Gateshead NHS
Primary Care Trust

# Are Stop Smoking Services Reducing Health Inequalities in Gateshead – A Health Equity Audit

## 1 Executive Summary

Smoking makes a significant contribution to health inequalities – the gap in health outcomes between those at the top and bottom of the social scale. It is a major cause of ill health and premature mortality. The prevalence of smoking is higher among populations in disadvantaged areas and among those in manual occupations, where levels of mortality and morbidity are higher than those for the population as a whole. Encouraging people to give up smoking, particularly among these population groups, would do much to reduce health inequalities in England. In recognition of this "Reducing the number of people who smoke" is one of the key aims of the Government's White Paper *Choosing Health: Making Healthier Choices Easier*.

Health in Gateshead is poorer than health across England as a whole and Northumberland, Tyne and Wear has the highest prevalence of smoking among all 28 Strategic Health Authority areas. Thus there is a large population in Gateshead whose health would benefit from giving up smoking. Local evidence also shows that many people want to give up smoking but find it difficult to do so. Reducing the number of people who smoke in Gateshead would both improve health and narrow the gap in life expectancy between Gateshead and England as a whole.

The Gateshead and South Tyne Stop Smoking Service plays a key role in the strategy to reduce the numbers of people who smoke in Gateshead. The Service offers support to people trying to quit and, in 2003/04, helped 1,300 local people to give up smoking, as measured by success at four weeks. The quality of the service provided is reflected in the fact that Gateshead was achieving the highest proportion of clients giving up at four weeks within Northumberland, Tyne & Wear at the start of 2005/06. This health equity audit looks at the way the service the service is accessed in Gateshead. It identifies population groups where access rates are lower and who find it more difficult to give up. In this way delivery can be modified so that the service is accessed more equitably across all sections of the population and so that more people can be helped to successfully give up smoking.

Analysis of client records in 2003/04 shows that the Stop Smoking Service is successful in targeting populations in Gateshead from the most disadvantaged areas and the population of young adults, where rates of smoking prevalence are highest nationally. There is local evidence of higher prevalence among adults 35-44 years and access rates were lower among this group.

Males and members of black and minority ethnic groups are under-represented among service users. In six out of 22 electoral wards the rate of access of the Stop Smoking Service is significantly lower than the rate for Gateshead as whole.

The proportion of service users successfully quitting at four-weeks is lower among younger people, those people living in more disadvantaged areas and younger pregnant

women. The majority of people who set a quit date, but are not successful at the four week follow-up, do not turn up for the follow-up appointment.

The following recommendations are made:

- that the Stop Smoking Service continues to target young adults and disadvantaged areas where smoking prevalence is highest.
- that efforts are made to increase the number of males and people from black and minority ethnic groups accessing the service
- that the service reviews available evidence to find out if there are new approaches or additional support that could be offered to young adults, service users from disadvantaged areas and young pregnant women which might increase the percentage within these groups successfully quitting
- that provision is reviewed in the six electoral wards where access rates are lowest
- that an audit of service users who set a quit date but were lost to follow-up is carried out

**Andy Billett, Public Health Analyst**
**Dr Mark Lambert, Director of Public Health**

## 2 Introduction

### *2.1 Aims*

Reducing the number of people who smoke in Gateshead would do much to improve the population's health and reduce the gap in health outcomes and life expectancy that currently exists between Gateshead and England as a whole. Both levels of premature mortality and the prevalence of smoking are higher among people living in disadvantaged areas and working in manual occupations[1,2]. Gateshead has a large population which falls into these groups. In recognition of the link between smoking and health inequalities, "Reducing the number of people who smoke" is one of the key aims of the Government's White Paper *Choosing Health: Making Healthier Choices Easier*.

The Gateshead and South Tyne Stop Smoking Service plays a key role in the strategy to reduce the numbers of people who smoke in Gateshead. Evidence shows that many people want to give up smoking but find it difficult to do so[3]. The Service offers support to people trying to quit and, in 2003/04, helped 1,300 local people to give up smoking, as measured by success at four weeks.

This health equity audit is intended to inform the commissioning and delivery of the Stop Smoking Service. It looks at the way the Stop Smoking Service is accessed in Gateshead. In particular, it identifies population groups where access rates are lower and who find it more difficult to give up. The dimensions against which access of the service and percentage successfully quitting are measured are gender, age, area of residence, socioeconomic group, pregnant status and ethnic group. By identifying gaps in service provision, delivery can be modified so that the service is accessed more equitably across all sections of the population and so that more people can be helped to successfully give up smoking.

### *2.2 Background*

Health in Gateshead is poorer than health cross England as a whole. The all causes standardised mortality ratio (SMR) in Gateshead is 116[4] i.e. the mortality rate in Gateshead is 16% higher than a comparable rate for England as a whole. The SMR for lung cancer in Gateshead is higher at 153[5]. Smoking is the main cause of lung cancer, being responsible for nine out of ten cases[6]. It also contributes to other illnesses such as heart and respiratory disease. In addition the prevalence of smoking among all adults across the Northumberland, Tyne and Wear Strategic Health Authority (SHA) area between 2000 and 2002, at 32%, was the highest among all 28 SHA areas according to

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[1] Acheson D, "Independent Enquiry into Health Inequalities", 1998, The Stationery Office

[2] Rickards L, Fox K, Roberts C, Fletcher L & Goddard E, "Living in Britain: Results from the 2002 General Household Survey", 2004, The Stationery Office

[3] The 2004 Gateshead Lifestyle Survey (Gateshead PCT, 2004) reported that 40% of respondents who smoked were thinking of or trying to give up

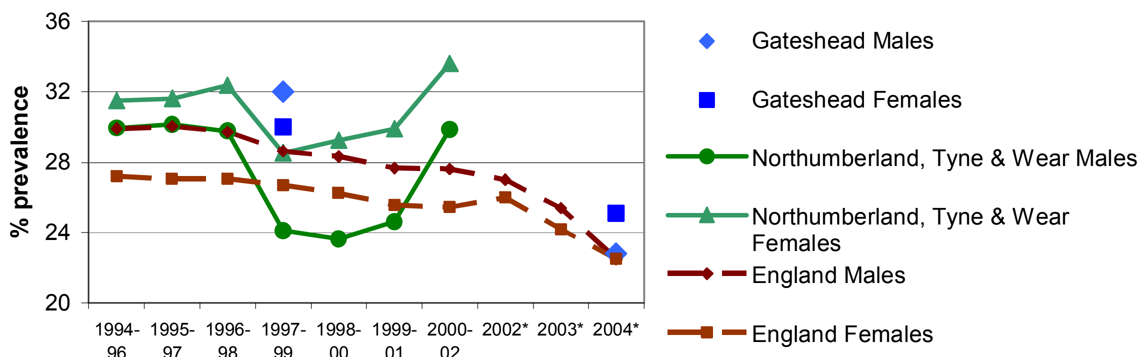
[4] National Centre for Health Outcomes Development, 2002-2004 indirectly standardised mortality ratio due to all causes for Gateshead among people of all ages, "Clinical and Health Outcomes Knowledge Base", Department of Health

[5] National Centre for Health Outcomes Development, 2002-2004 indirectly standardised mortality ratio due to lung cancer for Gateshead among people of all ages, "Clinical and Health Outcomes Knowledge Base", Department of Health

[6] Twigg L, Moon G and Walker S, "The Smoking Epidemic in England", 2004, Health Development Agency

the Health Survey for England[7]. Fig 1 below shows trends in smoking prevalence among males and females for Gateshead, the Northumberland, Tyne & Wear SHA area and for England between 1994 and 2004.

**Fig 1: Prevalence of smoking measured by the Gateshead Lifestyle Survey (1998 and 2004) and Health Survey for England (1994 to 2004)**




*All figures are three year pooled averages except data for 2002, 2003 and 2004 which are single year figures.
*Data sources: Gateshead - 1998 and 2004 Gateshead Lifestyle Surveys, Gateshead PCT, Northumberland, Tyne & Wear and England – Health Survey for England, Department of Health*

What is noticeable is the decline in prevalence nationally in 2003 and 2004 which was reflected in local findings from the 2004 Gateshead Lifestyle Survey. Both locally and nationally, the decline is slower among females than males. Evidence from the 2004 Gateshead survey also showed that 40% of smokers were considering or actively trying to give up.

Because smoking is a major cause of ill health, and because many people wish to give up, Gateshead PCT funds the delivery of a Stop Smoking Service. This service helps people to give up smoking by providing both personal support and, where appropriate, a prescription for buproprion (Zyban) or a Nicotine Replacement Therapy. This approach recognises that many people wish to stop smoking but find it hard to do so. A commitment to continue developing and expanding the Stop Smoking Service is stated in the Health Chapter of the Gateshead Community Strategy[8]. This also ties in with national pledges to provide these services included in the NHS Plan[9] and the NHS Cancer Plan[10]. Most recently, "Reducing the Numbers of People Who Smoke" is one of eight priorities set out in the Government's White Paper, "Choosing Health"[11] This recognises the key role of Stop Smoking Services in improving health,.

In the financial year 2003/04 4934 clients were seen by Gateshead and South Tyneside Stop Smoking Service (referred to as 'the service') and set quit dates. 4,345 or 88% of these clients had full postcodes recorded and, of these, 2,529 were resident within Gateshead and 1,731 were resident in South Tyne. This paper looks at whether the rate of access of the service delivered within Gateshead was equally distributed across the population by gender, age, socioeconomic group, electoral ward and ethnic category.

[7] Scholes S, Prescott A and Bajekal M, "Health Survey for England: Health & Lifestyle Indicators for Strategic Health Authorities 2002-04", 2004, Department of Health
[8] Gateshead Strategic Partnership, "Gateshead Community Strategy 2004-2007", 2004, Gateshead Strategic Partnership
[9] Department of Health, "NHS Plan – a plan for investment, a plan for reform", 2000, Department of Health
[10] Department of Health, "NHS Cancer Plan – a plan for investment, a plan for reform", 2000, Department of Health
[11] "Delivering Choosing Health: making healthier choices easier", 2005, Department of Health

Among those people that accessed the service it also considers whether different population groups were equally successful at quitting.

## 3 Methods

Access to any clinical service will be a function of the way in which that service is delivered, the health need in the population and the willingness of the population to take it up. Specific reasons for poor access are often difficult to determine. However, if it can be demonstrated that a particular population group e.g. people in a certain age band, gender, ethnic group or geographical area, are accessing a service at a lower rate than other groups this is a good starting point for further investigation among members of that population group as to the reasons for the poor access.

The principal method used in this report to demonstrate equity of access to the Stop Smoking Service is the calculation of rate of access by population group expressed as a percentage of the smoking population in that group. The number of people using the service by a population group over a particular period can be determined from client records held by the service. The number of smokers in that population group can be calculated from the total population in the group, recorded most recently at the 2001 Census, and the prevalence of smoking in that group. Rates of prevalence of smoking will vary across different population groups. As an example, results from the 2004 Gateshead Lifestyle Survey (GLS) showed that smoking was most prevalent amongst 18-24 year olds with 37% of respondents in this age band smoking. Estimates of smoking prevalence by population group are available from a number of sources including the Gateshead Lifestyle Survey, the Health Survey for England and the Office for National Statistics. Population is multiplied by prevalence to give an estimate of the number of smokers in each population group.

If rates of access are higher in population groups where prevalence of smoking is higher, the service is successfully targeting the “in need” population. If uptake rates are higher where prevalence is lower, this is an illustration of the inverse care law first recognised by Hart[12] whereby communities in most need of care are least likely to receive it.

## 4 Results

### *4.1 Access by gender*

“Health need”, as measured by smoking prevalence, is higher among females than males but the difference is not statistically significant at the 95% level of confidence. Rate of access is expressed as a percentage of the smoking population and equity of service provision is demonstrated by equal access rates amongst males and females. A greater proportion of female smokers access the service than male smokers (Fig 2) although the difference is not statistically significant at the 95% level of confidence if uncertainty in the estimates of smoking prevalence is taken into account. The percentage of people quitting at four weeks was similar amongst males and females, at 51% and 52% respectively.

[12] Hart, J.T., “The inverse care law”, Lancet, 1971; 1(7696), pp405-412

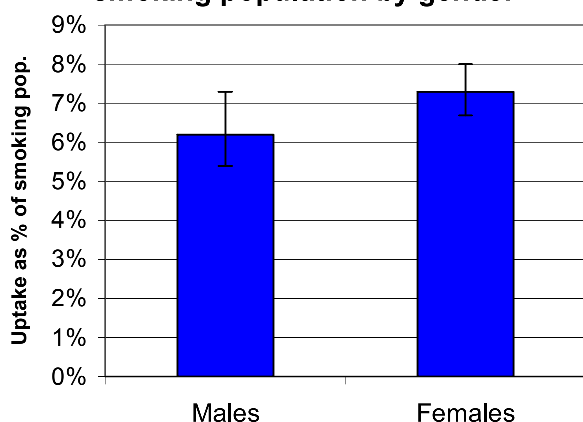



**Table 1: Rate of access of Stop Smoking Services as a percentage of the smoking population by gender**

| | Male | Female | Totals |
|---|---|---|---|
| Population mid-year 2003 ages 16 and over* | 74200 | 80800 | 155000 |
| Smoking prevalence** | 22.8% | 25.1% | |
| Estimated smoking population | 16918 | 20281 | 37198 |
| Service uptake | 1052 | 1477 | 2529 |
| **Rate of access** | **6.2%** | **7.3%** | **6.8%** |
| Successful quitters at 4 weeks | 540 | 765 | 1305 |
| **Percentage successfully quitting at four weeks** | **51.3%** | **51.8%** | **51.6%** |

Data sources: *ONS, **2004 Gateshead Health & Lifestyle Survey

*Error bars indicate 95% confidence limits due to uncertainty in the estimates of smoking prevalence by gender*

## 4.2 Access by age band

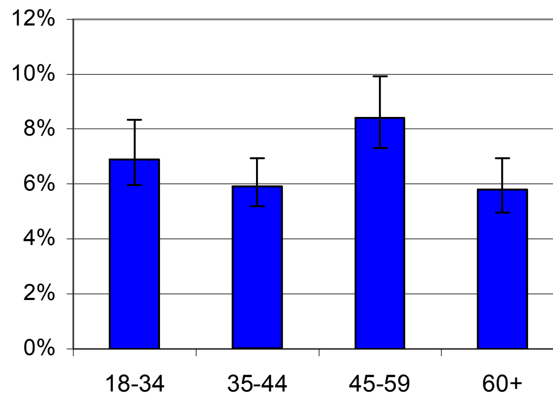
Estimates of smoking prevalence by age band across Gateshead as a whole are available from the 2004 Gateshead Lifestyle Survey (GLS). If these prevalence figures are applied to the mid-year 2004 Gateshead population within each age band, an estimate of the number of smokers can be made (Table 2). Rate of access within each age band is calculated as the number of service users expressed as a percentage of the smoking population (Fig 3).

**Table 2: Estimates of Gateshead smoking population, Stop Smoking Service uptake and percentage successfully quitting at four weeks by age band**

| Age band (years) | 18-34 | 35-44 | 45-59 | 60+ | Total |
|---|---|---|---|---|---|
| 2004 mid-year population estimate* | 39851 | 29509 | 37642 | 43625 | 150627 |
| Smoking prevalence** | 24.5% | 33.0% | 24.5% | 18.8% | 24.4% |
| Sample size from which prevalence estimated | 425 | 376 | 518 | 602 | 1921 |
| Estimated smoking population | 9752 | 9732 | 9229 | 8189 | 36901 |
| No. accessing Stop Smoking Service | 677 | 578 | 776 | 474 | 2505 |
| Rate of access as % of smoking population | 6.9% | 5.9% | 8.4% | 5.8% | 6.8% |
| Percentage quitting at four weeks | 43.3% | 49.0% | 53.7% | 64.8% | 51.6% |

*Data sources: *ONS, **2004 Gateshead Lifestyle Survey*

**Fig 3: Rate of access of Stop Smoking Service as a percentage of the smoking population by age band**




*Error bars represent 95% confidence limits*
*Data sources: Service users – Gateshead and South Tyneside Stop Smoking Service, population – ONS 2003 mid-year population estimates, prevalence – 2004 Gateshead Lifestyle Survey, Gateshead PCT.*

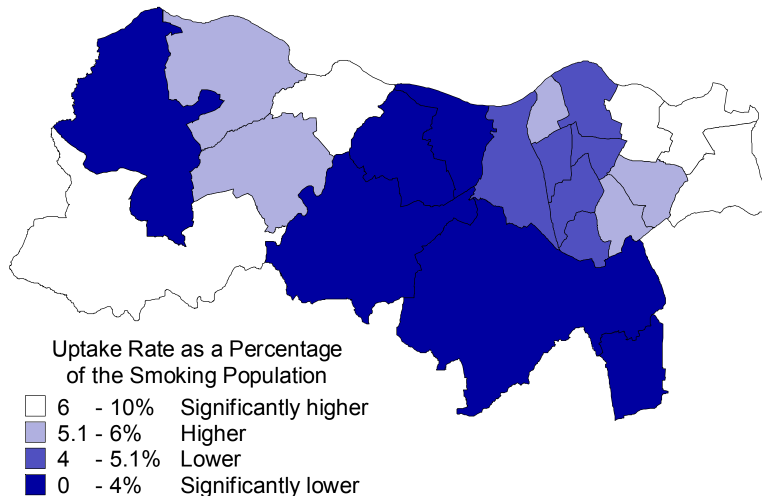
Uptake is lower in the 35-44 years and 60 years and over age bands, and higher in the 18-34 years and 45-54 years age bands. 95% confidence limits are shown reflecting uncertainty in the estimates of smoking prevalence. There is a clear relationship between age and percentage successfully quitting, with older people finding it easier to give up (Table 2). This suggests that the Stop Smoking Service should target people in the 35-44 years age band and consider what additional support could be given to younger people accessing the service to help them succeed in quitting.

### *4.3 Access by electoral ward*

The rate of access within an electoral ward is given by expressing the number of service users resident in the ward as a percentage of the estimated smoking population in that ward. Estimates of smoking prevalence by electoral ward are available from the Office for National Statistics. These are calculated by establishing a numerical relationship between smoking prevalence and environmental variables such as employment rates and the age/sex population mix for larger geographical areas. Robust survey data for these areas is available from the Health Survey for England. This relationship is then applied to known values of the variables at electoral ward level to generate "synthetic" estimates of smoking prevalence.

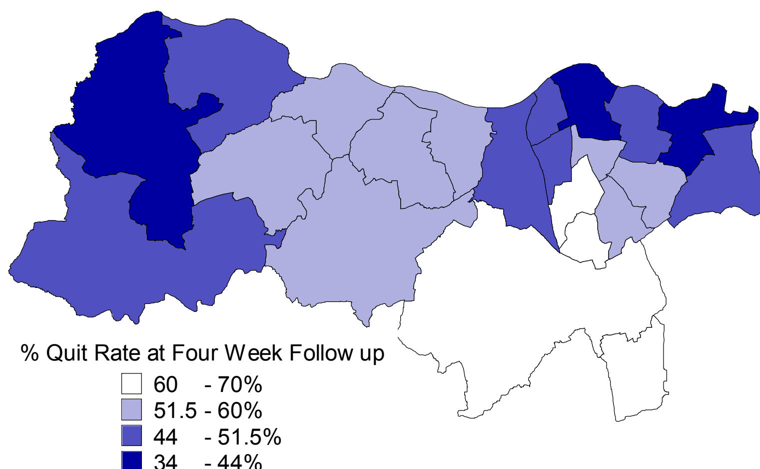
There are six electoral wards where the access rate is significantly lower than the rate for Gateshead as a whole at the 95% level of confidence. The majority of these wards lie in a band of central Gateshead running from Dunston in the North to Lamesley and Birtley in the South (Fig 4). Access rates in the South of Gateshead may be lower due to smokers accessing Stop Smoking Services delivered by neighbouring PCTs. Annex A shows the rate of access for each electoral ward in Gateshead, with the wards ranked in decreasing order of smoking prevalence.

**Fig 4: Rate of access of Stop Smoking Services as a percentage of the smoking population by electoral ward**



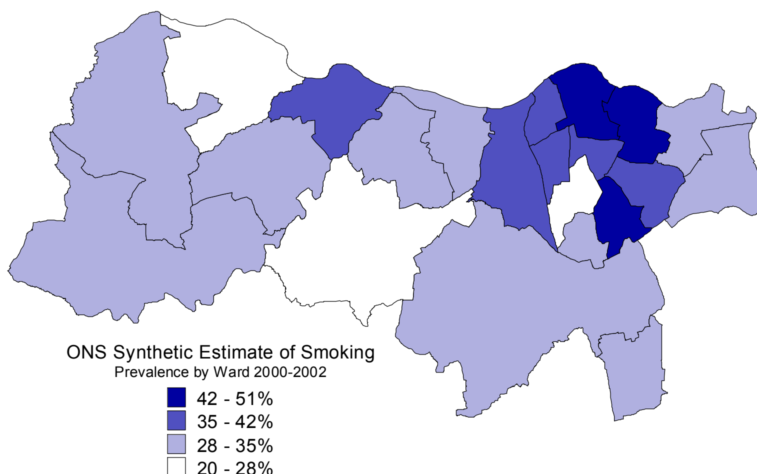

*Data sources: Service users – Gateshead & South Tyneside Stop Smoking Service, population – ONS mid-year population estimates by electoral ward, prevalence – ONS synthetic estimates of smoking prevalence by electoral ward*

**Fig 5: Percentage of people successfully quitting at the four week follow up**




*Data source: Service users – Gateshead & South Tyneside Stop Smoking Service*

**Fig 6: Estimated smoking prevalence by electoral ward**

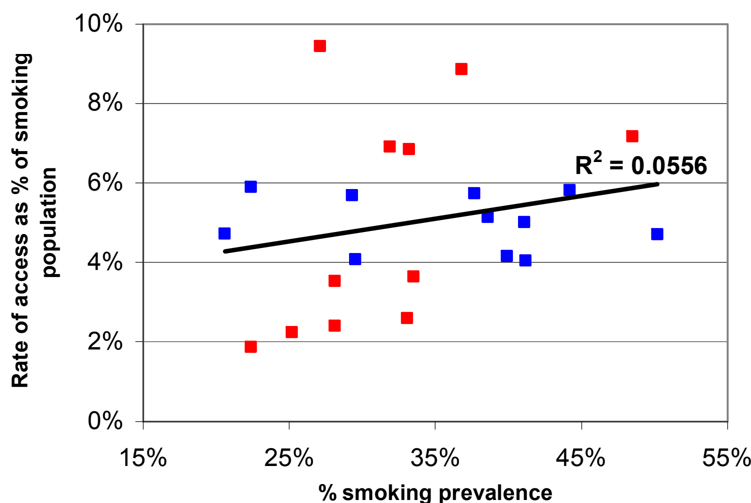



*Data source: Prevalence – ONS synthetic estimates of smoking prevalence by electoral ward*

The percentage successfully quitting at four weeks, at ward level, (Fig 5) varies from 36% to 69%, but there are no wards where the quit rate is significantly different from the rate for Gateshead as a whole at the 95% level of confidence. Regression analysis shows that there is an inverse relationship between smoking prevalence and quit success rate i.e. where smoking prevalence is lower, quit rates are higher, but this is not significant at the 95% level of confidence (Pearson's r = 0.349, p>0.1, 20 d.f.).

If access of the service is equitable, the rate of access, when expressed as a percentage of the smoking population, should be equal regardless of smoking prevalence. A positive correlation between uptake and prevalence would demonstrate targeting of areas where need is greatest. A negative correlation would demonstrate the inverse care law. A scatter plot of smoking prevalence against uptake of the service as a percentage of the smoking population (Fig 7) shows that there is no significant relationship between smoking prevalence and service uptake at the 95% level of confidence (Pearson's r = 0.236, p>0.1, 20 d.f.). An equitable relationship between prevalence and uptake would be demonstrated by a horizontal line i.e. rate of access as a percentage of the smoking population is the same regardless of prevalence. There are variations in rate of access of the service by ward, although these are not related to smoking prevalence.

**Fig 7: Smoking prevalence against rate of access as a percentage of the estimated smoking population for all Gateshead electoral wards**




*Data sources:*

*Smoking prevalence – Office for National Statistics synthetic estimates*

*Numbers accessing the service by ward – Gateshead & South Tyneside Stop Smoking Service*

*Data points in red indicate where ward rate of access is significantly higher or lower than the Gateshead rate at the 95% level of confidence*

## 4.4 Access by socioeconomic group

Service users can be assigned to a deprivation quintile (fifth) by linking postcode of residence to lower tier super output areas (LSOA), a set of geographical areas defined within the 2001 Census. Each LSOA can be assigned to a quintile of deprivation from its rank among all LSOAs across England according to the 2004 Index of Multiple Deprivation. Estimates of the smoking population by deprivation quintile can be obtained by estimating the smoking population within each LSOA and aggregating by deprivation quintile in the same way. A full explanation of how estimates of the smoking population by LSOA are determined is included in Annex B.

The rate of access of the Stop Smoking Service is highest among the most disadvantaged fifth of the population (Fig 8). The service is successfully targeting this population group, where evidence suggests that smoking prevalence is higher[13]. However, the percentage successfully quitting at four weeks by deprivation quintile (Fig 9) shows lower success rates among people living in more disadvantaged areas. This warrants further investigation. Increasing the success rate among this group, the largest group of service users, would cause a large increase in the total number of people giving up.

**Fig 8: Rate of access of the Stop Smoking Service in Gateshead by Deprivation Quintile as a percentage of the smoking population**

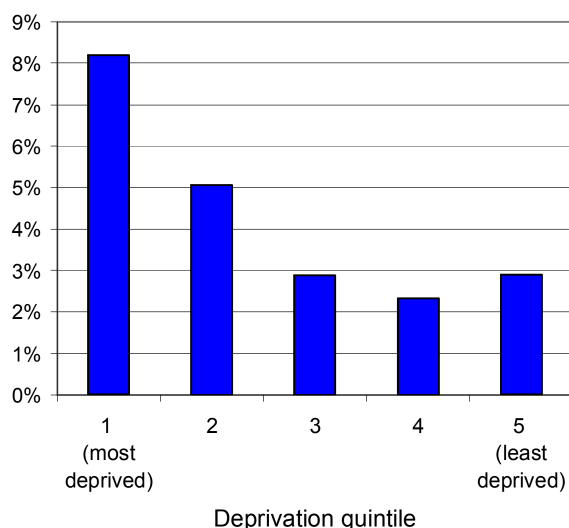
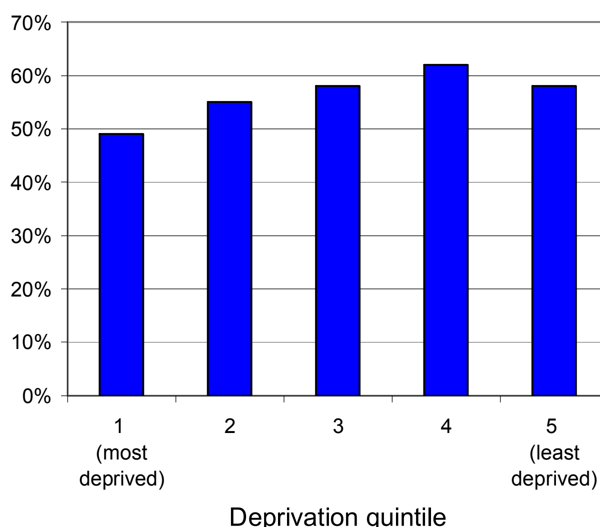



**Fig 9: Percentage successfully quitting at four weeks in Gateshead by Deprivation Quintile**




*Data sources: Service users – Gateshead and South Tyneside Stop Smoking Service, population – 2001 Census population by Lower Tier Super Output Area and NS-SeC group aggregated to deprivation quintile, prevalence by NS-SeC group for the NE – Health Survey for England data 2003-2004.*

[13] Secondary analysis of data from the Health Survey for England showing prevalence by National Statistics Socio-economic Classification (NS-SeC) for the NE, translated to prevalence within deprivation quintile using population by NS-SeC group within each Lower tier Super Output Area from the 2001 Census.

### 4.5 Access among pregnant women

45 pregnant women accessed Stop Smoking Services in Gateshead in 2003/04. Although there are no exact population figures as some of this population may have given birth in other local hospitals or at home, there were 1667 maternities at Queen Elizabeth Hospital maternity unit in Gateshead in 2003/04 of which 454 smoked (smoking prevalence 27%), and so the 45 women accessing services represents an access rate of 9.9%. This compares favourably against the overall access rate of 5.5% of smokers in the population of Gateshead as a whole.

**Table 3: Proportion of pregnant women successfully quitting at the four-week follow-up in Gateshead by age band**

| Age band (years) | 18-34 | 35-44 | Total |
|---|---|---|---|
| Number of pregnant women setting quit date | 33 | 12 | 45 |
| Number successful at 4 weeks | 16 | 7 | 23 |
| Percentage successfully quitting at four weeks | 48% | 58% | 51% |

*Data source: Gateshead and South Tyneside Stop Smoking Service*

The percentage successfully quitting at the four week follow-up was lower among younger pregnant women. However, the overall percentage successfully quitting at four weeks among pregnant women was similar to that among the population as a whole. Given the health benefits to the infant if mothers are successful in stopping smoking during pregnancy, additional effort may be justified in trying to increase this success rate. The Stop Smoking Service currently employs a Specialist Smoking Cessation Adviser with responsibility for pregnant women in Gateshead who request support. The Stop Smoking Service should consider what additional support can be given to younger pregnant women.

### 4.6 Access by ethnic category

3,100 people or 1.6% of the population of Gateshead belong to black or minority ethnic origin (BME) groups according to 2001 Census data. The quality of the ethnic category data was good with 97% of all clients resident in Gateshead being classified. However, only 0.5% of service users were from BME groups. These population groups are therefore under-represented amongst Stop Smoking Service users. As the numbers of clients from BME groups is very small it is not possible to draw any statistically significant conclusions from the figures. Nonetheless, the service should make efforts to increase the number of clients from black or minority ethnic groups.

### 4.7 Service users lost to follow-up at four weeks

The analysis above makes no distinction between those service users who attended the four-week follow-up but were unsuccessful in their attempts to give up and those who did not attend the four-week follow up. There may be an assumption that those who do not return for the follow-up session at four weeks, do not turn up because they have been unsuccessful in giving up. However, it would be worthwhile contacting a sample of those lost to follow-up to determine the reasons why they did not come back. 85% of those unsuccessful at the four week follow-up did not attend the follow-up appointment and there may be reasons apart from being unsuccessful in giving up which contribute to this decision e.g. location of the service, time of appointment or quality of the service offered. It is recommended that an audit of service users lost to follow-up is undertaken.

## 5 Effect of Stop Smoking Service on total number of smokers in Gateshead

It is worthwhile considering what effect the Stop Smoking Service in Gateshead is having on the overall prevalence of smoking figure. The 2004 Gateshead Lifestyle Survey reported prevalence among people of all ages of 24.4%. Based on the 2003 mid-year population estimate this suggests that there are 36,600 adult smokers in Gateshead ages 18 years and over.

Across the year 2003/04, 1,305 people accessing the Stop Smoking Service successfully quit at the four week follow-up. This represents a reduction in prevalence of 0.9% per annum. Although this is a small reduction, the work of the Service also contributes to reducing health inequalities by targeting disadvantaged areas where prevalence of smoking is higher. The Stop Smoking Service is securing Gateshead's contribution to the national target of reducing smoking prevalence among manual groups from 32% in 1998 to 26% by 2010[14]. The work carried out by the Service must also be seen as one of several different approaches to reducing smoking prevalence being pursued by public agencies in Gateshead, including media campaigning through Fresh NE, strengthening of Smoke Free Workplace policies and enforcing tobacco control legislation.

## 6 Conclusions

One of the key objectives for Stop Smoking Services is to target population groups where smoking prevalence is highest. Two important sectors are populations from lower socioeconomic groups and young adults ages 18 to 35 years where national and local evidence shows that the prevalence of smoking is highest. The Gateshead and South Tyne Stop Smoking Service have successfully targeted populations resident in Gateshead within the most disadvantaged fifth of all areas across England. The rate of access among smokers in the 18-34 years age band is also higher than the rate of access in the smoking population as a whole. However, smokers in the 35-44 years age band are under-represented among service users. Across all age bands males are also under-represented in the profile of service users, as are members of BME population groups. The rate of access in six electoral wards is significantly lower than the rate for Gateshead as a whole and these are mostly in a band stretching from Dunston in the North to Lamesley and Birtley in the South. Access rates in the South of Gateshead may be affected by smokers accessing Stop Smoking Services delivered by neighbouring PCTs.

The proportion of people successfully quitting at four-weeks is lower among younger age bands, among those people living in more disadvantaged areas and among younger pregnant women. In addition, the majority of people who set a quit date, but are not successful at the four week follow-up, do not turn up for the follow-up appointment.

## 7 Recommendations

The following recommendations are made:

- that the Stop Smoking Service continues to target young adults and disadvantaged areas where smoking prevalence is highest.
- that efforts are made to increase the number of males and people from black and minority ethnic groups accessing the service

[14] Tackling Health Inequalities: A Programme for Action, p56, 2003, Department of Health

- that the service reviews available evidence to find out if there are new approaches or additional support that could be offered to young adults, service users from disadvantaged areas and young pregnant women which might increase the percentage within these groups successfully quitting
- that provision is reviewed in the six electoral wards where access rates are lowest
- that an audit of service users who set a quit date but were lost to follow-up is carried out

## 8 Further work

It is recommended that this equity audit is carried out again based on data for the financial year 2006/07, to assess whether any of the gaps in service provision identified in this report have been addressed. It is important that health equity audit should be undertaken every one or two years and information systems should be developed which allow the extraction of data at the required level of detail with the minimum of administrative time and effort.

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**Public Health, Gateshead PCT, January 2006**

**Acknowledgements**
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[15] Natarajan M, Walrond S, Chappell D, “Are NHS Stop Smoking Services Reducing Health Inequalities in the NE of England?”, 2005, North East Public Health Observatory

## Annex A

**Rate of access of the Stop Smoking Service as a percentage of the smoking population by electoral ward**

The table below shows rate of access of the service as a percentage of the smoking population for each electoral ward in Gateshead, with the wards ranked in decreasing order of smoking prevalence. Thus wards where "health need" is greatest are at the top of the table. The ward access rate is marked if it is significantly higher or lower than the access rate for Gateshead as a whole at the 95% level of confidence.

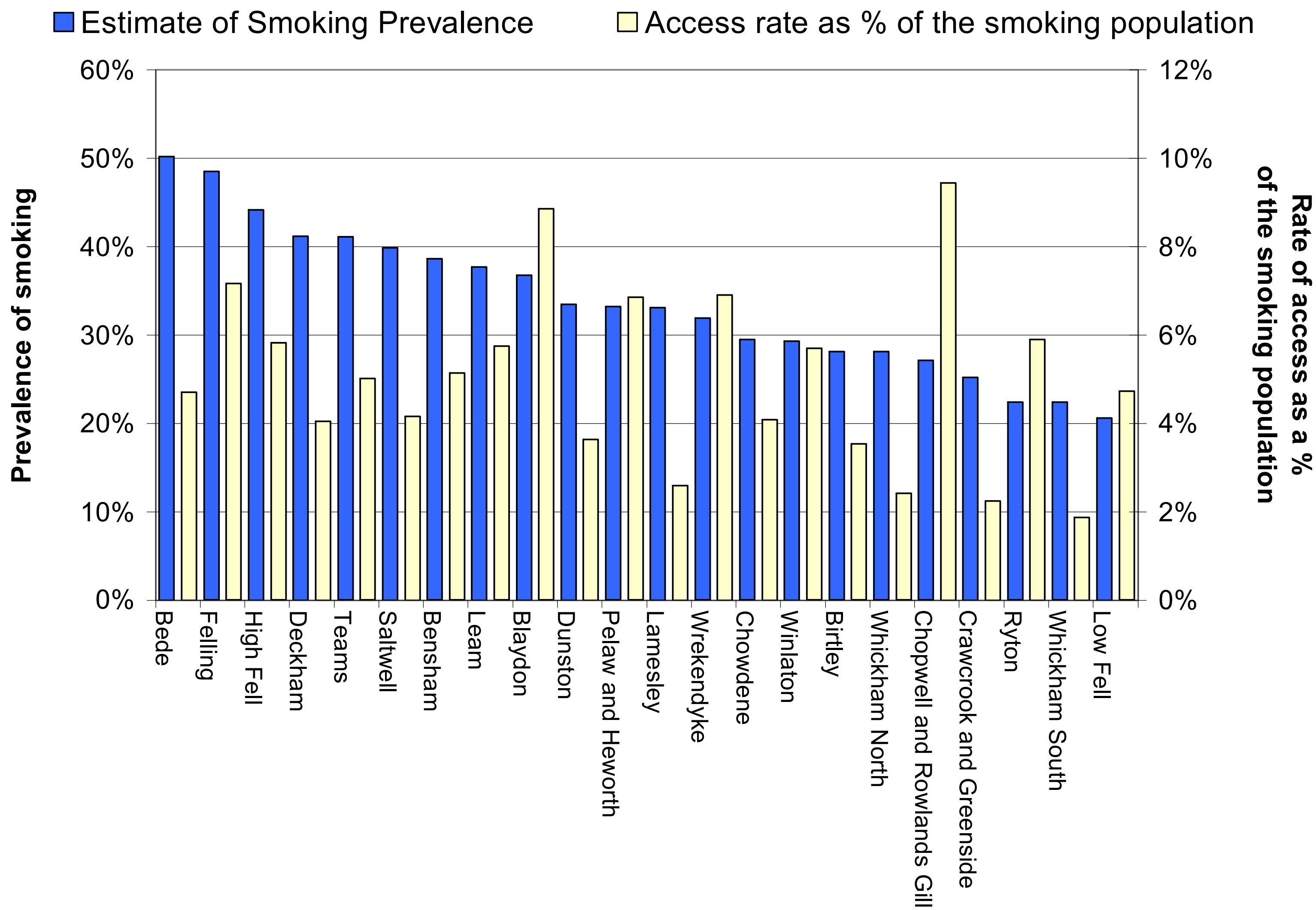
| Ward name* | Population mid-year 2003 ages 16+** | Estimate of Smoking Prevalence*** | Estimate of smoking population | Number setting quit date 2003/04 | Uptake rate as % of the smoking population | H/L **** | % successful at four weeks |
|---|---|---|---|---|---|---|---|
| Bede | 5585 | 50.2% | 2804 | 132 | 4.7% | | 39.4% |
| Felling | 5696 | 48.5% | 2763 | 198 | 7.2% | H | 47.5% |
| High Fell | 6219 | 44.2% | 2749 | 160 | 5.8% | | 52.5% |
| Deckham | 6048 | 41.2% | 2492 | 101 | 4.1% | | 56.4% |
| Teams | 7286 | 41.1% | 2995 | 150 | 5.0% | | 51.3% |
| Saltwell | 6202 | 39.9% | 2475 | 103 | 4.2% | | 49.5% |
| Bensham | 5344 | 38.6% | 2063 | 106 | 5.1% | | 47.2% |
| Leam | 7528 | 37.7% | 2838 | 163 | 5.7% | | 52.8% |
| Blaydon | 6506 | 36.8% | 2394 | 212 | 8.9% | H | 57.5% |
| Dunston | 7539 | 33.5% | 2526 | 92 | 3.6% | L | 54.3% |
| Pelaw and Heworth | 6418 | 33.2% | 2131 | 146 | 6.9% | H | 43.8% |
| Lamesley | 6281 | 33.1% | 2079 | 54 | 2.6% | L | 63.0% |
| Wrekendyke | 7938 | 31.9% | 2532 | 175 | 6.9% | H | 50.3% |
| Chowdene | 6719 | 29.5% | 1982 | 81 | 4.1% | | 60.5% |
| Winlaton | 6289 | 29.3% | 1843 | 105 | 5.7% | | 52.4% |
| Birtley | 6348 | 28.1% | 1784 | 63 | 3.5% | L | 65.1% |
| Whickham North | 7965 | 28.1% | 2238 | 54 | 2.4% | L | 55.6% |
| Chopwell and Rowlands Gill | 7271 | 27.1% | 1970 | 186 | 9.4% | H | 45.7% |
| Crawcrook and Greenside | 7417 | 25.2% | 1869 | 42 | 2.2% | L | 35.7% |
| Ryton | 7265 | 22.4% | 1627 | 96 | 5.9% | | 51.0% |
| Whickham South | 8355 | 22.4% | 1872 | 35 | 1.9% | L | 57.1% |
| Low Fell | 7703 | 20.6% | 1587 | 75 | 4.7% | | 69.3% |
| **Gateshead** | **149922** | **33.1%** | **49624** | **2529** | **5.1%** | | **51.6%** |

* pre June 2004 electoral wards

** source: ONS experimental population estimates

*** source: ONS synthetic estimates of smoking prevalence by electoral ward 2000-2002

**** significantly higher/lower at 95% level of confidence


Smoking prevalence and rate of access of Stop Smoking Services by Gateshead electoral ward
Estimate of Smoking Prevalence
Access rate as % of the smoking population
Prevalence of smoking
Rate of access as a % of the smoking population
60%
50%
40%
30%
20%
10%
0%
12%
10%
8%
6%
4%
2%
0%
Bede
Felling
High Fell
Deckham
Teams
Saltwell
Bensham
Leam
Blaydon
Dunston
Pelaw and Heworth
Lamesley
Wrekendyke
Chowdene
Winlaton
Birtley
Whickham North
Chopwell and Rowlands Gill
Crawcrook and Greenside
Ryton
Whickham South
Low Fell

## Annex B

### Estimating service use and smoking population by deprivation quintile

The numbers of service users within each quintile (fifth) of deprivation was calculated by assigning each user to a lower tier super output area (LSOA) from postcode of residence and summing to determine the number in each LSOA. Each LSOA was then assigned to a quintile of deprivation from its rank among all LSOAs across England according to the 2004 Index of Multiple Deprivation. Quintile 1 is the most socioeconomically disadvantaged fifth of the population and quintile 5 the least disadvantaged fifth. The smoking population within each quintile was estimated by applying the prevalence of smoking within each of five National Statistics Socioeconomic Classification (NS-SeC) groups in the NE (source: Health Survey for England 2003-2004) to LSOA populations by NS-SeC group taken from the 2001 Census and scaling to the ONS mid-year 2003 population estimate for Gateshead. Summing over NS-SeC group gives an estimate of smoking population for each LSOA which is then converted into smoking population by deprivation quintile by assigning each LSOA to a deprivation quintile as described previously. These calculations give the following figures.

**Uptake of Stop Smoking Services by socioeconomic group**

| Deprivation quintile | 1 (most deprived) | 2 | 3 | 4 | 5 (least deprived) | Total |
|---|---|---|---|---|---|---|
| Estimate of smoking population | 19851 | 10884 | 8593 | 3644 | 656 | 43627 |
| Clients setting a quit date | 1626 | 551 | 248 | 85 | 19 | 2529 |
| Percentage rate of access | 8.2% | 5.1% | 2.9% | 2.3% | 2.9% | 5.8% |
| Successfully quit at 4-week follow-up | 792 | 305 | 144 | 53 | 11 | 1305 |
| % successfully quitting at four weeks | 49% | 55% | 58% | 62% | 58% | 52% |

## Annex C

### Locations where Stop Smoking Services are delivered in Gateshead at January 2006

### Specialist Advisers (Level 3)

- Queen Elizabeth Hospital
- Bensham Walk-In Centre
- Gateshead Civic Centre
- Rowlands Pharmacy, Ryton
- Young Women's Outreach Centre, Gladstone Terrace

Level 3 advisers also carry out home visits and deliver sessions to Community Groups on an ad hoc basis.

### Intermediate Advisers (Level 2)

*Schools*

- Bensham Walk-in Clinicl
- Whickham Health Centre
- The Drive Primary School, Felling
- Gateshead College
- Hookergate School
- Joseph Swan School
- Kingsmeadow School
- Ryton Comprehensive School
- Whickham Comprehensive School & Sports College

*Primary Care*

- Beacon View Medical Centre, Beacon Lough Road
- Bensham Family Practice, Sidney Grove, Bensham
- Dr Cope & Partners, 10 Bewick Road
- Birtley Medical Group, Durham Road, Birtley
- Birtley Nursing Unit, Durham Road, Birtley
- Chainbridge Medical Partnership, 4 Wesley Court, Blaydon Precinct
- Chopwell Health Centre, South Road, Chopwell
- Dr Rooney & Partners, The Croft Surgery, Wrekenton
- Fell Cottage Surgery, 123 Kells Lane, Low Fell
- Fell Tower Medical Centre, Durham Road, Low Fell
- Felling Health Centre
- Bridges Medical Centre, Prince Consort Road
- Central Gateshead Medical Group, Prince Consort Road
- Gateshead Health Centre, Prince Consort Road
- Glenpark Medical Centre, Ravensworth Road, Dunston
- Dr Smith, Grange Road, Ryton
- Dr Hilton, 7 Elvaston Road, Ryton
- Dr Hunt, Dewhurst Terrace, Sunniside
- Dr Imam & Partners, 5 Walker Terrace
- Longrigg Medical Group, Leam Lane

- Dr Mandal, 4 Birtley Lane, Birtley
- Oldwell Surgery, 10 Front Street, Winlaton
- Dr Morris & Partners, Oxford Terrace Medical Group
- Dr Suchdev & Partners, Pelaw Medical Centre
- Drs Mohamed & Orritt, 1 Rawling Road
- The Grove Medical Centre, Rowlands Gill
- Teams Medical Practice, Northumberland Street, Teams
- The High Street Medical Centre, Wrekenton
- Whickham Health Centre, Rectory Road, Whickham

*Pharmacies [pre-June 2004 electoral ward in brackets]*

- Alliance Pharmacy, 544 Durham Road, Low Fell, NE9 6HX [Low Fell]
- Alliance Pharmacy, Station Road, Rowlands Gill, NE39 1PZ [Chopwell & Rowlands Gill]
- ASDA Pharmacy, MetroCentre, NE11 9YA [Whickham North]
- Fairmans (Numark) Chemists, 5 Brookfield Terrace, Pelaw, NE10 0QU [Pelaw & Heworth]
- Healthcare Plus Pharmacies Ltd, 3 Crowhall Lane, Felling NE10 9PW [Felling]
- Healthcare Plus Pharmacies Ltd, 6 Elvaston Road, Ryton, NE40 3NT [Ryton]
- Lloyds Pharmacy, 13 Bewick Road, NE8 4DP [Bensham]
- N&B Chemists Ltd, 1 Liddell Terrace, NE8 1YN [Bensham]
- Mrs O A Osunkunle, 292 Old Durham Road, NE8 4BQ [Deckham]
- R G Young Chemist, 33 Sheriff’s Highway, Old Durham Road, NE9 5PJ [Deckham]
- Raygale Pharmacy, 17 The Crescent, Dunston, NE11 9SJ [Dunston]
- Tesco Pharmacy, Ellison Street, Gateshead, NE8 1BU [Bede]
- Trichem Ltd, Felling Health Centre, Stephenson Terrace, Felling, NE10 9QG [Felling]

*Pharmacies with no Intermediate Adviser presence*

- Alliance Pharmacy, 7 Tower Court, Dunston, NE11 9AZ [Dunston]
- Alliance Pharmacy, 9-10 The Precinct, Wesley Court, Blaydon, NE21 5BT [Blaydon]
- Ashchem Ltd, 11 Fewster Square, Leam Lane Estate, Felling, NE10 8XQ [Wrekendyke]
- Beacon View Pharmacy Ltd, Beacon View Health Centre, Beacon Lough Road, NE9 6YS [High Fell]
- Boots, Unit 9, TVTE, NE11 0BD [Teams]
- Boots, 176-180 High St, Gateshead, NE8 1DS [Bede]
- Boots, 479 Durham Road, Low Fell, NE9 5EX [Deckham]
- Boots, Units 46-52, The Metro Centre, NE11 9YQ [Whickham North]
- Centrechem Limited, 217 Coatsworth Road, Gateshead, NE8 1SR [Bensham]
- Eilbeck J F (Chemist) Ltd, 105 Bensham Road, NE8 1PU [Bensham]
- G H Furness Ltd, 13 Derwent Street, Chopwell, NE17 7HX [Chopwell & Rowlands Gill]
- Healthcare Plus Pharmacies Ltd, 127 Prince Consort Road, NE8 1LR [Bensham]
- L Rowland & Co Ltd, 76-78 Saltwell Road, NE8 4XE [Bensham]
- L Rowland & Co Ltd, 109 Meresyde, Leam Lane Estate, Felling, NE10 8UN [Pelaw & Heworth]
- Lloyds Pharmacy Ltd, Rockwood Hill Road, Greenside, Ryton, NE40 4AX [Crawcrook & Greenside]
- Lloyds Pharmacy Ltd, 181 Coatsworth Road, NE8 1SQ [Bensham]
- Lloyds Pharmacy Ltd, 9 Harras Bank, Birtley, DH3 2PE [Birtley]
- Lloyds Pharmacy Ltd, 1 Springwell Road, Wrekenton, NE9 7JN [High Fell]

- Lloyds Pharmacy Ltd, Teams Medical Centre, Watson Street, Teams Estate, NE8 2PQ [Teams]
- Lobley Hill Pharmacy Ltd, 72 Malvern Gardens, Lobley Hill, NE11 9LL [Teams]
- M R & R A Crowder, 9 Dewhurst Terrace, Sunniside, NE16 5LP [Whickham South]
- Mills Pharmacies Ltd, 7 Wrekenton Row, NE9 7JD [Lamesley]
- P & C E Henderson, 2 Dean Terrace, Ryton, NE40 3HQ [Ryton]
- R W Wilson, 50 Front Street, Winlaton, Blaydon, NE21 6AD [Winlaton]
- Raygale Ltd, 2-3 St Mary's Green, Whickham, NE16 4DN [Whickham North]
- Raygale Ltd, 14 Beaconsfield Road, Low Fell, Gateshead, NE9 5EU [Low Fell]
- Raygale Ltd, 105 Prince Consort Road, NE8 1LR [Bensham]
- S K Handa, 29 Front Street, Whickham, NE16 4EA [Whickham North]
- Sainsbury's, 11th Avenue, TVTE, NE11 0NJ [Teams]
- Vantage Chemists Ltd, 2 Imperial Buildings, Durham Road, Birtley, DH3 1LG [Birtley]
- Vantage Chemists Ltd, 11 Main Street, Crawcrook, Ryton, NE40 4TX [Crawcrook & Greenside]

*Community*

- Briarwood Sector Base, Blaydon
- The Axis Building, TVTE, Gateshead
- Grassbanks Health Centre, Grassbanks
- Queen Elizabeth Hospital
- Sure Start Deckham, Carr Hill Road
- Sure Start Winlaton & Blaydon, Shibdon Bank, Blaydon
- Fire Service, Saltmeadows Road

*Dentists*

- Mr Pabary, Fewster Square, Leam Lane