey, Office for National Statistics

In the North West prevalence is higher than the England average at 23.2% and has been similar since 2007.

### Estimated smoking prevalence among adults in Lancashire: results from the Integrated Household Survey

The Integrated Household Survey (IHS) is a survey published by the Office for National Statistics (ONS) for the first time in September 2010. It now covers the period from 2009/10 to 2010/11. The IHS is a composite survey combining questions asked in a number of ONS social surveys to gather basic information for a very large number of households. It contains information from nearly 450,000 individual respondents and, as such, is the biggest collection of social data after the Census. The aim of the IHS is to produce high-level estimates for particular themes to a higher degree of precision and lower geographic level than current ONS surveys. The survey covers a number of themes, including health, and provides an opportunity to report smoking prevalence for all local authorities in England. The IHS estimates are published by ONS as 'experimental statistics'. Further review of the methodology and future and current estimates are needed before it becomes clearer how reliable the data are.

The IHS estimates of smoking prevalence are used in the London Health Observatory Tobacco Control Profiles, with the 2012 updates of the profiles including estimates for all groups for April 2010-March 2011 and, for the Routine and Manual Group, January 2010-December 2010: <a href="http://www.lho.org.uk/LHO\_TOPICS/ANALYTIC\_TOOLS/TOBACCOCONTROLPROFILES/">http://www.lho.org.uk/LHO\_TOPICS/ANALYTIC\_TOOLS/TOBACCOCONTROLPROFILES/</a>

The complete dataset on smoking prevalence from the IHS, updated in November 2011, is available to download at: http://www.lho.org.uk/viewResource.aspx?id=16678

The tables and charts that follow show, for the 14 districts in Lancashire and comparators, the estimated prevalence of smoking among adults for the five quarterly rolling annual periods now available (April 2009-March 2010 to April 2010-March 2011). Data are also available on estimated smoking prevalence among adults in Routine & Manual occupations for four quarterly rolling annual periods (April 2009-March 2010 to January 2010 to December 2010). Point prevalence is presented with 95% confidence intervals which indicate the

level of uncertainty around the estimates. However, due to the complexity of the IHS survey design and sampling method, these uncertainty limits should be considered as indicative only.

Changes over time in estimates of smoking prevalence can reflect chance variation as opposed to changes in the true population prevalence of smoking. This can be expected for lower tier districts, in particular, because of the relatively small sample size at this level, and is reflected in the width of the confidence intervals around these estimates. However, of note is a consistent and substantial reduction between April 09 and March 10 in the estimates among all groups in Hyndburn (10.7% reduction) and Preston (6.8% reduction), and an increase in Blackburn (4.8%). These changes are reported as 'statistically significant'. Expert opinion is that changes of this magnitude over this short period of time are unlikely to reflect the true picture. The consistent, but relatively slight, reduction of 1.4% across Lancashire County is both encouraging and more realistic.

It is therefore recommended that the lower tier district level estimates be regarded as indicative and not, by themselves, as a determinant of policy. It is recommended that they should be considered along with data from other sources (e.g. outcomes of the smoking cessation services and data from local surveys).

#### Key points regarding Lancashire smoking prevalence:

- The total prevalence figure for the 12 Lancashire districts is just above the England average at 20.9% and has remained similar over the 5 quarterly rolling average periods.
- The districts of Blackburn with Darwen and Blackpool are both statistically higher than the national average at 27.8% and 30.5% respectively.
- Compared to figures from the previous year, prevalence has increased in six areas; Blackburn with Darwen, Chorley, Lancaster, Pendle,
   Fylde and Wyre. Blackburn with Darwen increasing by the highest margin of 4.8%.
- Seven districts showed an annual decrease in prevalence with the district of Hyndburn showing reductions of 10.7%.

 Whilst the 1.4% reduction across Lancashire County is more realistic due to a greater sample size, consistent and substantial reductions by several of the lower tier districts are reported as 'statistically significant' yet further reviews of the methodology and future and current estimates are needed before it becomes clearer how reliable the data is.

	Ар	or 2009 ·	- Mar 2	010		Jul 2009 - Jun 2010			Oct 2009 - Sept 2010				Jan 2010 - Dec 2010					April 2010 - March 2011			2011			
		95%	6 CI				95	% CI				95%	6 CI				95%	6 CI				95%	6 CI	
Area	%	LL	UL	Rank		%	LL	UL	Rank		%	LL	UL	Rank		%	LL	UL	Rank		%	LL	UL	Rank
BwD	23.0	20.7	25.3	(=) 88		23.7	21.6	25.8	(=) 67		24.2	22.1	26.3	(=) 59		25.4	23.2	27.5	34		27.8	25.6	30.1	(=) 10
Blackpool	30.5	28.1	32.8	7		31.2	29.1	33.3	(=) 2		31.2	29.1	33.3	2		29.5	27.4	31.7	8		30.5	28.4	32.7	4
					] [					]										] [				
Burnley	29.2	23.6	34.8	10		31.2	25.9	36.5	(=) 2		31.9	26.2	37.7	1		29.8	24.3	35.3	6		28.5	23.5	33.6	8
Chorley	19.3	15.1	23.4	(=) 196		19.3	15.2	23.4	(=) 198		20.2	16.1	24.3	(=) 159		20.7	16.6	24.8	(=) 143		21.1	17.0	25.1	(=) 128
Fylde	19.7	15.4	24.0	(=) 183		22.5	18.2	26.9	(=) 99		20.6	16.4	24.8	(=) 147		20.4	15.7	25.2	(=) 155		20.1	15.3	24.9	(=) 161
Hyndburn	33.5	28.6	38.4	3		30.4	25.9	34.8	4		28.6	24.0	33.1	(=) 10		24.2	19.7	28.8	(=) 54		22.8	18.3	27.3	(=) 84
Lancaster	20.1	16.7	23.4	(=) 173		19.6	16.3	22.9	(=) 180		19.8	16.3	23.3	(=) 172		21.9	18.4	25.4	(=) 106		23.3	19.6	27.0	(=) 71
Pendle	22.2	17.6	26.8	(=) 106		22.7	18.4	27.0	(=) 90		26.3	21.9	30.8	28		24.6	20.2	29.1	(=) 41		24.9	20.2	29.5	(=) 37
Preston	27.4	22.8	32.0	(=) 18		27.3	23.0	31.5	19		23.3	19.4	27.2	(=) 80		21.7	18.1	25.2	(=) 113		20.6	17.0	24.2	(=) 142
<b>Ribble Valley</b>	18.3	13.1	23.6	(=) 235		15.6	11.1	20.2	(=) 288		13.6	9.3	17.9	(=) 314		14.9	10.2	19.6	(=) 302		14.7	10.0	19.4	298
Rossendale	26.0	20.0	32.1	(=) 32		24.9	19.6	30.1	42		26.1	20.8	31.5	30		24.8	19.5	30.1	40		24.0	18.8	29.2	(=) 51
South Ribble	20.4	15.9	24.8	(=) 165		18.9	15.0	22.8	(=) 208		17.4	13.8	21.1	(=) 243		15.5	12.0	19.0	291		16.4	12.6	20.1	(=) 270
West Lancs	17.4	13.8	21.0	(=) 259		15.0	11.8	18.2	(=) 303		15.3	11.7	18.9	296		17.0	13.2	20.7	(=) 261		16.1	12.4	19.8	(=) 276
Wyre	17.6	14.0	21.1	(=) 251		17.1	13.8	20.5	(=) 258		16.7	13.3	20.2	(=) 272		17.9	14.1	21.6	(=) 235		18.4	14.5	22.2	(=) 218
					] [					]										] [				
LCC	22.3	21.0	23.6			21.8	20.6	23.0			21.3	20.1	22.6			20.9	19.7	22.2			20.9	19.6	22.1	
North West	23.4	23.0	23.9			23.4	23.0	23.8			23.2	22.8	23.6			23.0	22.6	23.4			22.8	22.4	23.2	
England	21.1	21.0	21.3			21.0	20.8	21.1			21.0	20.8	21.1			20.8	20.6	21.0			20.7	20.5	20.8	
	Distric	ts ranke	ed out	of 324 d	listrio	cts in	Engla	nd, wh	ere a ra	nk of	1 is th	e distri	ict wit	h the hi	ghes	st estir	nated	preval	ence					
		Statisti	cally si	gnificant	tly hi	gher	than t	he Eng	land ave	erage	2													
		Not sta	ntistical	lly signif	icant	ly dif	ferent	from	England	aver	age													
		Statisti	cally sig	gnificant	ly lo	wer t	than t	he Eng	and ave	rage														
	Source	e: Integr	rated H	louseho	ld Su	rvey;	; Nove	mber	2011 up	date														

### Figure 2: Estimated smoking prevalence in Lancashire 14 and comparators among adults aged 18+ years, April 2009 to March 2011.



### **Smoking in Pregnancy**

Smoking during pregnancy is one of the most preventable causes of foetal and infant morbidity and mortality. The 2005 Infant Feeding Survey found that almost half (49%) of women who smoked before pregnancy managed to stop once they became pregnant, but 17% of mothers-to-be continued to smoke throughout their pregnancy. In 2010, the early results from the survey showed that 26% of mothers in England smoked at some point in the preceding twelve months or during their pregnancy but just over half (55%) gave up before the birth.<sup>56</sup> Women who smoke in pregnancy are more likely to be younger, single, of lower educational achievement and in unskilled occupations.

Smoking at time of delivery (SATOD) is recorded in maternity services and provided to PCTs and the percentage of mothers reported to be smoking at delivery in England is 13.4% in 2011/12.<sup>57</sup> In the North West SATOD rates are higher at 17% and in Lancashire although SATOD rates are reducing the rate remains above both the England and North West rate at 20.1%

In Lancashire the prevalence rate for smoking at delivery across PCTs also shows a wide difference with North Lancashire PCT at 18% and Blackpool PCT at 29.7 %. PCT data shows smoking at time of delivery for Lancashire 14 has improved by 0.8 % compared to the same period of the previous year. 3 out of 5 Lancashire PCTs have also improved. Trend data for smoking at time of delivery shows all Lancashire PCTs to be above both the England and North West average. The greatest reduction has been in Blackpool PCT, where smoking at time of delivery has improved by 3.5% % from the outturn figure for 2010/11 – 33.2 % to the current 2011/12 position of 29.7%.

The following table shows the comparison of annual outturn data from both 2010/11 and 2011/12.

Table 1: Smoking at time of delivery - 2011/2012 SATOD

	No. of maternities	No. of women known to be smoking at time of delivery	% of women known to be smoking at time of delivery	No. of maternities	No. of women known to be smoking at time of delivery	% of women known to be smoking at time of delivery			
	2010/11 outt	urn		2011/12 outturn					
England	659,067	89,067	13.5%	665,884	87,731	13.2%			
North West	85,954	15,213	17.7%	86,536	14,719	17.0%			
Lancashire 14	16,915	3532	20.90%	17,102	3437	20.10%			
Blackburn Darwen PCT	2,259	390	17.3%	2,362	436	18.5%			
Blackpool PCT	1,607	522	33.2%	1,672	497	29.7%			
Central Lancashire PCT	5,278	980	18.8%	5,299	983	18.6%			
East Lancashire PCT	4,707	1,018	21.6%	4,630	957	20.7%			
North Lancashire PCT	3,064	622	20.3%	3,139	564	18.0%			

Improvemen
No change in
Deterioratior

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# <u>Gender</u>

Throughout the period in which the General Lifestyle Survey has been monitoring cigarette smoking, prevalence has been higher among men than women and this continues to be the case, with 22% men and 20% women smoking in 2009. In 1974, 51% of men smoked cigarettes, compared with 41% of women. Since the early 1990s there has been an increase in the proportion of women taking up smoking before the age of 16. In 1992, 28% of women who had ever smoked started before the age of 16. In 2009 the corresponding figure was 37%. There has been little change since 1992 in the proportion of men who had started smoking regularly before the age of 16.

# <u>Age</u>

Smoking prevalence is highest in the 20-24 age group among women (28%) and in the 25-34 age group among men (27%) but thereafter in older age groups the proportion of smokers declines. Smoking continues to be lowest among people aged 60 and over. Although they are more likely than younger people to have ever been smokers, they are more likely to have stopped smoking. <sup>58</sup>(ASH)

Most long term smokers start smoking in their teens. Experimentation is an important predictor of future use. Children who experiment with cigarettes can quickly become addicted to the nicotine in tobacco. Children may show signs of addiction within four weeks of starting to smoke and before they commence daily smoking.<sup>59</sup>

# **Children and Young people**

Around 200,000 children and young people start smoking in England every year. However very few pupils are smokers when they start secondary school: among 11 year olds only 1% are regular smokers. The likelihood of smoking increases with age so that by 15 years of age 12% of pupils are regular smokers.

Overall, the prevalence of regular smoking among children aged 11-15 remained stable at between 9 and 11 per cent from 1998 until 2006. However, in 2007 there was a fall in overall prevalence from 9% to 6%, the lowest rate recorded since surveys of pupils' smoking began in 1982. There was a further decline in 2010 to 5% overall and to 12% among 15 year olds. <sup>60</sup>

Children who live with parents or siblings who smoke are 2 – 3 times more likely to become smokers themselves than children of nonsmoking households.

35% of current pupils think it is acceptable to try smoking, a decrease since 1999 when over 50% of pupils thought it acceptable. Children are now more likely to have a realistic view of the number of people in their own age group who smoke. Half of pupils thought that only a few of their peers smoked, the most accurate answer, an increase from 45% in 1999.<sup>61</sup>

In the North West Trading standards undertake a survey every two years and over 13,000 young people aged 14 to 17 from across the region took part in the survey. In 2011 the number of young people smoking at age 14 has halved since 2009 – down from 18% to 9% However it is still 50% higher than the national average of 6%. The survey found that the proportion of those aged 15 who smoke had fallen by four percentage points (down from 20% in 2009 to 16% in 2011), but again this is substantially above the national average. Overall, the number of 14 to 17 years olds in the North West who said that they hadn't tried smoking fell compared to 2009 – down from 54% to 46%. Other findings included:

- The majority of those smoking said they had started when they were aged 13 or 14.
- A quarter of females indicated that they smoke, which is 8% higher than males.
- More than a third of 17 year olds claimed to be smokers (36%).

#### In Lancashire:

Nearly 1,500 young people from Lancashire responded to the survey, distributed to schools across the county targeting year 10 and 11 pupils between the age of 14 and 17. The results report reductions in young people aged 14-17 reported smoking from 24% in 2009 to 20% in 2011. This is slightly higher than for the North West as a whole. The number of young people indicating they had never tried smoking increased from 45% in 2009 to 51% in 2011. The survey also found that girls are more likely to smoke than boys and the majority of young people who smoked said they had started between the ages of 13-14.<sup>62</sup>

### **Inequalities**

Social deprivation is associated with high levels of smoking and low rates of quitting.





Figure source: Wardle, J et al (1999) in Marmot and Wilkinson (2003) Social Determinants of Health: The Solid Facts (2nd edn).63

# **Occupational status**

There is a strong link between cigarette smoking and occupation. In 2009, 30% of men and 27% of women in routine and manual occupations smoked compared to 15% of men and 14% of women in managerial and professional occupations. Reasons for higher

prevalence rates amongst these workers are not fully understood but national research indicates that it may be related to a culture of smoking that has developed around certain occupations.

	A	Apr 2009 - Mar 2010			J	ul 2009 -	Jun 20	)10		Oct 2009 - Sept 2010					J	an 2010	- Dec 2	010	
		95%	í Cl				95%	6 CI				959	% CI				95%	6 CI	
Area	%	LL	UL	Rank		%	LL	UL	Rank		%	LL	UL	Rank		%	LL	UL	Rank
BwD	29.3	24.8	33.9	(=) 165		31.7	27.6	35.9	(=) 93		34.9	30.7	39.1	(=) 37		39.3	34.8	43.9	8
Blackpool	41.9	37.2	46.5	7		41.2	37.1	45.2	6		41.7	37.5	45.9	2		37.1	32.8	41.3	27
Burnley	42.5	33.2	51.7	(=) 5		42.3	33.2	51.4	(=) 3		39.7	28.7	50.7	5		40.3	28.7	51.8	6
Chorley	24.2	15.5	32.9	262		23.2	14.3	32.2	279		26.9	17.8	35.9	(=) 204		30.4	20.5	40.3	(=) 136
Fylde	27.6	17.2	38.0	(=) 201		30.1	19.9	40.2	(=) 136		27.7	17.6	37.7	(=) 191		22.9	11.5	34.3	(=) 285
Hyndburn	43.5	34.7	52.3	4		40.3	31.5	49.1	7		38.3	29.5	47.1	11		33.8	24.2	43.5	(=) 67
Lancaster	27.2	20.5	33.8	(=) 208		25.5	19.0	32.0	(=) 243		29.5	22.4	36.6	(=) 145		33.7	25.7	41.8	(=) 69
Pendle	30.2	21.6	38.8	(=) 139		29.7	21.7	37.7	(=) 147		35.1	27.2	43.1	(=) 34		33.1	24.4	41.9	(=) 81
Preston	37.2	27.5	46.9	(=) 29		36.4	27.7	45.1	(=) 29		35.8	27.6	44.0	(=) 27		30.7	23.3	38.1	(=) 132
Ribble Valley	40.7	28.0	53.3	(=) 10		33.6	22.0	45.2	(=) 58		28.0	17.0	39.0	(=) 180		28.5	17.3	39.6	(=) 183
Rossendale	34.4	22.6	46.1	(=) 49		36.2	25.7	46.7	(=) 31		34.6	23.5	45.6	(=) 46		38.7	26.8	50.7	14
South Ribble	27.2	18.6	35.7	(=) 208		26.9	18.9	34.9	214		26.2	18.5	33.8	(=) 221		26.3	18.1	34.4	(=) 235
West Lancs	29.1	21.4	36.9	(=) 172		22.4	15.3	29.6	(=) 289		21.5	13.6	29.4	(=) 294		24.8	15.9	33.7	(=) 259
Wyre	25.6	17.3	33.8	(=) 241		23.7	16.1	31.3	(=) 270		18.3	10.9	25.7	(=) 316		23.5	14.7	32.3	(=) 277
LCC	32.1	29.5	34.7			30.4	28.0	32.9			30.2	27.6	32.7		-	30.6	27.8	33.3	
North West	32.5	31.6	33.4			32.2	31.4	33.0			31.7	30.9	32.6		1	32.5	31.6	33.4	
England	29.7	29.4	30.1			29.7	29.3	30.0			29.4	29.0	29.7			30.0	29.6	30.3	
	District	s ranked	out of 3	24 distric	ts ir	n Englan	d. where	a rank	c of 1 is th	e di	strict w	/ith the	highest	estimate	ed pr	evaler	nce		
		Statistic	allv sign	ificantly h	ighe	r than t	he Engla	nd ave	rage										
		Not stat	istically	significant	tlv d	lifferent	from Er	ngland	average										
		Statistic	ally sign	ificantly lo	wei	r than tl	ne Engla	nd ave	rage	-									
			,	,,															
	Source	Integrat	ed Hou	sehold Su	rvey	; Nover	nber 20:	11 upd	ate										

Figure 4: Estimated smoking prevalence among adults aged 18+ years in the Routine & Manual Group in Lancashire 14 and comparators April 2009 to March 2011



# **Ethnicity**

The main source of information about ethnicity and smoking is The Heath Survey for England (HSE) in 2004<sup>64</sup> which looked in particular at the health of ethnic minority groups. Self-reported male cigarette smoking prevalence was 40% among Bangladeshi, 30% Irish, 29% Pakistani, 25% of Black Caribbean, 21% Black African and Chinese, and 20% in Indian men, compared with 24% among men in the general population. After adjustment for age, Bangladeshi and Irish men were more and Indian men less likely to report smoking cigarettes than men in the general population.

Self-reported smoking prevalence was higher among women in the general population (23%) than most minority ethnic groups, except Irish (26%) and Black Caribbean women (24%). The figures for the other groups were 10% Black African, 8% Chinese, 5% Indian and Pakistani, and 2% in Bangladeshi women. Whilst only 2% of Bangladeshi women reported that they smoked cigarettes, 16% reported that they chewed tobacco which is associated with high rates of oral cancer. As with the general population, smoking prevalence in minority ethnic groups tends to decrease with age with the highest rates in those aged 16-34. Exceptions are Black Caribbean and South Asian men in whom prevalence is highest in those aged 35-54.

# **Mental health**

Those with severe mental illness die on average 25 years earlier than the general population and are 10 times more likely to die from respiratory disease. Most of this increased mortality can be attributed to higher rates and levels of smoking. Doses of many psychiatric medications can be reduced by up to 50% if a mental health service user stops smoking, with a reduction in side effects.

Smoking rates are much higher among people with mental illness. Over 70% of psychiatric inpatients smoke; 50% of them heavily, and 76% of people with first episode psychosis are smokers. More than 40% of total tobacco consumption is by those with mental illness.

# **Prisons**

The estimated prevalence of smoking amongst prisoners is 80%, much higher than the 21% in the general population.<sup>65</sup>

	Prevalence (%)	Estimated numbers HMYOI Lancaster Farms	Estimated numbers HMP Kirkham	Estimated numbers HMP Garth	Estimated numbers HMP Wymott	Estimated numbers HMP Preston
Operational capacity -	Total Population	530	630	847	1176	800
Estimated number smokers	80%	424	504	678	915	640

Table 2: Estimated numbers of smokers in Lancashire prisons<sup>66</sup>

# People living with long term conditions

Approximately 410,000 people registered with Lancashire GPs are known to be living with long term conditions such as high blood pressure, coronary heart disease, stroke, diabetes or coronary pulmonary obstructive disease (COPD), all of which are either caused by and/or exacerbated by smoking. It is estimated that another 215,000 people are living with these conditions but have not yet been diagnosed, which may be explained by them not showing any symptoms (asymptomatic) or because people ignore symptoms.<sup>67</sup>

### **Smokeless tobacco**

There is little reliable data on usage and prevalence of niche tobacco products like shisha and smokeless forms.

## Prevalence of exposure to secondhand smoke

Secondhand smoke (SHS), sometimes called environmental tobacco smoke is a mixture of air-diluted 'sidestream' smoke from the burning tip of a cigarette, and the exhaled 'mainstream' smoke exhaled by the smoker. While the proportions of sidestream and exhaled mainstream smoke can differ, sidestream smoke is usually the larger constituent of SHS. Breathing other people's smoke is known as passive, involuntary or secondhand smoking. Inhaling SHS is an unavoidable consequence of being in a smoke-filled environment. Sidestream smoke has a similar composition to mainstream smoke breathed in by a smoker, both containing over 4000 chemicals and fine particles from the combustion of tobacco, paper and other additives.<sup>68</sup>

Between the 1980s and 1990s, surveys in the UK found that about 50% of all children in lived in a house with at least one person who smoked. More recent surveys in 2007 found that this figure had dropped to around 40% and since the introduction of smokefree legislation in 2007 has continued to fall to 37%. that the same time the number of children who live in a smokefree home has increased from 21% in 1996 to 37% in 2007. However for most children living in a smoking household there has been little reduction in exposure to secondhand smoke. <sup>69</sup>

For young children, the major source of tobacco smoke is smoking by parents and other household members. Maternal smoking is usually the largest source of SHS because of the cumulative effect of exposure during pregnancy and close proximity to the mother during early life.

There is widespread recognition that passive smoking is harmful and the majority of smokers report that they try not to smoke in the presence of children. According to the 2009 Smoking-related Behaviour and Attitudes survey, 77% of smokers report that they would not

smoke at all when they are in a room with children, with a further 14% saying they would limit their smoking in the presence of children. The same survey found a high level of knowledge about the impact of secondhand smoke: 92% of adults were aware that exposure to SHS increases a child's risk of chest infections and 86% were aware of an increased risk of asthma. Fewer respondents (58%) were aware of the risks associated with cot deaths while only 35% were aware of the association between SHS and ear infections.<sup>70</sup>

# Mortality and morbidity

# Key facts:

- Smoking is the single greatest cause of preventable illness and premature death, accounting for 81,400 deaths in England in 2009.
- For every death caused by smoking, approximately 20 smokers are suffering from a smoking related disease.
- Smoking harms nearly every organ of the body and dramatically reduces both quality of life and life expectancy.
- Smoking causes lung cancer, respiratory disease and heart disease as well as numerous cancers in other organs including lip, mouth, throat, bladder, kidney, stomach, liver and cervix.
- In England it is estimated that in 2008-09, 462,900 NHS hospital admissions were attributable to smoking.
- Estimates of the cost of smoking to the National Health Service is estimated to be £5.2bn a year.
- One in two regular smokers is killed by tobacco, half dying before the age of 70 losing an average of 21 years of life.
- Around 84% of deaths from chronic obstructive pulmonary disease, and 90% of all deaths from lung cancer are caused by smoking.
- It is estimated that around 5% of all hospital admissions in 2008/09 were attributable to smoking.

# Acute adverse effects associated with the use of tobacco

Tobacco use can lead to both acute and chronic conditions.

#### Table 3: Acute adverse effects associated with the use of tobacco

Physical		
Mortality	Morbidity	Psychological/psychiatric
Death by nicotine poisoning	Sympathetic over-activation	Brain/Personality/mood
rare, occurs in children or non-smokers	especially among novice users	increased anxiety
	palpitations	mood disturbance
Accidental death	sweating	increased irritability during periods of
can be caused by fires that may result from smoking	tremor	enforced abstinence
	nausea	altered brain chemistry - initial increase in
Foetal effects	dizziness	dopamine transmission prior to alteration of
Miscarriage – 3 - 7.5% of total attributable to smoking		receptors to decrease receptors with
Perinatal mortality -26% increase in risk for maternal	Respiratory effects	continued smoking
smokers	irritant effects of smoke on respiratory system	increased stress
	causing bronchospasm	
Infants	cough	Addiction
Neonatal death	increased phlegm production	latest research shows that serious symptoms
Sudden Infant death - causal relationship between		of addiction can appear amongst young
prenatal maternal smoking and post natal exposure to	Cardiovascular effects	smokers within weeks or days of starting
second hand smoke	damage to blood vessels	occasional smoking.
	thrombosis	The Royal College of Physicians compared
	constricts blood vessels	nicotine to other supposedly 'harder' drugs
	increased heart rate	such as heroin and cocaine. They looked at
	increase in blood pressure	many things including how these drugs cause
	O set a la tractica ha set a u	addiction, how difficult it is to stop using
	Gastrointestinal system	them, and now many deaths they caused.
	irritation to mouth and oesophagus	I ne panel concluded that nicotine causes
	neartburn and reflux	addiction in much the same way as heroin or
	inhibition of stomach mucus leading to peptic	cocaine and is just as addictive, if not more $\frac{72}{72}$
	UICEI	so, man mese harder drugs.
	holitosis	
	Taillosis	
	Immune System	
	weakens the immune system leading to	
	weakens the initialle system leading to	

Physical		
Mortality	Morbidity	Psychological/psychiatric
	otitis media	
	sinusitis	
	rhinitis	
	pneumonia	
	Injury	
	injury resulting from fires	
	Pharmacological Interactions	
	interferes with drug metabolism and drug function	
	resulting in either a slowing or a speeding up of	
	drug metabolism which in turn results in either	
	lower or higher concentrations of some drugs:	
	increases metabolism of anti-coagulants,	
	antidepressants, and epileptic medication	
	therefore decreasing drug exposure time and	
	reducing circulating concentrations of drug which	
	compromises effectiveness of the prescription.	
	Foetal and infant	
	increased risk of congenital defects	
	small for gestational age and low birth weight	
Source: "A summary of the health harms of drugs", Departr	nent of Health, August 2011	
Smoking's immediate effects on the body from Campaign for	or tobacco free Kids Georgetown Hospital USA	
Passive Smoking and Children: A Report by the Tobacco A	dvisory Group of the Royal College of Physicians Ma	rch 2010

# Chronic adverse effects associated with the use of tobacco

#### Table 4: Acute adverse effects associated with the use of tobacco

Physical		Psychological/psychiatric	Dependence/withdrawal/telerance	
Mortality	Morbidity	P Sychological/pSychiatric	Dependence/withdrawai/tolerance	
Cardiovascular disease	Cancers strongly linked to smoking	Association with mental health	Dependence	
coronary heart disease	cancer of lung, mouth, pharynx, larynx	disorders	good evidence for a nicotine	
peripheral vascular disease	cancer of oesophagus, bladder, kidney,	strong association between	dependence syndrome	
blood clots may form in the arteries	pancreas	mental health disorders, including	nicotine is comparatively more likely	

Physical		Psychological/psychiatric	Dependence/withdrawal/tolerance
supplying the heart (coronary thrombosis)	cancer of stomach, liver, cervix, nose, lip	schizophrenia and mood	to cause dependence among users
or the brain (cerebral thrombosis) leading	bone marrow	disorders, and tobacco smoking	than other psychoactive substances
to a heart attack or stroke		depression	including alcohol, heroin, cocaine
	Cardio-vascular		and cannabis
Cancers	angina	Significant risk factor for dementia	evidence that smoking in pregnancy
lung	heart attack	Alzheimer's disease	can lead to a propensity for nicotine
digestive tract (mouth, tongue, throat and	abdominal aortic aneurysm	other types of dementias	dependence in later life.
oesophagus, gastric, pancreatic)	coronary artery disease	evidence of cognitive decline	
acute myeloid leukaemia	peripheral vascular disease	among elderly smokers	Withdrawal
urinary tract –kidney, bladder	stroke		craving for nicotine
reproductive – cervical			anxiety
	Respiratory disease		irritability
Respiratory disease	chronic obstructive pulmonary disease		frequent changes in mood (emotional
chronic obstructive pulmonary disease,	pneumonia		lability)
defined by a long-term cough with mucus	exacerbation of asthma		inability to concentrate
(chronic bronchitis) and/or destruction of			insomnia
the lungs over time (emphysema)	Other diseases/conditions		increased appetite
death from slow and progressive	peptic ulcer		
breathlessness	periodontal disease		Tolerance
	osteoporosis and hip fracture		rapid development of tolerance to
Accidents	type 2 diabetes		adverse effects e.g. nausea
fires are an important cause of accidental	macular degeneration, cataracts, optic		acute tolerance to effects on heart
death that may result from smoking	neuropathy, tobacco amblyopia		rate
			no tolerance to peripheral
Exposure to second hand smoke adults	Minor ailments		vasoconstriction
coronary heart disease and lung cancer	decreased exercise tolerance		acute tolerance to the subjective
among adults	weight loss		sensations of nicotine (i.e. the
	bad breath (halitosis)		'pleasurable' effects of smoking)
Exposure to second hand smoke in	increased susceptibility to coughs and colds		
pregnancy and children	increased signs of ageing – skin wrinkling		
Increased risk miscarriage and stillbirth			
Perinatal mortality	Reproductive disorders		
SIDS	decreased fertility in males and females		
Meningococcal disease	(30% lower)		
	impotence in males		
	menopause (onset 1.74 years earlier on		
	average)		

Physical		Psychological/psychiatric	Dependence/withdrawal/tolerance
	Smoking in pregnancy and exposure to		
	secondhand smoke in pregnancy		
	increased risk of miscarriage,		
	Increased risk of premature birth		
	IOW DIRTN Weight,		
	increased risk of cleft palate and lip.		
	Exposure to second hand smoke		
	Among adults:		
	lung cancer		
	coronary heart disease		
	Among infants and children:		
	infections of the lower respiratory tract		
	middle ear disease		
	major respiratory symptoms (cough,		
	phlegm, wheeze and breathlessness)		
	asthma		
	reduced lung function		
Source: "A summary of the health harms of c	drugs", Department of Health, August 2011		
Smoking's immediate effects on the body fro	m Campaign for tobacco free Kids Georgetowr	n Hospital USA	
Passive Smoking and Children: A Report by	the Tobacco Advisory Group of the Royal Colle	ege of Physicians March 2010	

The main consequences of smoking are heart disease and stroke, chest and lung diseases (including lung cancer) and several other

cancers.

# **Gender differences**

Although both males and females have diseases leading to morbidity and mortality from the conditions listed above there is growing evidence that there is gender differentiation for both the effects of and development of the diseases mentioned above.<sup>73</sup> For example:

# **Respiratory**

• Women get lung cancers at lower exposure than men, and adenocarcinomas are more prevalent among women smokers than men,

• The effects of tobacco use on the trajectory of lung health, evidenced by diseases such as cancer and chronic obstructive pulmonary disease, are sex-differentiated, with women experiencing different and faster developments of lung disease, starting in adolescence.

### **Reproductive**

- There are sex-specific effects on both male and female reproductive systems and capabilities. Additional female health conditions affected by tobacco use include cervical cancer and bone disease and enhanced mortality from breast cancer for women who smoke (Fentiman et al., 2005).
- The effects of smoking during pregnancy are numerous and well documented, and include difficulties with labour, delivery and breastfeeding, low-birth-weight infants and possible long-term effects on child behaviour and a propensity to nicotine addiction in later life (see United States Surgeon General, 2004, Chapter 5; United States Surgeon General, 2001:277-307).

### Non smokers exposure to secondhand smoke

- Women are more likely to be exposed to secondhand smoke than men
- Rates of lung cancer in non smoking women is greater than for men

# **Smoking in pregnancy**

Smoking during pregnancy hinders the blood flow to the placenta, which reduces the amount of nutrients that reach the baby and women who smoke while pregnant have lighter babies than those who don't smoke. Low birth weight can lead to higher risks of diseases and death in infancy and early childhood. There is also evidence that women exposed to second-hand smoke during pregnancy also have lighter babies. Smoking during pregnancy has also been linked to other pregnancy complications including miscarriage, stillbirth, ectopic pregnancy and cot death. It may also have consequences for the physical and mental development of the child.

# Low Birth Weight

In 2010, the percentage of low birthweights in England (as a percentage of live births) was 7%. In Lancashire (14) during this period there were 1,315 low birthweight births, the highest percentage in Blackburn with Darwen at 9.3%. Blackpool was slightly lower at 8.0%, and

Lancashire (12) equalled the England figure at 7.0%. The districts with the lowest percentage of low birthweights were Ribble Valley at 4.8% and Lancaster at 5.2%. Since 2009, Lancashire (12) had decreased by 3.1%, yet both Blackpool and Blackburn with Darwen increased upon figures from the previous year; Blackpool increasing by 5.3% and Blackburn with Darwen by 1.4%.



Figure 5: Percentage of low birthweights across Lancashire, 2010

### **Smoking Attributable Hospital Admissions**

The main consequences of smoking are heart disease and stroke, chest and lung diseases (including lung cancer) and several other cancers. Continued smoking is independently associated with re admissions for COPD, heart disease, vascular disease and nearly all surgical complications.<sup>74</sup>

It is estimated that around 5% of all hospital admissions in 2008/09 were attributable to smoking. Smoking is the biggest single cause of preventable death and ill-health and accounts for approximately 5.5% of the NHS budget. Admissions to hospital due to smoking related conditions not only represent a large demand on NHS resources, but can also be used as a proxy for variations in smoking related ill-health in the general population across England.

There is a substantial body of evidence that smoking also reduces the benefits from health care treatments. In relation to surgery, post operative complications related to anaesthesia and surgery result in increased morbidity and mortality and extended hospital stays and convalescence for 5-10% of the population who undergo surgery.<sup>75</sup>

### Lancashire 14

In 2010/11 there were more than 61,000 smoking related hospital admissions for adults aged 35 and over in Lancashire 14<sup>76</sup>; hospital admissions attributable to tobacco use are significantly higher than the national average in all but 5 of Lancashire's 14 local authority areas.<sup>77</sup>. The chart below represents the number of smoking attributable hospital admissions for each of the Lancashire districts and provides a measure on the burden smoking is having on healthcare services.

The chart is based on smoking data taken from the Local Tobacco Profiles (London Health Observatory, LHO) combined with Index of Multiple Deprivation 2010 data for each district. The chart is ordered on the indicator information with each district bar colour-coded in line with the England deprivation quintile to which they are categorised. This can show a difference in the observed results than otherwise may

be have been expected and therefore, lead to a further detailed assessment of the population within each area. Further information of The Indices of Deprivation can be located via the following link:

http://www.communities.gov.uk/communities/research/indicesdeprivation/deprivation10/

Due to the fact that chance variation may occur, the significance of the difference between the England value and the local value has also been calculated statistically. The chart represents the number of smoking attributable hospital admissions for each of the Lancashire districts and provides a measure on the burden smoking is having on healthcare services. Four districts are significantly better than the England average, nine districts are significantly worse. Approximately, 5.5% of the NHS budget is spent on smoking-related healthcare. However, smoking is the biggest single cause of preventable mortality and ill-health which means that health promotion and prevention interventions can help to reduce smoking prevalence, and thus the prevalence of smoking-related illnesses. This indicator aims to highlight the resource implications of preventable smoking-related conditions on inpatient hospital services and to support the arguments for local smoking prevention and health promotion initiatives.

Figure 6: Directly age-standardised rate of smoking attributable hospital admissions per 100,000 population aged 35 years and over



	Actual admissions	Attributable number			Attributable percentage	
	Persons	Men	Women	Total	Men	Women
All cancers	29,496	11,794	5,268	17,062		
Lung, trachea, and bronchus	9,688	4,821	3,158	7,978	88	75
Oesophagus	2,657	1,233	571	1,804	71	62
Bladder	5,334	1,829	421	2,250	46	31
Pancreas	1,292	181	146	326	24	27
Upper respiratory sites	3,350	1,853	431	2,284	74	51
Stomach	1,130	193	54	247	27	13
Kidney	1,339	350	33	383	36	9
Larynx	1,135	805	116	922	82	76
Myeloid leukaemia	1,299	137	71	207	23	10
Cervical	823	-	99	99	-	12
Unspecified site	1,449	394	168	563	55	23
All respiratory	31,751	9,970	9,352	19,323		
Chronic obstructive lung disease	2,201	1,142	762	1,904	89	83
Chronic airway obstruction	18,859	7,377	7,518	14,894	80	78
Pneumonia, Influenza	10,691	1,452	1,073	2,524	26	21
All circulatory	115,204	15,304	8,091	23,395		
Ischaemic heart disease	52,727	8,464	4,276	12,740	27	20
Aortic aneurysm	1,640	816	212	1,028	64	58
Cerebrovascular disease	10,027	906	736	1,642	19	14
Other heart disease	43,339	4,313	2,270	6,583	19	11
Other arterial disease	6,814	695	561	1,256	18	19
Atherosclerosis	657	109	36	146	29	13
Digestive - Stomach and duodenal ulcer	3,140	951	648	1,599	54	47
Total admissions from the above causes	179,591					
Total admissions caused by smoking		38,019	23,359	61,378		

#### Table 5: Estimated numbers and percentages of hospital admissions attributable to smoking, by cause, Lancashire (14), 2010.

### Hospital admissions from secondhand smoke

Children are particularly at risk because they breathe faster than adults and have underdeveloped immune systems. A study by the Royal College of Physicians showed that about 17,000 children in the UK are admitted to hospital every year because of illnesses caused by second-hand smoke.<sup>78</sup>

#### Lower respiratory tract infection – Emergency hospital admissions in children under 16 years in Lancashire 14

Emergency hospital admissions for children under 16 years with lower respiratory tract infection continue to rise across Lancashire. The latest data from 2009/10 shows 11 out of 14 districts to have higher rates than the national average; only Chorley, Fylde and Wyre were better than the England average of 383 admissions per 100,000. Four districts had improved on figures from the previous year, yet this improvement was not statistically significant. Ten districts had deteriorated; four of these districts had significantly deteriorated: Burnley, Lancaster, Rossendale and South Ribble.

# **Smoking attributable deaths**

Figure 7: Disease attributable to smoking, males aged 35 years and over, England, 2010



Disease attributable to smoking, Males aged 35 years and over - England, 2010

Figure 8: Disease attributable to smoking, females aged 35 years and over, England, 2010



Disease attributable to smoking, Females aged 35 years and over - England, 2010

Source: The Health and Social Care Information Centre, 2012.

#### Figure 9: Smoking attributable deaths - Lancashire 14



The chart above addresses deaths which are wholly or partially attributed to smoking during the period of 2007-09. These deaths fall within four categories: malignant neoplasms, cardiovascular diseases, respiratory diseases and diseases of the digestive system. Data shows six districts with a greater number of deaths than the North West average of 264.9 per 100,000 population. Each of these districts, plus Lancaster, are significantly worse than the England average for smoking attributable deaths. High smoking attributable death rates are indicative of poor population health and high smoking prevalence.<sup>79</sup> The highest number of deaths occur in the most deprived

districts, except Pendle which, whilst in the 2<sup>nd</sup> most disadvantaged quintile, is lower than the regional average at 228.2 attributable deaths per 100,000 population. Only two of the 14 districts of Lancashire have smoking attributable death rates lower than the England average; Fylde and the Ribble Valley.

### **Infant Mortality**

The latest national data release of infant mortality figures shows many Lancashire districts have higher rates than the national average of 4.6 deaths per 1,000 live births. Infant mortality data for infants aged under 1 year of age for the period of 2008-10 (pooled data) show almost 300 deaths across Lancashire (14). Blackburn with Darwen (8.0 per 1,000 live births), Pendle (7.5 per 1,000 live births) and Blackpool (6.1 per 1,000 live births) had the highest rates with South Ribble (2.2 per 1,000 live births), Fylde (3.6 per 1,000 live births) and Wyre (3.8 per 1,000 live births) the lowest.

Figure 10: Infant mortality rates in children under 1 year of age, Lancashire districts, 2008-10 (pooled data)



# Enforcement/Community safety/illicit tobacco

# **Underage sales**

According to a recent survey by Trading Standards North West, 21.0% of Lancashire 15-16 year olds surveyed said they smoke and 12.1% claimed to purchase their own cigarettes. These figures are roughly in line with the North West as a whole.80 Consistent with previous waves, most young people purchase their own cigarettes from off licences/newsagents. However, since 2007, there has been a gradual reduction in the number of young people purchasing cigarettes from retailers. In contrast, the proportion that gets cigarettes off their siblings or friends (over 18) has increased.81 Between 2007 and 2011 the prevalence of smoking for 14-19 year olds has remained static, so this data shows us that young people are changing the way in which they source their cigarettes.

Figure 11: Responses to question ask of 15-16 year olds: where do you get your cigarettes from?



#### Where do / did you get your cigarettes from?

### Illicit Tobacco

Illicit tobacco includes both 'counterfeit/fake' tobacco products as well as 'smuggled' tobacco products. It is much cheaper than legitimate tobacco products. Surveys by HMRC have shown that 13% of ciggarettes, and 52% of hand rolling tobacco is illicit (REF). 'Apart from being illegal, illicit tobacco has serious consequences for health, crime, and community. From a health perspective, illicit tobacco encourages non-smokers (including children) to start smoking, current smokers to smoke more and prospective quitters to fail/not attempt. One in five adult smokers and one in three underage smokers in the North West recently admitted to buying illicit tobacco (more likely in hand rolled tobacco smokers). Counterfit tobacco products are likely to contain unknown products that are dangerous to health. A Cancer Research UK paper (Robert West et al 2008) said smuggled tobacco is likely to kill four times more people than illicit drugs because of impacts on smoking habits.

Illicit tobacco is sold via a long supply chain, and most end user sales made in the community. Illicit tobacco funds more serious, organised criminal activity and has a bigger impact on communities with low income. 79% of the public support a crackdown (REF).

Price is one of the most effective policy levers to reduce smoking prevalence which is being undermined by sales of illicit tobacco, as are underage sales and pictorial warnings. North of England population survey research found that 64% of buyers indicate that buying illicit 'makes it possible to smoke when I could not afford to otherwise'. The cost to the UK of illicit tobacco is estimated at £2.6bn, purely in terms of revenue loss.

### **Test purchasing operations**

Lancashire County Council Trading Standards Service has sole responsibility for enforcing the sale of age-restricted products for controlled goods like tobacco, alcohol, fireworks and solvents. During 2010-11 Lancashire County Council Trading Standards Service received 52 complaints regarding underage sales of tobacco and 141 complaints about illicit tobacco use. The Trading Standard Service co-ordinate test purchases for under-age sales, using a mystery shopper. During 2010-11 test purchasing operations indicated that one in

ten tobacco purchases in Lancashire are underage sales. The number of test purchases at district level is small, and therefore it is not possible to compare data between districts.

#### Seizures and prosecutions/cautions

During 2010-11 Lancashire County Council Trading Standards Service recorded 26 seizures in total for illicit tobacco, of which:

- 1 was handed over to Customs;
- 14 seizures were signed over and warnings issued;
- 6 investigations and written warnings;
- 2 simple cautions issued;
- 3 prosecutions illicit tobacco;
- 3 prosecutions tobacco underage sales.

### **Training**

Lancashire Trading Standards Service run an Age Restricted Products Course for premises that fail a test purchase, based loosely on the speed awareness course piloted in Lancashire. The aim of the course is to highlight both the social and health consequences of selling controlled products to children in order to prevent future underage sales from taking place. There is a charge and delegates receive a copy of Age Check- our award winning retailer due diligence package, along with inputs from other agencies (PCT and the Police). In 2010/11 there were 32 attendances on the course for tobacco offences.

# **Community Safety**

One of the main risks to community safety as a result of tobacco use is that of fires, but smoking can also impair dexterity and concentration whilst driving and tobacco products are sometimes offered as gifts in victim/offender grooming relationships. Discarded cigarette butts are a common complaint in reports of antisocial behaviour and littering.

# **Dwelling fires**

Smoking in the home can lead to accidental dwelling fires and Lancashire Fire and Rescue Service (LFRS) collect data on the source of ignition for such fires. These ignition sources are grouped into two categories: cigarette lighter and smoking-related materials. Note that the 'cigarette lighter' incidents may not necessarily be smoking related but may be 'child playing with fire' for example. Similar examples could cover 'smoking related materials' but are commonly 'careless disposal', 'falling asleep' etc. LFRS do not normally state that incidents were caused by smoking, only that they are smoking related. During the period of April 2005 to March 2012 over 9,000 accidental dwelling fires occurred across Lancashire (14). This resulted in over 1,500 fire-related injuries and almost 50 deaths. During the last 12 months (April 2011 to March 2012), over 1,000 accidental dwelling fires were reported and over 270 fire-related injuries.<sup>82</sup>

# **Stop Smoking Services**

Since their foundation ten years ago, NHS Stop Smoking Services have supported over 2 million people to stop smoking in the short term and 500,000 people to stop long term, saving 70,000 lives. The services have been praised by the Care Quality Commission for the contribution they make to the national health inequalities agenda. They therefore remain a key element of the Government's overall tobacco control strategy. The recently published Tobacco Control Plan for England (2011) reasserts the government's commitment to the provision of local Stop Smoking Services which are tailored to the needs of local communities, particularly in groups which have high prevalence, as a contribution to reducing inequalities in health.<sup>83</sup>

There is strong evidence for the effectiveness of smoking cessation support which demonstrates that Stop Smoking Services are highly effective both clinically and in terms of cost. They should therefore be offered to all smokers.

The NHS Stop Smoking Services Service and Monitoring Guidance provides best practice guidance relevant to the provision of all NHS stop smoking interventions and sets out fundamental quality principles for the delivery of services, which all providers are expected to attain and be monitored against.<sup>84</sup> Other guidance contains evidence based recommendations for commissioners and providers of Stop Smoking Services including a range of NICE public health guidance both published and planned. NICE guidance on smoking cessation services recommends that Stop Smoking Services prioritise disadvantaged groups, pregnant women and minority ethnic communities in the local population.<sup>85</sup> The guidance also recommends the routine offer of smoking cessation drug therapy by healthcare professionals to smokers who want to stop.

Evidence shows that providing support for smokers to stop is effective. Brief advice alone from a GP can have a small but significant effect on the likelihood of a smoker successfully quitting (1-3% over the background cessation rate), and applied at a population level the effect is considerable for a relatively small intervention.<sup>86</sup>

There is strong evidence that providing more intensive behavioural support is effective in increasing the likelihood of a successful quit attempt, and success rates can range between 22% - 74% dependant on the type of intervention. Smokers from routine and manual groups comprise 44% of the overall smoking population and reducing smoking in this group is critical to reducing inequalities.

NHS Stop Smoking Services can be up to 4 times more effective in helping smokers to stop than an unsupported quit attempt and Department of Health guidance recommends that all smokers should be routinely offered advice to quit and a referral to the Stop Smoking Service, and that all health care professionals should make this part of routine practice.<sup>87</sup> Services should aim to treat at least 5% of their estimated population of smokers per year.

The primary role of NHS Stop Smoking Services is to provide a high quality clinical smoking cessation service to their local population. They can only have a partial influence on lowering overall smoking prevalence rates and should not be viewed as a means of reducing smoking prevalence. Stop Smoking Services therefore should be considered one arm of a comprehensive tobacco control strategy.

Specialist Stop Smoking Services are currently commissioned by PCTs across Lancashire from a range of providers including NHS, pharmacists and community based providers e.g. Leisure Services and Healthy Living Centres.

Commissioners are advised to ensure that services are adequately resourced, evidence based, effective, accessible and based on local needs, particularly with regard to health inequalities. Services should be targeted at priority groups i.e. routine and manual groups, along with pregnant women, and black and minority communities. They should ensure a balance is achieved between efficacy and reach, ensuring widely accessible services but with optimum efficacy rates. Only evidence based smoking cessation treatments approved by NICE should be funded by the NHS. Commissioners are also responsible for ensuring effective clinical governance systems are in place, safeguarding the quality of treatment and data collection processes.

In 2010/11 Stop Smoking Services in Lancashire had a combined target of 12434 quitters; actual achievement fell slightly short of this at 12406, with 3 out of 5 services meeting or exceeding their target. The overall percentage of smokers setting a quit date who were successfully quit at 4 weeks was 49% in Lancashire, compared with 44% overall for the North West as a whole.<sup>88</sup>



Figure 12: Number setting a quit date and successful quitters, Lancashire, 2010/11

A total of 269 pregnant women successfully quit with Stop Smoking Services in Lancashire in 2010/11. The quit rate was slightly lower for Lancashire than the North West as a whole, at 36% compared against 30%. Both the numbers quitting, and the success rate improved in Lancashire in 2010/11 when compared with the previous year.<sup>89</sup>

Quality indicators for Stop Smoking Services also improved markedly in 2010/11 from the previous year. The percentage of clients making a quit attempt where the outcome was not known reduced from 31% in 2009/10, to 20% in 2010/11. Similarly the percentage of clients accessing the service unable to code against socio-economic classification reduced from 5% in 2009/10 to 3.5% in 2010/11.

# **Tobacco Economics**

Not only does tobacco use have a high toll on the health of smokers and non smokers, it also remains a major contributor to health inequalities with higher rates of uptake and lower rates of quitting amongst those who are most disadvantaged. This has a significant cost to individuals and society, not just in health care alone but in wider societal costs. A recent report by the all party Parliamentary group on smoking and health examined the costs of tobacco use and the cost effectiveness of a comprehensive tobacco control interventions. There conclusion was that tobacco control activity was essential to meet government's public health priorities, that it should be a central plank in reducing inequalities and was cost effective and value for money<sup>.90</sup>

Tax revenue from smoking is estimated to be around  $\pounds 10$  billion per year however the cost of smoking to society is estimated at  $\pounds 13.74$  billion per annum and therefore a net lost to society. <sup>91</sup>

### Health care costs

Smoking is a key driver of demand for healthcare, causing the majority of respiratory diseases, around 30% of cancers, and nearly one in five cases of cardiovascular disease, as well as being a contributory factor in diabetes and many other diseases and disorders. Smoking-related conditions are also associated with significant social care costs as well as informal care costs often incurred by the families of those affected. Stopping smoking has been proven to significantly improve healthcare outcomes, even amongst those with pre-existing smoking-related diseases. Furthermore, interventions to assist smokers to quit are relatively inexpensive in comparison with the costs of treating smoking attributable conditions. Stop smoking services are often quoted as being amongst the most cost effective uses of NHS resources, estimated to be between **£2.7 billion and £5.2 billion** 

The total annual cost to the NHS of smoking during pregnancy for maternal outcomes is estimated to be in the region of £8 million for toplevel HRG reference costs. However this is a conservative estimate and the true costs may be as high as £64 million. The total annual cost of smoking in pregnancy for infant outcomes is estimated to be between £12 million - £23.5 million, with the majority of costs attributable to the care of low birth weight and preterm infants.<sup>92</sup>

### **Broader societal costs**

The costs of broader, societal impacts of smoking are substantial, particularly in terms of productivity losses that result from smoking attributable diseases and premature mortality

- Loss of Productivity –staff taking unauthorised breaks Estimated to be between £915 million to £3.2 billion per annum.
- Staff absence resulting from smoking-related illness. Smokers take on average eight days a year more sick leave than non-smokers.
   Estimated to be between £1.1billion and £2.5 billion per annum.
- Loss of productive output through economic cost of premature death of smokers. Estimated to be £4.1billion per annum.
- Cost of passive smoking lives lost estimated at £713 million per annum exclusive of healthcare costs and loss of productivity costs.
- Environmental costs to clean up smoking-related litter cigarette butts are the most common form of litter. Cleaning costs are estimated to be £343 million per annum.
- Domestic fires £507 million per annum

The challenge for healthcare planners is how to allocate scarce resources in the face of numerous public health priorities. In recent times, obesity, alcohol and physical activity have all been the focus of attention and additional investment. However, it should be remembered that amongst the challenges facing public health, smoking remains *the* major contributor to ill-health and inequalities and furthermore, the level of evidence available to support interventions to reduce smoking is more robust than for many other alternative uses of healthcare funds.

### **Lancashire**

Using the model from the tobacco control toolkit<sup>93</sup> developed by Brunel University, it is possible to estimate the economic impact of tobacco across Lancashire.

Smoking prevalence for the 12 Lancashire districts was estimated to be 20.86%. For the purpose of this JSNA, costs for short, medium and long term outcomes were ascertained based upon a series of scenarios. Without local stop smoking services or a sub-national tobacco control programme in place (Scenario 1), the model estimates that smoking will cost Lancashire approximately £115m over the next 2 years (including £83.1m in costs to the NHS). This figure will rise to £190m over the next 10 years. By establishing local stop smoking services in Lancashire (Scenario 2) the model estimates a saving of £2.52m over the next 2 years, with total NHS cost savings of £1.22m.

If a sub-national tobacco control programme was established alongside local services, the model estimates a saving of £6.37m over the next 2 years, rising to £24.6m over the next 10 years. Over the two year period, a total NHS cost saving of £3.09m would be made due to a reduction in consultations, prescriptions, outpatient attendances and secondary care admissions. The cost savings for passive smoking are estimated at £1.67m, with £1.61m saved in productivity losses.

Using this same scenario to generate medium term outcomes, it was estimated that £7.01m could be saved on disease cases, with a further £17.64m on productivity losses. Long term outcomes assessed mortality, treatment costs and quality of life years (QALYs).

# **Recommendations**

To address the issues of tobacco related harm it is recommended that:

- The Lancashire Tobacco strategy is fully implemented across all local authorities in Lancashire (14) i.e.
  - Stop the promotion of tobacco

Make tobacco less affordable

Effectively regulate tobacco products

Help tobacco users to quit

Reduce exposure to second-hand smoke

Effectively communicate for tobacco control

- That tobacco is included in the revised health inequalities JSNA to provide further evidence and information of its impact on health inequalities in Lancashire.
- Ensure that tobacco control is prioritised in cross-cutting policies, guidance and funding.

# Conclusion

Tobacco use remains one of the most significant public health challenges in Lancashire 14 with varied prevalence across the area. While rates of smoking have continued to decline over the past decades, around 21 per cent of adults in England still smoke. In Lancashire, this figure rises to 32.5 per cent in Blackpool (London Health Observatory, 2011). In March 2011, this was the second highest local authority smoking rate recorded in the North West of England. Blackpool's smoking rate was closely followed by areas such as Burnley, Blackburn with Darwen, Rossendale, Pendle and Lancaster, which all saw rates in excess of both the national and North West regional average. Within each of those districts smoking prevalence is likely to be higher in particular neighbourhoods or among particular population groups, such as routine and manual workers. In recent years, smoking rates have remained somewhat stagnant and we need to take new and braver action to drive smoking rates down further (Department of Health, 2011).

Smoking is the primary cause of preventable morbidity and premature death, accounting for 2714 deaths in Lancashire alone per year (APHO, 2011). Deaths caused by smoking are more numerous than the next six most common causes of preventable death combined (i.e. drug use, road accidents, other accidents and falls, preventable diabetes, suicide and alcohol abuse) (Department of Health, 2011). Hospital admissions attributable to tobacco use are significantly higher than the national average in all but 5 of Lancashire's 14 local authority areas (APHO, 2011). Tobacco use is also a cause of and results in health inequalities.

Tobacco Free Lancashire is well placed to address tobacco control from a holistic perspective and has recently developed its five year strategy and delivery plan in partnership with a wide ranging group of partners. The strategy mirrors the government's new national tobacco plan as well as local priorities and adopts the six internationally recognised strands of comprehensive tobacco control measures. It is supported by a detailed delivery plan which will be updated on a yearly basis to reflect progress. As current statistics reveal, smoking rates in Lancashire are some of the highest in the country and this strategy aims to change that through its mission to: "To make smoking history for the children of Lancashire whilst improving the lives of Lancashire residents by reducing overall tobacco consumption"

This JSNA provides the data and evidence base to support the strategy and delivery plan and shows the size and scale of the tobacco epidemic in Lancashire. The scale of this tobacco epidemic needs to be strongly recognised in Lancashire if we are to significantly reduce both smoking rates and health inequalities across Lancashire (14).

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