



# **Exposure to second-hand smoke in Bristol**

**Baseline Report**

***September 2005***

*Produced by the Monitoring Sub-group of the  
Smoke-free Bristol Steering Group*

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## Glossary

Avon and Wiltshire Partnership NHS Trust	<i>Provider of care and services for people with mental health problems.</i>
Bristol City Council	<i>Local Government body responsible for a wide range of local services.</i>
Bristol Partnership	<i>A city-wide partnership of 30 organisations / networks, working together to make Bristol a better place to live in, work and visit. See <a href="http://www.bristol-city.gov.uk/aboutbris/executivePartnerships.html">http://www.bristol-city.gov.uk/aboutbris/executivePartnerships.html</a>.</i>
Bristol Quality of Life Survey	<i>Annual questionnaire survey to a sample of Bristol households that collects information about quality of life and sustainability.</i>
Bristol Smoking Advice Service	<i>A service run by the Bristol Primary Care Trusts, that helps smokers who want to quit, works throughout the city to raise awareness of the harms of smoking and the benefits of clean air, and assists workplaces with implementation of clean air policies..</i>
Electoral ward	<i>A local area from which one Councillor is elected onto the City Council.</i>
Food Safety Team	<i>Inspectors of local food businesses to enforce standards of cleanliness and good hygiene practices.</i>
Health and Safety Executive	<i>Responsible for the regulation of risks to health and safety arising from work activity in Britain.</i>
Health Survey for England	<i>An annual survey involving detailed interviews with a sample of households. It is commissioned by the Department of Health to provide regular information on various aspects of the nation's health.</i>
North Bristol NHS Trust	<i>The organisation responsible for running hospital services in North Bristol, including Southmead and Frenchay Hospitals.</i>
Primary Care Trust	<i>A National Health Service organisation responsible for commissioning health services, providing community services, overseeing payments to GPs, opticians, dentists and pharmacists, and improving the health of the local population.</i>
Public enclosed spaces	<i>Enclosed indoor places, enclosed parts of vehicles, and substantially enclosed structures such as sports stadia, where members of the public visit.</i>
Public Health Directorate	<i>Team of staff, including public health consultants and specialists and health promotion and community development staff, within the two Bristol Primary Care Trusts</i>
Quality and Outcomes Framework	<i>System of quality standards and measures for GP practices, linked to financial incentives.</i>
Second-hand smoke	<i>The smoke inhaled by an individual not actively engaged in smoking. It contains the same harmful chemicals that smokers inhale.</i>

Smoke-free	<i>No smoking in enclosed spaces.</i>
Smoke-free Bristol	<i>A five-year plan, adopted by the Bristol Partnership, to protect the public from the harmful effects of second-hand smoke. See <a href="http://www.smokefreebristol.org">www.smokefreebristol.org</a>.</i>
Smoking room	<i>An indoor room where smoking is permitted.</i>
Stratified sample	<i>A sampling technique used in population studies.</i>
United Bristol Healthcare NHS Trust	<i>The organisation responsible for running hospital services in central Bristol, including the Bristol Royal Infirmary, Bristol Royal Hospital for Children, St Michael's Hospital, etc.</i>

## 1 Summary

The Bristol Partnership signed a smoke-free Bristol Charter in January 2005, initiating a five-year plan to protect the public from the harmful effects of second-hand tobacco smoke.

A Steering Group for smoke-free Bristol was established. The Steering Group for smoke-free Bristol requested preparation of this Baseline Report from which subsequent progress could then be monitored.

Key findings are:

- The City Council, the Health Service, and other public sector organisations have made significant progress but there is still some way to go before all public sector workers are free of second-hand smoke exposure in their workplaces.
- Many Bristol businesses in the non-food sector have introduced, or are planning to introduce, smoke-free policies to safeguard workers, but a substantial proportion (30-50% of employers) do not yet have adequate workplace policies.
- The majority (over 80%) of cafés and restaurants in Bristol are not smoke-free.
- Almost all pubs in Bristol are not smoke-free, with the exception of J D Wetherspoon's pub 'The Commercial Rooms' on Corn Street. The Wetherspoon's chain is gradually converting all its pubs to smoke-free.
- Across Bristol over ten thousand workers are still exposed to second-hand smoke in their workplace.
- Plans are in place to improve data collection concerning workplace smoke exposure using the environmental services FLARE database.
- The percentage of Bristol households that are smoky is well over 30%, which significantly damages the health of children living in smoky rooms.
- Plans are being developed to improve data collection concerning childhood exposure to home smoking.
- The percentage of Bristol adults who smoke is higher than the average for England, and varies widely from ward to ward, with highest rates in the most deprived wards. Lung

cancer death rates in the Bristol South and West Primary Care Trust area are 35% higher than the average for Avon.

- Surveys in Bristol show that over 80% of respondents are bothered by second-hand smoke and would prefer it if indoor public places were smoke-free.
- The numbers of deaths and injuries caused by fires due to smoking are very small, and will be monitored.
- Smoking-related litter is a nationwide problem and plans will be developed to ensure this problem is kept under control in Bristol.

## 2 Introduction

Smoke-free Bristol<sup>1</sup> is a five-year plan, adopted by the Bristol Partnership with the signing of a Charter in January 2005. The plan aims to protect the public from the harmful effects of second-hand tobacco smoke, and has three main stages:

- i) The City Council, the Health Service, and all other public sector organisations put their houses in order – with smoking policies on all their sites, and for all their workers who work off-site.
- ii) The business and voluntary sector follow suit. Working in partnership we encourage smoke-free policies that protect their workers from second-hand tobacco smoke. We also work with the hospitality trade to extend smoke-free provision.
- iii) We work on increasing awareness of the health damage to children from smoking in the home, and we support and encourage parents and others in protecting clean air for children.

In order to monitor progress, the Steering Group for smoke-free Bristol requested that a monitoring sub-group be convened (see Appendix 1) with the initial task of compiling this Baseline Report.

## 3 Definitions

### ***Smoke-free premises***

Smoke-free means that there is no smoking at all indoors, or in enclosed spaces such as vehicles. If there is a designated smoking area or a designated smoking room this is not smoke-free, because the second-hand smoke drifts into other areas and because the cancer-causing agents become impregnated in soft furnishings. Ventilation systems are not capable of rendering premises smoke-free as they do not remove all the cancer-causing agents<sup>2</sup>.

### ***Enclosed spaces***

The definition in the proposed legislation for England is that enclosed spaces are internal areas where the openings make up less than 30% of the wall and roof area. This will cover indoor rooms, enclosed spaces in vehicles, and substantially enclosed places in sports stadia, railway stations, etc.

## 4 Key questions

The key questions for monitoring progress on smoke-free Bristol are:

- How many workplaces and public enclosed spaces are smoke-free and how many are not smoke-free.
- How many people are exposed to second-hand smoke in workplaces and public enclosed spaces.
- How many households are smoke-free and how many are not smoke-free, and how many people, in particular children, are exposed to second-hand smoke in the home.

Additional questions are:

- How many people smoke and how much.
- What are people's knowledge and attitudes about smoke-free.
- How many fires and injuries are caused by smoking, and where and when do these happen.
- Is smoking-related litter a problem, how much, and where.

## 5 How many workplaces and public enclosed spaces are smoke-free / not smoke-free

Including public, private, and community / voluntary sector organisations there are probably over 20,000 premises in Bristol where workers or members of the public could be exposed involuntarily to second-hand smoke. The Bristol Smoking Advice Service (part of the Public Health Directorate for the Bristol NHS Primary Care Trusts) and staff from Bristol City Council, have collated baseline information about the current situation that enables us to estimate how many places are smoke-free. By and large, most public enclosed spaces are also someone's workplace. The broad headings we are using in this report to describe workplaces and public enclosed spaces are:

- non-food businesses;
- food businesses;
- licensed pubs;
- NHS premises;
- City Council premises, including leisure centres;
- educational establishments, including Universities, colleges and schools;
- other public sector premises, such as the police and fire services;
- public transport (buses, trains, taxis).

## **Non-food businesses**

The Public Health and Safety team of Bristol City Council is responsible for enforcing health and safety legislation in over 11,500 non-food businesses across the City. In addition, there are approximately 700 other non-food businesses (e.g. factories, NHS premises, educational establishments) that are covered instead by the Health and Safety Executive. At present the Health and Safety Executive does not routinely enquire, or collect data, about the smoke-free policies in workplaces that they inspect. Policy in NHS premises, the City Council, other public services and educational establishments (all of which are covered by the Health and Safety Executive) is also described on pages 8-10.

Our baseline audit in 2004 shows that:

- of the 80 large (250+ employees) non-food businesses covered by Bristol City Council Public Health and Safety team, approximately 45% were smoke-free in 2004;
- of the 11,400 smaller (<250 employees) non-food businesses covered by Bristol City Council Public Health and Safety Team, we found that 72% of a sample of the smallest businesses, visited by our Workplace Policy Advisor, were smoke-free. The workplace Policy Advisor is part of the Bristol Smoking Advice Service.
- data for the non-food businesses that fall under the jurisdiction of the Health and Safety Executive is not available.

## **Food Businesses**

The Food Safety Team of Bristol City Council is responsible for enforcing health and safety legislation in approximately 4,000 food businesses in the city. This includes pubs, but we are describing these separately under the next heading. The Bristol Smoking Advice Service has worked with 770 of these food businesses to encourage smoke-free provision, and publishes a directory of 'Easybreathing eateries'.

- Of the 770 cafes / restaurants / hot food shops worked with by the Smoking Advice Service an estimated 14% were smoke-free.

## **Licensed pubs**

There are 414 licensed pubs in Bristol City. These are also included amongst the 4,000 food businesses. The majority (308) serve drinks and meals; the rest (106) serve drinks and snacks only (Environmental Health Department FLARE database). The non-food pubs are concentrated in the more deprived parts of the city where smoking rates are highest. The smoke-free Public Places Advisor, a member of Bristol Smoking Advice Service, is visiting all pubs to encourage smoke-free policies.

- In 2004 no Bristol pubs were smoke-free, and only 16 (4%) were known to have a separate no-smoking room.
- In May 2005 the J D Wetherspoon's pub on Corn Street, 'The Commercial Rooms', was the first Bristol pub to go smoke-free. It made the second page of the *Evening Post* and attracted positive comments from staff and customers, even from those who had to pop outside when they wanted a cigarette.

## ***NHS premises***

Bristol has two major acute hospital Trusts: the North Bristol NHS Trust, which includes Frenchay and Southmead Hospitals, and the United Bristol Healthcare NHS Trust, which includes the Bristol Royal Infirmary and other specialist hospitals close by. Bristol has two Primary Care Trusts, each with several hundred employees and a wide range of community premises, including clinics, health centres, walk-in centres, and community hospitals. The Avon and Wiltshire Partnership Trust includes the mental health services both in and around Bristol.

Most NHS services introduced smoking policies many years ago in recognition of the magnitude of the health damage caused by tobacco smoking. Evidence on second-smoke was at that time still equivocal, so the policies then enacted did not aim to protect people from second-hand smoke. The result is that not all NHS organisations have policies that guarantee a smoke-free environment for the public and for staff.

Review of the position in 2004 revealed that:

- King Square House, the main office base for both Bristol PCTs (Bristol North and Bristol South and West), is completely smoke-free;
- all PCT clinics, GP surgeries, and walk-in centres are completely smoke-free;
- United Bristol Healthcare NHS Trust still has smoking rooms, is reviewing its policies, and has set a date in October 2005 for becoming smoke-free;
- North Bristol NHS Trust still has smoking rooms, is reviewing its policies, and plans to set a date in 2006 for becoming smoke-free;
- the mental health services (Avon and Wiltshire Partnership Trust) are reviewing their policies. Guidance for the NHS allows a special case to be made for mental health patients;
- all NHS vehicles are completely smoke-free;
- community staff spend considerable time in patients' homes or other community venues where they may be exposed to second-hand smoke. It is PCT policy for staff to ask clients not to smoke during a home visit, though it is recognised that sometimes there are extenuating circumstances such as mental health problems or bereavement. Community staff report that, as awareness grows, people are generally very considerate and their exposure in patients' homes is reducing.

## ***Bristol City Council premises***

The Council owns and runs a wide range of premises, including office premises such as the Council House, arts venues such as the Colston Hall, leisure centres and swimming pools.

Review of the position in 2004 revealed that:

- the main Council buildings are completely smoke-free, and the Council is reviewing all its policies for premises and for staff working off-site;

- the Colston Hall is smoke-free, including the bar, but excluding very limited areas back-stage;
- leisure centres, including the bar areas, and swimming pools, are largely smoke-free but for certain events such as boxing matches, smoking is allowed;
- all Council vehicles are smoke-free;
- community staff spend considerable time in patients' homes or other community venues where they may be exposed to second-hand smoke. The policy is as for the PCT (see above);
- a policy is being developed whereby all voluntary organisations and groups in receipt of a grant from the Council will, from summer 2006, be required to have a policy concerning smoking in enclosed places.

### ***Educational establishments***

The main educational establishments in Bristol are schools and colleges run by the Local Education Authority (part of Bristol City Council), the University of Bristol, and independent schools. The University of the West of England has premises in Bristol and in South Gloucestershire.

Review of the position in 2004 revealed that:

- policy for schools, including those run by the local Education Authority, is set by the Governors, or in some cases the owners, of each individual school. All are designated smoke-free for students but some have indoor smoking rooms for staff;
- in the ASSIST trial<sup>3</sup>, which was a large study on school-age smoking that included 18 Bristol schools (15 state and 3 independent), all the teachers confirmed that smoking was not allowed by pupils on school premises. Many teachers were aware that this policy was breached occasionally but mainly in outdoor areas. For smoking by teachers, around half the schools had no smoking allowed by teachers, and half had smoking allowed in restricted areas. Amongst teachers, 55% thought smoking by teachers should not be allowed, 42% thought it should be allowed in designated areas, and 1% thought it should be allowed in staff rooms;
- responses from pupils in the 18 Bristol schools in the ASSIST study showed that over 70% reported being aware of smoking restrictions for pupils, 53% knew what the restrictions were for teachers' smoking, and the vast majority (84%) were aware of seeing teachers smoking only sometimes, never, or not sure.
- overall this confirms that pupils are not exposed to second-hand smoke in schools, that some staff, including cleaners, may be exposed to smoky indoor areas, and that most teachers do not want indoor exposure to smoky areas for staff.
- City of Bristol College has smoke-free buildings with secluded outdoor smoking areas;
- the University of Bristol has smoking rooms in some buildings, and in some Halls of Residence;
- the University of the West of England has entirely smoke-free buildings.

## **Police and Fire Services**

The Avon and Somerset Constabulary and the Avon Fire Service already have smoke-free premises and smoke-free vehicles.

## **Public Transport**

Trains, buses, and aeroplanes have been completely smoke-free for some years already and public acceptance is very high. Most taxis are smoke-free. Bristol Temple Meads railway station will soon be smoke-free.

# **6 How many people are exposed to second-hand smoke in workplaces and public enclosed spaces**

The census, together with other local data sources and the local area labour force survey, tells us the number of people living and working in Bristol. Although the 2001 census data for Bristol raised major concern about accuracy (380,000 people with Bristol addresses completed census forms, whereas 417,000 were registered with GPs and resident in Bristol at the time), this does not have a major impact on our estimates for workplace exposure. Table 1 gives a rough split of the residents of Bristol in a way that enables us to consider second-hand smoke exposure.

**Table 1: Numbers of Bristol people in employment in 2003/04**

	<b>Approximate Bristol numbers</b>
People of working age (males 16-64, females 16-59)	256,200
People below working age (<16)	72,000
People above working age (males 65 and over, females 60 and over)	63,300
All residents	391,500
In employment	189,000
▪ Employees	168,000
▪ Self-employed	20,000
Unemployed	8,000
Full-time students and schoolchildren	87,000

Source: 2001 Census [www.statistics.gov.uk](http://www.statistics.gov.uk), and Bristol Labour Market Profile May 2005 (based on data from the 2003/04 local area labour force survey).

Our audit of smoke-free policies in Bristol workplaces (see previous section) confirms the national picture, which is that the workers most exposed are those working in the hospitality trade (hotels, cafes, restaurants, pubs and clubs). In 2004 in Bristol, all pubs were smoky and 86% of cafes and restaurants were smoky. Table 2 shows data about types of jobs for Bristol people.

**Table 2: Numbers of Bristol people in employment by occupational group, and numbers of employee jobs by type of job 2003/04**

	<b>Approximate Bristol numbers</b>
<b>Employment occupation</b> <i>Soc 2000 major group</i>	
1 Managers and senior officials	30,000
2 Professional occupations	32,000
3 Associate professional and technical	32,000
4 Administrative and secretarial	20,000
5 Skilled trades	19,000
6 Personal service	10,000
7 Sales and customer service	17,000
8 Process plant and machine operatives	12,000
9 Elementary occupations	23,000
<b>Employee jobs</b>	
Manufacturing	17,500
Construction	11,900
Services	200,800
▪ Distribution, hotels and restaurants	51,100
▪ Transport and communications	8,500
▪ Finance, IT, other business activities	67,700
▪ Public admin, education and health	62,200
▪ Other services	11,300

Source: *Bristol Labour Market Profile, May 2005 (uses 2003/04 local area labour force survey and 2003 annual business inquiry employee analysis).*

Those most likely to be exposed to second-hand smoke at work will be the 60,000 workers in occupational groups 6-9, many of whom will be amongst the 50,000 workers in the distribution (i.e. shops), hotel and restaurant trade. The Annual Business Inquiry for 2003<sup>4</sup> shows that the number of employees in Bristol hotels and restaurants was 11,600. Taken overall this suggests that over ten thousand workers in Bristol do not have the benefit of clean air in their workplace.

It is very difficult to estimate how many members of the public and customers are exposed to second-hand smoke, but it is likely to be a substantial number. To some extent these individuals have greater choice than workers, but if every pub and café near to where you live is smoky, then choice is limited.

In conclusion:

- at least ten thousand Bristol workers are exposed to the health damage of second-hand smoke in their workplace.
- the number of customers / members of the public exposed is very difficult to estimate.

## 7 How many households are smoke-free and how many people, particularly children, are exposed to second-hand smoke in the home

Exposure to second-hand smoke in the home is an important health risk<sup>5</sup>. Babies and children are particularly vulnerable to harm from second-hand smoke and have no choice in the matter. In addition to the direct harm of second-hand smoke, children who are exposed to smoking in the home are more likely to become smokers themselves.

Awareness of harm from second-hand smoke is growing rapidly. Health Visitors, the qualified nurses who support parents of all pre-school age children, report that far more parents now regard it as a matter of course that all smoking should take place outside the house. The situation was very different 5 or 10 years ago. It is also becoming more socially acceptable to request visitors not to smoke indoors.

Experience from countries such as Ireland, Australia and Canada, is that the percentage of homes that are smoke-free increases once smoking is banned in workplaces and public places. In Canada, for example, 26% of children under 12 were regularly exposed to second-hand smoke at home in 1999 before the introduction of smoke-free legislation. By 2004 this had fallen to 12%<sup>6</sup>. In Ireland the percentage of homes that are smoke-free has risen by 30%<sup>7</sup>. In Australia the percentage of homes that are smoke-free has risen in several states following smoke-free legislation<sup>8</sup>.

**Health Survey for England** – this national, annual survey, asks detailed questions to a sample of households in England. In 2003 (and presumably for 2004) the survey included a question about smoking in the home but as with much of the detailed information collected, this has not been analysed or included in the available published data tables. Routine data from the Health Survey may include analysis of home smoking from 2006.

**Bristol Quality of Life Survey** – for Bristol we have data from the Quality of Life Survey conducted annually since 2001 by Bristol City Council's Sustainable Development Department. Information about this survey is available on [www.bristol-city.gov.uk](http://www.bristol-city.gov.uk). Questionnaires are sent to a stratified random sample of Bristol residents on the electoral roll, and a young person's survey is also conducted. The strength of the survey is that it gives us local data year on year. The main limitation is that it inevitably includes only a small sample of Bristol residents and undoubtedly those who respond are skewed towards older, more well-off, and retired people. This means that the responses are not representative of all Bristol residents but they are valuable as a guide and for monitoring trends.

The Quality of Life Survey includes the following question:

“Does anyone in your household currently smoke?”	Yes I smoke
(tick all boxes that apply)	Yes another household member smokes
	No
	Don't know

This gives us data about how many respondents smoke and about how many respondents' households contain at least one smoker. We can also link this to whether the respondent said there were children in the household. What it does not tell us is whether smoker(s) regularly smoke indoors or not. An addition to this question is being included in 2005's Quality of Life Survey to ask, 'Does anyone smoke regularly indoors?'.

**Health visiting service** – Health Visitors are in contact with all young children in Bristol, and do much to raise awareness among parents of the benefits of safeguarding children from the harms of second-hand smoke. It could be feasible to collect information prospectively from 2006 on the smokiness / smoke-free status of the household, for each Bristol infant at 8 months of age. We would need to devise a system that does not put a great administrative burden on health visitors, and a format for the question that does not come across as judgemental. Early discussions about this with Health Visitors in Bristol have been very positive. We are organising secondment of an experienced Health Visitor to work with the Lead Manager for smoke-free Bristol on developing this data collection, and on developing a plan for ensuring that the number of smoke-free homes increases. Our conclusions in relation to data about home exposure are:

- the Health Survey for England has asked about it but has not analysed the data;
- data from the 2004 Bristol Quality of Life Survey shows that 31% of respondents reported that their household contained a smoker. This means that the true percentage is likely to be higher than 31%;
- data from the 2004 Bristol Quality of Life Survey showed that the percentage of respondents reporting a smoker in their household varied widely, from 13% in Stoke Bishop, to 49% in Filwood;
- from 2005 we will include, in the Bristol Quality of Life Survey, a question about whether smoking takes place regularly indoors;
- from 2006 we hope to have information collected by Health Visitors, categorising the homes of all 8-month-olds as smoke-free / partially smoke-free / smoky;
- the Health Survey for England should give national and regional data about smoke-free homes from 2006.

## 8 How many people smoke and how much

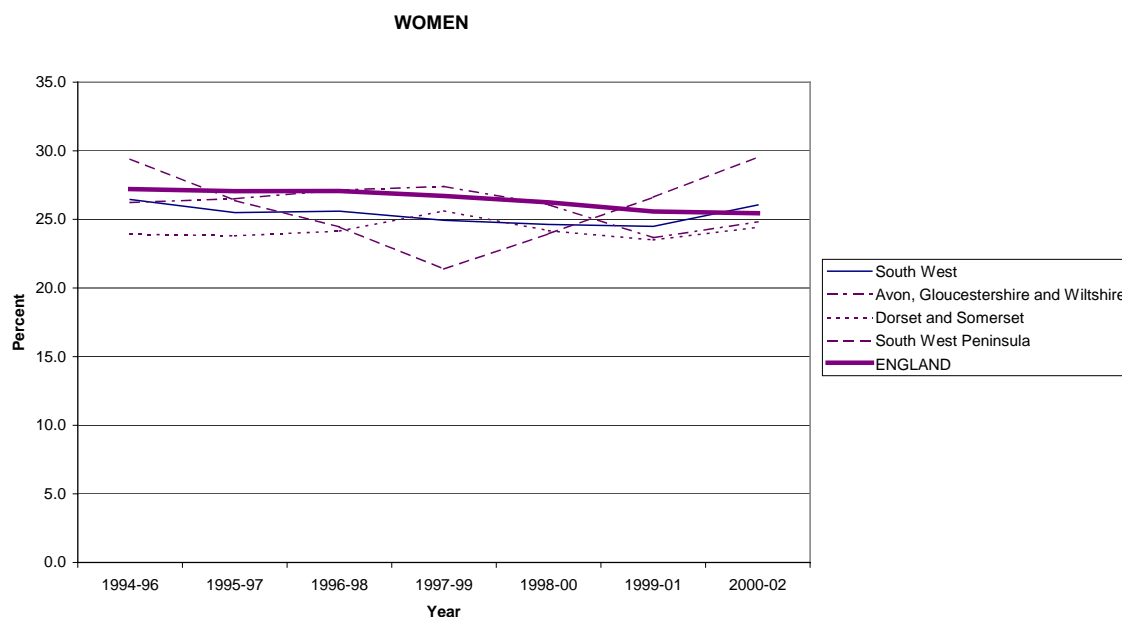
The primary aim of smoke-free Bristol is to eliminate the substantial health damage from second-hand smoke. We respect the right of smokers to smoke in places where this does not expose others to the harmful toxic substances in second-hand smoke.

Experience from other countries<sup>9</sup> is that once smoke-free policies are introduced, this has the extra benefit of increasing the success rate for the 70% of smokers who want to quit. In California, Ireland, and New York, smoking prevalence and tobacco consumption fell more rapidly after workplaces and public places became smoke-free.

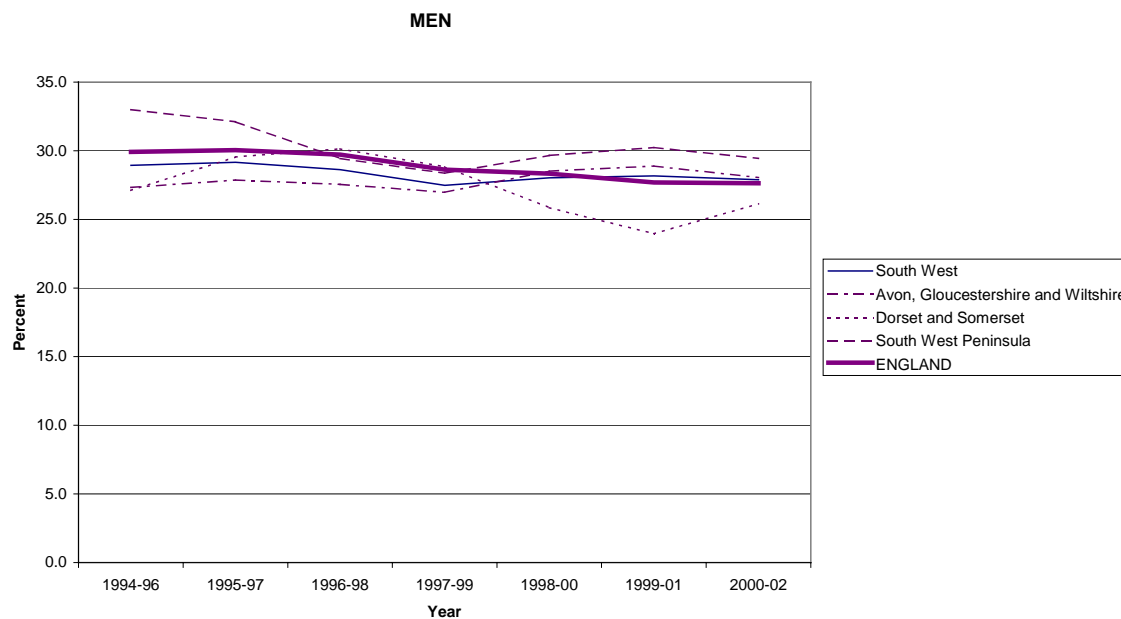
There are various sources of information that give us an idea of smoking prevalence, but all have some limitations.

**Health Survey for England** – this annual survey gives valuable national data about smoking prevalence, by age group and gender, and categorised by heavy / medium / light smoker<sup>10</sup>. For 1996-2002 the data is available for Avon, Gloucestershire and Wiltshire. From 2003 it is presented by Government Office Regions. The sample size at Unitary Authority level is too small to enable local statistics to be produced. The data for Avon, Gloucestershire and Wiltshire are shown in figures 1 and 2.

**Figure 1 Health Survey for England, Smoking in South West region by Strategic Health Authority**



**Figure 2 Health Survey for England, Smoking in South West region by Strategic Health authority**



**Avon County Health Survey** – this was a high-quality survey of a 2% sample of Avon residents aged 16-64, performed by Bristol University Department of Social Medicine and the NHS Public Health Departments in 1989<sup>11</sup>. The response rate was 65%, with 7,099 questionnaires being analysed. The County Survey predated the Health Survey for England, which began in 1991. The Avon County Survey found that 31.8% of respondents reported that they were current smokers, 28.9% ex-smokers, and 39.3% never smokers. The table below shows how these data compare with Health Survey for England data for 1993, the earliest year included in their trend data, and for 2003.

**Table 3: Comparison of reported smoking in Avon County Health Survey 1989, and Health Survey for England data 1993 and 2003.**

	Avon County Survey 1989	England	
		1993	2003 unweighted*
<i>Men</i>			
Current smokers	34.8%	28%	25%
Ex-smokers	32.1%	33%	31%
Never smokers	33.1%	39%	44%
<i>Women</i>			
Current smokers	29.4%	26%	24%
Ex-smokers	26.3%	22%	21%
Never Smokers	44.3%	52%	55%

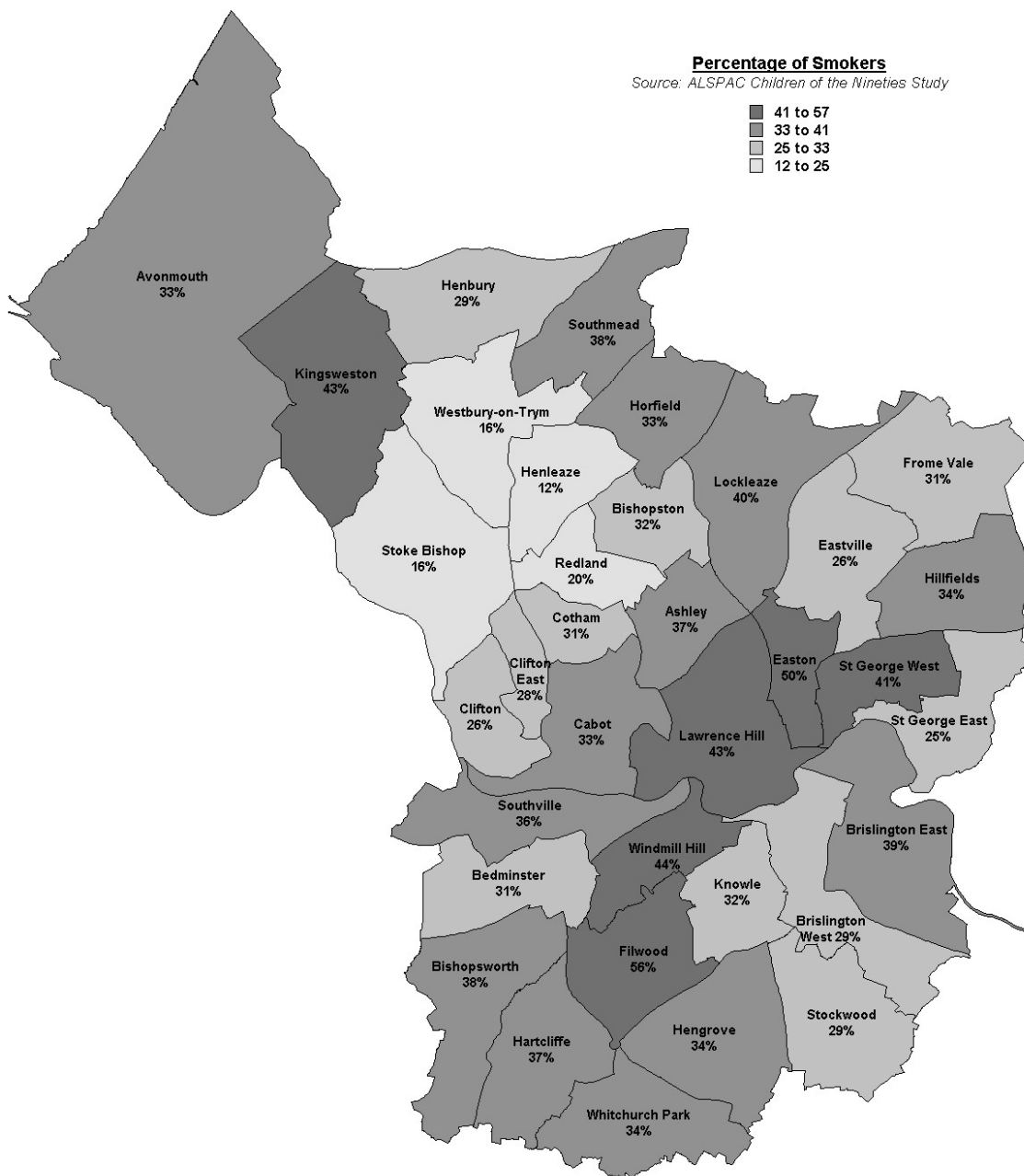
\* The HSE results for 2003 are presented in two ways: weighted, which gives the most accurate estimate of smoking (27% current smokers in men), or unweighted, which gives a better trend comparison with previous years.

These data suggest that Avon smoking rates might be higher than national rates but it is very hard to be certain because of differences in the survey methods and response rates. What is certain is that if Avon rates are close to or above England rates, then Bristol City rates are certain to be significantly above these rates because of the known variation with socioeconomic group and deprivation.

**Health Development Agency estimates** – a 2004 analysis from the Health Development Agency<sup>12</sup> gave estimates of smoking prevalence by Primary Care Trust using national estimates and weighting by deprivation. This gave estimated adult smoking prevalence rates of 30% for Bristol North, and 33% for Bristol South and West.

**Avon Longitudinal Study of Parents and Children (ALSPAC)** – this cohort study, also known as ‘Children of the 90s’, includes around 14,000 parents and children in Avon. Data from this study tells us about smoking rates among these 14,000 adults, and therefore about the variation in smoking prevalence that exists from one electoral ward to another. Health Survey for England data give an overall smoking prevalence estimate for Avon of 27% (there has been little change in prevalence in Avon, Gloucestershire and Wiltshire in recent years). Weighting this using the known variation in smoking prevalence among the 14,000 mothers in ALSPAC, gives smoking prevalence estimates for Bristol City as a whole and for individual electoral wards. This suggests that adult smoking prevalence in Bristol City is 34%, and ranges from 12% in Henleaze to 56% in Filwood, (see map below).

**Figure 1: Smoking rates in Bristol by ward**



workspsMiscMShepherdBristolSmokers.WOR

Produced by Avon IM&T Consortium  
 23 December 2002  
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Death rates for lung cancer bear this out, with Bristol lung cancer death rates being over 20% higher than the Avon average, and Bristol South and West rates 35% higher (Office for National Statistics Public Health Compendium data 1997-2002).

**Bristol's Quality of Life Survey** – in the Quality of Life Survey, around 20% of respondents report that they smoke. There is no significant downward trend. In the most deprived wards the percentage of respondents who report that they smoke is between 25% and 30%. This is entirely consistent with an overall smoking prevalence of 34% across Bristol and with smoking rates of 50% in deprived wards, since the 25% of people who respond to the survey are known to be skewed towards the type of people who are less likely to smoke.

**GP Practice data** – in theory, GP records contain an entry for every registered person saying whether they smoke and when that record was last updated. In practice, obtaining and using this data to produce anonymised prevalence rates is fraught with difficulty. If the data were consistently coded and sufficiently complete, then national analysis would be possible through the 14 February submission of GP data nationwide that takes place to enable Quality and Outcomes Framework information to be gathered. Locally it is very time-consuming even to extract data, and analysis is a further problem on top of that. The possibility of obtaining useful data through this route is still being explored.

**Tobacco sales and tobacco revenue** – these data can be a useful marker of tobacco consumption but they do not give the full picture. This is because of the considerable amount of smuggling that takes place from abroad to avoid payment of tax. Unofficial estimates put the illegal cigarette trade at around 25-30% of the total market<sup>13</sup>. In Ireland, in the first six months of 2004, revenue from tobacco was down 16%, and Gallagher (manufacturers of Benson and Hedges and Silk Cut) reported a 9% drop in sales<sup>14</sup>. The Ireland ban took effect from March 2004. Reduced paramilitary involvement and tighter controls on smuggling may mean that official sales, and revenue subsequently increase.

**Quit rates** – many thousands of Bristol residents have received support to stop smoking and have quit successfully for at least 4 weeks, following the establishment of support services in 2002. This service continues to meet all targets set for it.

So in conclusion:

- the Avon County Health Survey in 1989 found that 32% of respondents (16-64) reported that they were current smokers. The response rate was 65%;
- the Health Survey for England showed very little change in recent years in reported smoking rates for Avon, Gloucestershire and Wiltshire. Of adult respondents in 2003, 25% of males and 24% of females said that they smoked;
- smoking rates in Bristol are certain to be higher than for Avon and for England. Data from the ALSPAC study enables Bristol smoking rates to be estimated. This puts the overall Bristol adult smoking rate at around 34%, with major variation from ward to ward (12% in Henleaze; 56% in Filwood).

## **9 What are people's knowledge and attitudes about smoke-free**

Survey data show that many people feel bothered by second-hand smoke but very few people complain or make a fuss about it. Most people appreciate being in smoke-free places, and support some restrictions on smoking in workplaces and enclosed public places. Experience elsewhere shows that once the move towards smoke-free grows and people begin to understand and see for themselves what smoke-free is all about, then active

support grows substantially. It seems that people are inherently tolerant and are reluctant to infringe the freedom of others, but once smoke-free places become a reality everyone wonders what all the fuss was about and why did we wait so long to achieve clean air. This is perhaps a reflection of the success the tobacco industry has had in using our strong sense of the value of personal freedom, and framing this as freedom to smoke wherever I like, rather than freedom to breath clean air.

Few surveys have tested knowledge about the harm from second-hand smoke, or about what is involved in smoke-free policy. At present in Bristol, knowledge is likely to be limited, as evidenced by the fact that many respondents agree that all workplaces should be smoke-free but overlook the fact that pubs are workplaces when asked if pubs should be smoke-free.

The information we have about current attitudes in Bristol comes from the Big Smoke Debate, the Bristol Citizens' Panel and the 2005 National No-Smoking Day survey. Some of the main findings are summarised below.

**The Big Smoke Debate** – this was a nationwide, widely publicised, attitude survey conducted via the web and by post between 24 May and 12 July 2004<sup>15</sup>. Across the south west there were 23,843 respondents, of whom 2,470 were from Bristol. Table 4 summarises some of the main findings for Bristol respondents.

**Table 4: Responses for 2,470 Bristol respondents to the Big Smoke Debate Survey 2004. Smokers make up 19% of respondents.**

<b>How bothered are you about tobacco smoke in public places?</b>	
A great deal	48.2%
A fair amount	25.1%
A little	<u>14.7%</u>
Sub-total (all bothered)	88.0%
Not at all	11.8%
Don't know	0.2%

<b>Your overall preference on smoking in indoor areas?</b>				
	<i>Completely smoke-free</i>	<i>Mainly smoke-free</i>	<i>Mainly smoking</i>	<i>Smoking allowed throughout</i>
Taxis	92%	-	-	1%
Offices	78%	19%	2%	1%
Cafes	72%	19%	6%	2%
Shopping centres	73%	21%	2%	3%
Restaurants	64%	25%	6%	4%
Railway and bus stations	59%	31%	4%	5%
Pubs and bars	51%	28%	13%	8%

<b>Overall would you prefer public places to be completely smoke-free?</b>			
	<i>All Bristol respondents</i>	<i>Non-smokers or ex-smokers</i>	<i>Smokers</i>
Yes	81.6%	91.3%	40.8%
No	17.%	7.4%	59.3%
Don't know	1.4%	1.3%	1.9%
<b>Would you support or oppose a law to make all workplaces smoke-free?</b>			
	<i>All south west respondents</i>	<i>Non-smokers or ex-smokers</i>	<i>Smokers</i>
Support	80.5%	89.2%	32.5%
Neutral	7.5%	5.4%	19.3%
Oppose	10.6%	4.4%	45.3%
Don't know	1.4%	1%	3%

**Bristol Citizens' Panel** – this is a representative sample, consisting of over 2,000 Bristol people, who assist the City Council by providing their views on a wide range of issues. In September 2004 they gave their views about smoke-free policy. Table 5 sets out the main results of this consultation, laid out in the same format as for Table 4 for the Big Smoke Debate.

**Table 5: Responses from the Bristol Citizens' Panel to a consultation in September 2004 on smoking in public places. Smokers make up 14% -17% of respondents.**

<b>How bothered are you about tobacco smoke in public places?</b>			
	<i>All</i>	<i>Non-smokers</i>	<i>Smokers</i>
A great deal	44%	91.3%	40.8%
A fair amount	24%	7.4%	59.3%
A little	19%	1.3%	1.9%
<i>Sub-total (all bothered)</i>	87%	96%	58%
Not at all	9%	4%	39%
Don't know	0%	0%	0%

<b>Your overall preference on smoking in indoor areas?</b>				
	<i>Completely smoke-free</i>	<i>Mainly smoke-free</i>	<i>Mainly smoking</i>	<i>Smoking allowed throughout</i>
Offices	69%	21%	1%	1%
Cafes	65%	26%	3%	1%
Shopping centres	69%	22%	2%	2%
Pubs and bars	28%	52%	12%	3%

<b>Overall would you prefer public places to be completely smoke-free?</b>			
	<i>All Bristol respondents</i>	<i>Non-smokers or ex-smokers</i>	<i>Smokers</i>
Yes	83%	90%	46%
No	15%	9%	52%
Don't know	1%	1%	2%
<b>Would you support or oppose a law to make all workplaces smoke-free?</b>			
	<i>All Bristol respondents</i>	<i>Non-smokers or ex-smokers</i>	<i>Smokers</i>
Support	68%	76%	32%
Neutral	16%	14%	28%
Oppose	11%	8%	34%
Don't know	3%	2%	5%

These data are important because they may be a better indicator of across-the-board public opinion. The Big Smoke Debate may have attracted responses from people who have relatively strong views either for or against smoke-free policies. The Citizens' Panel is likely to include people with more neutral views, as well as those who have a clear position.

**National No Smoking Day survey** – this was a questionnaire survey carried out at the Galleries shopping mall in Bristol, and in three J D Wetherspoon's pubs on 9 March 2005, national no-smoking day. The proportion of respondents who were smokers (38% in the Galleries; 29% in Wetherspoon's) was considerably higher than in the Big Smoke Debate (19% of Bristol respondents) and for the Citizens' Panel (14% smokers; 3% no answer). This reflects the fact that it is generally smokers who are attracted to the no smoking day stalls). The main finds from this survey are summarised in Table 6.

**Table 6: Summary of responses from 219 people surveyed in the Galleries and in Wetherspoon's pubs on national no smoking day 2005. Smokers made up 38% of Galleries respondents, and 29% of Wetherspoon's respondents.**

	<i>All respondents</i>	<i>Non-smokers</i>	<i>Smokers</i>
<i>All indoor public places should be smoke-free</i>	67%	78%	48%
<i>Rooms where food is served should be smoke-free:</i> - completely, or - with separate smoking room	89% 6%	96% 2%	79% 10%
<i>Pubs and bars should be smoke-free:</i> - completely, or - with separate smoking room	38% 38%	52% 37%	15% 41%
<i>Offices should be smoke-free:</i> - completely, or - with separate smoking room	72% 22%	77% 17%	61% 32%
<i>All workplaces should be smoke-free:</i> - completely, or - with separate smoking room	56% 36%	61% 33%	48% 39%
<i>If this pub was smoke-free would you come here:</i> - more often - same - less often	31% 52% 17%		

So in conclusion, attitude surveys in Bristol suggest that:

- the vast majority of people – over 80% of all, and over 90% of non-smokers – are bothered by second-hand smoke and would prefer it if indoor public places were smoke-free;
- over 80% of people would not be opposed to a law that makes all workplaces smoke-free;
- many people do not think of pubs and bars as someone else's workplace, so give contradictory answers when asked about workplace smoking and about pubs and bars;
- when asked about smoking in pubs and bars, around 15% of people think that smoking should be allowed in most or all of the rooms, around 80% think they should be mainly or completely smoke-free.

## **10 How many fires and fire injuries are caused by smoking**

Around 10% of domestic fires in England are caused by smoking materials, which includes fires caused by children playing with matches. Most fire injuries are caused by chip-pan fires, but for fire deaths – which are relatively rare – smoking materials are involved in around 40% of cases. Alcohol is nearly always an associated factor, and old flammable furniture is also a risk.

In Ireland, concerns were raised about the possibility of an increase in fire related deaths if smokers drank at home instead of at the pub because of smoke-free legislation. With such small numbers of deaths the figures inevitably fluctuate year to year, and there is no evidence that smoke-free legislation has had an effect. The deaths tend to occur between midnight and 6am and there is no logical reason why the place of evening drinking should have an influence. The monitoring group is working with the Fire Service to examine relevant statistics for Bristol in order to ensure we have baseline data. Numbers of deaths and injuries are small.

## **11 Is smoking-related litter a problem**

Annual surveys have been carried out by Keep Britain Tidy since 2002<sup>16</sup>. These confirm that cigarette-related litter is present in most locations surveyed across Britain. Local authorities across England spend around £342 million a year on street cleaning and litter clearance.

As more buildings become smoke-free, provision has to be made for smokers to dispose of litter appropriately. Smoke-free Bristol will work with our local 'Bristol Clean and Green Campaign' to make sure that the problem of smoking-related litter is kept under control.

## **12 How should we monitor progress**

The Monitoring Group for smoke-free Bristol will meet regularly to review all the data presented in this report. We will present a follow-up report to the smoke-free Bristol Steering Group in September 2006.

### **Dr Angela E Raffle**

Consultant In Public Health

Chair of Monitoring Sub-Group for smoke-free Bristol

*September 2005*

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## **Appendix 1**

### **Members of the Monitoring Group for smoke-free Bristol**

Fiona Andrews - *Regional Tobacco Policy Manager, Government Office for the South West*  
Dr Ardiana Gjini – *Specialist Registrar in Public Health, Bristol North PCT*  
Pete Fryer - *Environment Quality Manager, Bristol City Council*  
Paul Pilkington - *Lecturer in Public Health, University of the West of England*  
Katie Porter - *Smoke Free Bristol Manager, Bristol City Council*  
Dr Angela Raffle (Chair) – *Consultant in Public Health, Public Health Network*  
Dr Rona Campbell - *Senior Lecturer in Health Services Research, University of Bristol*

## References

1. Bristol Partnership. smoke-free Bristol website. 2005. [www.smokefreebristol.org](http://www.smokefreebristol.org).
2. Repace, J. Can Ventilation Control Secondhand Smoke in the Hospitality Industry? 2000. California. OSHA Ventilation Workshop Analysis.
3. Campbell R. data from the ASSIST study. 2005. Personal Communication
4. Office for National Statistics. Annual Business Inquiry - employee analysis. 2003.
5. Cook DG Strachan DP. Summary of effects of parental smoking on the respiratory health of children and implications for research. *Thorax* 1999;**54**:357-66.
6. Ontario Tobacco Research Unit. The Tobacco Control Environment: Ontario and Beyond. 2005. Toronto, ON, Ontario Tobacco Research Unit. Special Reports; Monitoring and Evaluation Series 2004 - 2005 (Vol 11. No 1).
7. Belfast Telegraph . 28-6-2005.
8. The Cancer Council South Australia. Tobacco Control Research and Evaluation Report Vol 1 1998-2001. 2002. Eastwood South Australia, Cancer Council SA.
9. Smoke-free Action. Going Smoke-free: the case for all pubs and clubs. Smoke-free Action. 2005. London.
10. Department of Health. Health Survey for England. 2005. London.
11. Hughes, A. O. Avon County Health Survey 1989 County Report. 1989. University of Bristol Medical School, Department of Epidemiology and Public Health Medicine.
12. Twigg, L. Moon G. Walker S. The Smoking Epidemic in England. 2004. London, Health Development Agency.
13. Rowell, A. Bates C. Tobacco smuggling in the UK. 2000. Action on Smoking and Health.
14. Tobacco in Ireland; Smoker numbers continue to fall. *Euromonitor International* 2005;**33**.
15. Government Office for the South West. The Big Smoke Debate South West. 2004. Bristol, Department of Health.
16. Encams Keep Britain Tidy. Local Environmental Quality Survey of England research report 2003/04. 2004. London, Department of the Environment Food and Rural Affairs.