Introduction
Each year in the UK around 120,000 people die from smoking related diseases, this represents 13 people every hour - equivalent to a major disaster every day - yet the use of tobacco is still legal and very common.

In 1999, UK consumers spent over £12 billion on tobacco products, and the NHS spent approximately £1.7 billion on treating people with tobacco related illness.

Taxation on tobacco products provides substantial government revenue, and the industry is a huge powerful business providing jobs for many impoverished communities in the UK and overseas.

Tobacco is a sweet smelling product of the aromatic leaves of the Nicotiana family of plants but contains carcinogenic and highly addictive nicotine, tar, carbon monoxide and benzene and many more noxious substances.

The burning of tobacco produces two types of smoke. Mainstream smoke inhaled by smokers that is full of noxious gases and toxic chemicals. Side stream smoke, which occurs when a cigarette is left to burn, accounts for 85% of environmental tobacco smoke (ETS), and also contains high concentrations of toxins and nicotine making this passive smoke extremely harmful to other people in the vicinity.

There has been considerable debate over the centuries about the health benefits or otherwise of smoking, and it was only towards the end of the twentieth century that research illustrated the clear link between tobacco and ill health.

Smoking and health
Sir Richard Doll’s 1950 case control study demonstrated a strong relationship between smoking and lung cancer. Doll was actually surprised to find that cigarettes were the culprit and had suspected that the recent increase in lung cancer cases was more to do with the use of motor cars. Since the 1950s a huge body of evidence has developed linking cigarette smoking to a wide variety of cancers, heart disease and many other health problems.

A lifetime non-smoker is 60 per cent less likely than a current smoker to have coronary heart disease and smoking is the most important modifiable risk factor for coronary heart disease.

Cigarette smoking and tobacco chewing are known to play a causative role in the development of oral, oesophageal, stomach, bladder, kidney, pancreas, cervical and many other cancers. However, if smoking is stopped, even in middle age and for people who have smoked for many years, the risk of developing cancer decreases. In total, 30% of deaths attributed to cancer are related to smoking, and smoking is implicated in the vast majority of lung cancers. There is a strong, positive dose-response relationship between cigarette smoking and lung cancer. The incidence of lung cancer is higher in males than in females, but in the last decade, lung cancer rates have steadily fallen in males, but gradually risen in females, a change that reflects the smoking trends between the sexes.

A matched case control study in Liverpool found that people who smoked more than 19 cigarettes a day were three times more likely to develop TB than non-smokers.¹

Smoking during pregnancy leads to an increased risk of miscarriage, premature birth, low birth weight and sudden infant death syndrome (cot death). Children of parents who smoke have an increased risk of developing breathing difficulties, chest infections and ear problems.
Why do people smoke?
Tobacco is a drug and the inhalation of its smoke produces a pleasant sensation. Smoking is a popular recreational activity that often accompanies drinking alcohol and socialising and is used to relieve stress, especially by women. Some individuals perceive smoking to be attractive and glamorous. The strong desire for a particular body image and the prevention of weight gain are often cited as reasons why young girls take up smoking. As young children (under 16 years of age) cannot buy cigarettes, smoking is often pursued by adolescents to show off their newly acquired ‘near adult’ status.

Unfortunately, although most (70%) smokers report that they would like to, the rapidly addictive nature of nicotine makes it very difficult for people to stop smoking, even if they have only smoked for a short time.

Who is smoking?
In the UK, approximately 27% of adults and 13% of children smoke.

Gender
Globally and in the UK smoking is more common in men and in many cultures smoking is considered inappropriate for women. This used to be true in the UK but over the last fifty years gender differences have narrowed and in many parts of the UK smoking is now more common in young females than in young males. In the 1950's the male to female ratio for smokers was 6 to 1 by 1994 it had changed to 2 to 1. In 1974 in Merseyside the ratio was 3.6 to 1, but by 1986 it had gone down to 2 to 1 (cigar and pipe tobacco excluded). Figure 1 shows that in the UK in 1974 the difference in the prevalence of smoking between men and women was around 10% but from 1990 onwards it remained at 2% or less.

Ethnicity
In all ethnic groups, men smoke more than women. The most marked variation can be found amongst people of Bangladeshi origin (living in the UK) with 54% of men and only 1% of women smoking.

Tobacco chewing is popular among people from the Indian subcontinent and is most common amongst Bangladeshis, in particular the older generation. Among Bangladeshi people in the UK, 19% of men and 26% of women chew tobacco. Chewing tobacco is less popular with Indians (6% men and 2% women) and even less popular with Pakistanis (2% men and 2% women).

Knowledge about tobacco related disease is limited across all three South Asian groups.

Geographical area
The North West has the second highest rate of smokers in the country, and the highest rate of heavy smokers in England (i.e. those smoking more than 20 cigarettes per day). Smoking prevalence varies across the former Health Authority areas within the North West. Figure 2. Many areas are higher than the national average of 27%.

Young people
The WHO European Tobacco Control Policy Report says that in recent years there has been a significant overall increase in the number of young people smoking and that this is higher among girls than boys.
There is a lack of good prevalence data at the local level, however a detailed survey carried out in Wigan showed that the overall prevalence of smoking in the town was 29.5% (31.0% for men and 27.0% for women). Compared to the national figures (29.0% and 25.0% respectively). The proportion of the total population in Wigan who were classified as heavy smokers was 9.1% overall (10.8% for men and 7.5% for women compared to 11.5% nationally for men and 7.3% for women). There was great variation between wards from Swinley, a relatively affluent area with 4.4% to Norley one of the most deprived wards with 18.1% heavy smokers.

Another detailed survey showed that in Knowsley 29.2% of men and 30.6% of women smoked. Smoking prevalence for women in Knowsley was particularly high at 33.1% in the 18 – 39 year age group, 32.6% in the 40 – 46 year old age group and 22.2% in the 65 years and over age group. In Knowsley only 18.6% of people who described themselves as ‘managing comfortably’ smoked, compared to 71.7% of those that were finding it ‘very difficult’ to manage financially.

Prisons
Smoking in prisons is a particular problem. At any one time there are at least 65,000 people in prison in England and Wales and around 80% of prisoners smoke. The detrimental health effects of passive smoke are high even for the non-smokers. The Department of Health Tobacco Policy Unit has been working with the Prison Health Policy Unit on a pilot programme to test different models of smoking cessation services in prisons in Leicestershire. The evaluation report will be published in September 2002.

Smoking and health inequalities
Reducing smoking is central to the government strategy to reduce inequalities in health because it is the primary reason for the gap in healthy life expectancy between rich and poor. Figure 3 shows prevalence of smokers across the social classes.

The poor in the UK spend a disproportionately large share of their disposable income on tobacco: The poorest tenth spends about 15% of weekly income on cigarettes compared with the UK average of 2%. There is a highly significant strong positive correlation between average level of smoking in a Health Authority area and the underprivileged score for the same area (Pearson’s correlation coefficient = 0.67). Smoking accounts for over half of the difference in the risk of premature death for men between social classes. The NHS cancer plan specifically targets manual workers in an attempt to reduce this inequality. Reducing tobacco use in the poor must therefore take a central role in any strategy to reduce health inequalities.

Action to reduce the use of tobacco
The White Paper Smoking Kills (1998) outlines the Government strategy to reduce the morbidity and mortality caused by smoking.

The main components of this comprehensive strategy are:

- Strong mass media led information campaigns
- Ban on tobacco advertising and promotion
- NHS smoking cessation services
- Price policy and control of smuggling
- Smoke free public places, especially workplaces
- Community based initiatives
- Harm reduction strategies

Figure 4 shows how NHS investment has been directed towards treatment for tobacco dependence at the tip of the iceberg but that if we want to tackle the root of the problem, more investment is needed to produce the wider social changes that will reduce the risks of developing tobacco dependence.

Figure 3
Prevalence of smoking according to social class 1998

Figure 4
Investment in Tobacco Control and Health

Socio-economic groupings:
A = Professional
B = Middle Managers
C1 = All other non-manual workers
C2 = All skilled manual workers
D = All semiskilled and unskilled manual workers
E = On benefit / unemployed

Source: ONS General Household Survey (1998)
Strong mass media led information campaigns

Mass media campaigns, especially if targeted towards specific groups such as the poor, can be successful in reducing smoking prevalence. Ideally such campaigns will not only target individual behaviour, but also seek to change social norms. UK campaigns in the past were not targeted at specific groups, but were more successful with people from wealthy backgrounds, leading to differences in smoking prevalence between social classes.

Television based campaigns can be effective in reaching lower socio-economic groups, who view more hours of television.

Lessons learned from around the world suggest that successful campaigns:

- Are comprehensive from a media standpoint, featuring multiple messages.
- Are based on synergistic ways of working together with key stakeholders.
- Provide persuasive new health risk information to smokers and non-smokers.
- Provide resources and helpful information about how to quit.
- Are attractive and engaging, with features targeted towards different groups of smokers.
- De-normalise smoking and reinforce anti-smoking messages though multi-media.

Ban on tobacco advertising and promotion

The banning of all tobacco promotion has been a government priority, both by ministerial statement in 1997 and in the tobacco White Paper (1998). Despite this, there is evidence that in the UK cigarettes are still promoted, particularly to low income smokers. Loyalty schemes, such as on-pack coupons, which can be redeemed for ‘free gifts’, are designed to maintain the habit of low income smokers.

It has been estimated that around 3,000 lives could be saved each year if a complete ban on the advertising of tobacco products was implemented.

The proposed legislation will ban press, billboard and internet advertising of tobacco products and will prohibit the promotion of smoking through free distribution of tobacco products, coupons and mailshots and will place restrictions on the display and promotion of tobacco products in shops. The legislation will also bring an end to sponsorship by tobacco companies of sporting and other events.

NHS cessation services

NHS smoking cessation services are an extremely cost effective way of preserving life and reducing ill health. Government has spent over £75 million on encouraging and giving people the opportunity to stop or reduce their smoking over the last four years, including £23 million last year. There has been less emphasis and money spent on trying to encourage people not to start smoking.

To date most smoking cessation services have exceeded their targets. In England, over 127,000 smokers who had contacted services between April 2000 and March 2001 had set a quit date and nearly half of them (48%) were not smoking at four weeks.

In the North West over the same time period, over 31,000 smokers set a quit date and 13,000 (42%) had quit four weeks later.

Early evidence from the NHS smoking cessation services suggests that low-income smokers are using the service. While one in five adults qualifies for free prescriptions, almost two-thirds of those attending the cessation services qualify.

Lack of accurate baseline data makes accurate evaluation of these services difficult, but the results of a study that determines whether NHS smoking cessation services across the North West region are reducing inequalities in health will be available on the Smoke Free North West website http://www.nwtaskforces.org.uk/smoking.htm in July 2002.

The National Institute for Clinical Excellence (NICE) has advised that bupropion (Zyban) and Nicotine Replacement Therapy (NRT) are among the most clinically and cost effective methods that should be made available through the NHS to help smokers to quit. The availability of these items on prescription is an important part of the strategy to engage low income smokers and their general practitioners. The investment in drugs is substantial (up to £40 million). The effectiveness and the return on this expenditure is greatly improved when drugs are offered with motivational support from local services.
Price policy and control of smuggling

Tobacco duties are an important source of Government revenue, amounting to £7.6 billion in 2001-02. Since May 1997 the Government has increased the duty on cigarettes by 30%.

The policy of raising tobacco excise duty over the cost of inflation is acknowledged as one of the main drivers responsible for the reduction in smoking prevalence and tobacco consumption over the last 20 years. Unfortunately smoking is as popular as ever among the very worst off members of society, such as lone mothers living on state benefits. Low income smokers spend a disproportionately large part of their income on tobacco, which has an obvious impact on parents' ability to provide adequately for and maintain the health of their families, especially their children.

Around 30% of UK cigarettes and 70% of hand rolling tobacco is smuggled and access to smuggled cigarettes is widespread among low income groups. This undermines Government attempts to financially motivate people to stop smoking by increasing the tax on cigarettes. The effectiveness of increasing taxation on cigarettes to such high levels must be questioned.

Smoke free public places, especially workplaces

The right of an individual to smoke and the equal rights of non-smokers not to breathe unpolluted air creates conflict.

A smoke free public environment reduces opportunities to smoke and provides those who are trying to give up with less temptation. There is considerable support for smoke free public places, and 85% of both smoking and non-smoking adults support smoke free areas in restaurants and 51% believe that smoking should be restricted in pubs.

A public places charter has been agreed between Government and bodies representing the hospitality trade, although this has not been widely publicised. In the North West, Wirral Health Authority (2001) conducted a ‘rapid appraisal of regional smoking prevention and smoking activity’ on behalf of the Smoke Free North West Strategy Group. This study found that most people approved of action taken so far but many felt that after the intense focus on smoking cessation, the topic needed to be repackaged to re-energise people into tackling prevention as well. (The Rapid Appraisal should be available on the Smoke Free North West website http://www.nw-taskforces.org.uk/smoking.htm later this year).

Studies on the effects of smoking bans on the hospitality industry (mainly in the USA, Canada and Australia) indicate no negative effect on sales, the frequency of people eating out, or the number of restaurants in business. In California, where smoking is banned in virtually all public places, there have been positive returns for business. A study in Staffordshire also found a 7% increase in pub takings following the introduction of smoke free areas.

The 1998 Scientific Committee on Tobacco and Health said that ‘smoking should not be permitted in the workplace’, since increased exposure equals increased risk. Employees have recourse to civil law, and the general provisions of the Health and Safety at Work Act (1974) to enforce their right to a smoke free work place.

Pressures to increase the number of non-smoking policies in the workplace to-date have been largely driven by two forces. Increased awareness by non-smokers about the harmful effects of passive smoking and insurance companies seeking to reduce the number of fires caused by cigarettes.

Fires caused by cigarettes within the home, claim a life every three days. Those households with smokers are nearly one and half times more likely to experience a house fire than non-smoking households.

Community based initiatives

Individuals living in poor communities where smoking is the norm find it difficult to quit without the support of those around them. Smoking fosters a sense of belonging and a climate of participation in low income communities.

Community projects aim to reduce smoking by changing the social norms and attitudes within the community. Evaluation of one such project showed that 38% of smokers had stopped by the end of a six-week programme. A telephone survey carried out 12 months later showed a continued cessation rate of 21%, which compares very favourably with Nicotine Replacement Therapy. Unfortunately many community initiatives are often poorly funded and evaluated, so their success is not well known.

Harm reduction strategies

Even if the NHS Cancer Plan smoking targets were reached by 2010, there would still be over 5.5 million smokers in the UK. It is likely that smoking prevalence will not decrease uniformly and that pockets of higher prevalence will remain among the most disadvantaged. For these smokers, it might be important to consider less hazardous forms of tobacco / nicotine use.
Modifying tobacco products to make them marginally less harmful e.g. removing some carcinogens or additives is a possibility. The decision to develop slightly less harmful products would have to be taken with great care as they may reduce the incentive to give up altogether and could be marketed in a misleading manner by the tobacco industry.

The Scientific Committee on Tobacco and Health (SCOTH) is currently working on UK product regulation requiring the disclosure of all ingredients in cigarettes. The committee is also negotiating for a reduction in the number of permitted additives. A benchmarking study is underway to establish the relative harm of new products compared to existing brands. Ultimately, there is no safe limit for cigarette smoking - all cigarettes have some ill effects. The only way to eliminate risk is to stop completely.

Summary
Smoking is the single greatest cause of preventable illness and premature death in the UK. The costs to society are significant and include premature death, pain, suffering, lost productivity and health care costs. Tobacco smoking shows a strong association with social disadvantage. In order to reduce the prevalence of smoking particularly in these disadvantaged groups, action will be necessary from all key statutory, voluntary and commercial organisations, not just the NHS. There is a need for greater priority and investment in purposeful public policy to change attitudes and behaviour in social and community networks, to create supportive environments such as smoke free workplaces, pubs and shopping centres and to challenge the political and commercial market forces that profit from tobacco.

The investment will need to address the link between socio-economic position and smoking behaviour. The exclusion and powerlessness that comes with lack of money, educational attainment and influence are powerful factors in tobacco use and addiction.

To address the inequalities in health caused by smoking we need to use a range of strategies, monitor services appropriately and have better benchmark data such as the prevalence of smokers within Primary Care Trusts.

References

Web sites

http://www.manchesteronline.co.uk http://www.stoptb.org
http://www.smokefreegreatermanchester.co.uk http://www.tbalert.org
http://www.bbc.co.uk/worldservice/sci_tech/features/health/tobacco/india.htm

Please note that the health start website address has changed to http://www.healthstart.co.uk
"I feel we are on the starting blocks of a big race and there are so many opportunities for us to succeed."

In 1604 King James I increased import tax on tobacco by 400% to six shillings and ten pence per pound.

It was New Year's day 1990 at the top of Ingleborough mountain in the Yorkshire Dales when Brenda Fullard, now the North West's Tobacco Control Manager, had a last cigarette with a friend, as they toasted their determined resolution with a glass of champagne.

She has not touched a cigarette since and wishes she had managed to give up smoking much earlier in life (or preferably not started at all). "I had tried to give up before but had failed. There were not the aids to help you quit then that there are now," she notes. So Brenda relied on the support of her friend and by increasing the amount of exercise she did.

Eight years ago, with renewed lungs, Brenda took up running and has since completed the London marathon three times and the Manchester marathon once. "I certainly could not have done that if I had still been smoking" she says.

Her energetic zeal and positive outlook on life are now applied to the task of helping the North West to meet the evolving targets of the NHS Cancer plan and a forthcoming National Tobacco Control programme.

"Many people want to stop smoking but it is hard for them to do so if they are surrounded by others who continue to smoke. We have to find ways of helping different groups to stop smoking, or prevent them from starting in the first place, because smoking leads to so much illness."

How do we prevent young people from starting? How do we support people on low incomes to quit? Why is it more likely to start smoking? How do we reduce the availability of cheap tobacco?

"It has been my job to support high quality NHS smoking cessation services in the North West, but this is only one way of reducing the number of people who smoke. We have a new opportunity to work on different approaches with Government Office in the North West and with many organisations on a more local level."

"I feel we are on the starting blocks of a big race and there are so many opportunities for us to succeed. By the middle of this century, I am sure that smoking in public will seem a very strange and unusual thing to do and tobacco advertising will long be a thing of the past."

Brenda started her career as a nurse, midwife and health visitor in Burnley, East Lancashire, which led to developing her career in public health. "I have always believed that prevention is better than cure, which is why I passionately believe that smoking cessation could make such a tremendous impact on the improvement of health here in the North West."
Dear All,

A summary of the Cancer Plan projects for the various UK Regions and full details of the Liverpool Longitudinal Study can be obtained on the bulletin web site via the forum http://www.nwpho.org.uk/forum/display_forum.asp

The Editor

Smoke Free North West

An example of health promotion that targets smoking is North West Smoke Free Greater Manchester formally known as G-MAS. This group has produced 15,000 A4 and 5,000 A3 posters to promote the Roy Castle Good Air Award Scheme in each of the districts of Greater Manchester. For further details visit www.smokefreegreatermanchester.co.uk

Tackling Smoking in Young People

The European Smoking Prevention Framework Approach study was designed to reduce the uptake of regular smoking by children up to the age 15. A three year programme of interventions which targeted young people (age 12 and upwards) was conducted in secondary schools in the North West and West Midlands. Schools, parents and the wider community were involved. Preliminary findings suggest that the package of interventions has resulted in reduced regular smoking in girls and increased cessation among boys. Contact Dr. Elizabeth Nahit or Dr. Anne Fielder on 0161 275 5194.

St Helens and Knowsley

In November 2000, the Knowsley Children and Young Person’s Smoking Cessation and Prevention Initiative commenced. The two main aims of the initiative are to increase the awareness in young people of the risks that are associated with smoking and the need to make healthy lifestyle choices and, for there to be a reduction in the number of young people who take up smoking. Since its launch, the service has expanded and been able to adopt a flexible approach in order to educate young people about smoking related matters, to help them, and to enable them to make informed choices throughout their lives (Gaulton et al 2002). The effectiveness of this service will be evaluated by the NWPHO later on in the year.

Smoking Policies in the Hospitality Industry

Research conducted by the Institute for Health, Liverpool John Moores University to assess the number of public houses, bars, restaurants and cafes on Merseyside that have a current smoking policy was carried out against the backdrop of the Public Places Charter - a voluntary agreement between the Government and representatives of the hospitality industry. Knowledge of and compliance with the Charter was found to be very poor amongst the establishments that participated. Of the 81 businesses that did not have a policy, only 12 intended to introduce one in the next 12 months. There are many barriers to the uptake of a policy and whilst findings from other studies show that smoke-free areas are generally popular with customers and do not cause a downturn in trade, some establishments often face insurmountable problems with their introduction.

The Liverpool Longitudinal Study on Smoking (LLSS) Institute for Health (Liverpool John Moores University)

The Liverpool Longitudinal Study on Smoking is funded by the Roy Castle Lung Cancer Foundation and is part of their Kids Against Tobacco Smoke programme (KATS). The longitudinal study is designed to identify and explore children’s changing attitudes, beliefs, behaviour and intentions towards smoking as they age. It began in 1995 when researchers, using a multi-method approach, started tracking a birth cohort of over 250 children across 6 primary schools, following them through from their reception classes to year 6 when they leave to go on to secondary school. The seven year primary school phase of the project is now complete. The Roy Castle Lung Cancer Foundation is continuing to support the research and the secondary school phase, which will track the same children through adolescence, is now underway. What makes the Liverpool Longitudinal Study on Smoking especially significant is that it has allowed younger children, and now adolescents, themselves to directly contribute to the debate. Crucially the information from these groups about what the children think about smoking will provide a good evidence base for designing smoking prevention programmes. The longitudinal research is conducted by the Institute for Health at Liverpool John Moores University. Contact: Dr Susan Woods Email: s.e.woods@livjm.ac.uk Tel: 0151 231 4224. A full brief of the project is located on the bulletin forum http://www.nwpho.org.uk/forum/display_forum.asp

Smoking & Health Inequalities

A study has been carried out in the North West (NHS NW Regional Office and NW Public Health Observatory) to evaluate whether smoking cessation services in the region are reducing inequalities in health. This study will help to determine whether smoking cessation service can make a significant contribution to reducing inequalities in health. The results of this report will be available this August. E-mail H.Lowey@livjm.ac.uk