

# **A health equity audit of smoking cessation services provided by Live Life Better Derbyshire between April 2019 and March 2021**



Confidentiality
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## 1. Executive summary

This audit has used data from two years of LLBD stop smoking service provision to consider the equity of access and outcomes for users of the service.

The analysis found some inequalities in access, including in relation to age and sex. It is estimated that smokers who live in the most deprived areas of Derbyshire access the service proportionately more than those who live in the least deprived areas. This is consistent with published literature. Limitations in the availability of data meant not all the desired analysis on equity of access was possible.

Groups with poorer outcomes from the service (setting of quit dates and quitting smoking four weeks later) include: people who have never worked or are long term unemployed; people who work in routine and manual occupations; full time students; home carers; people who live in the most deprived areas; people aged between 18 to 24 years; and pregnant women.

High level recommendations have been made in each section in response to these findings. An action plan will be developed to provide detail on how and when the recommendations will be progressed. This will include targeted promotion of the service to groups with proportionately lower access and exploring opportunities for a more flexible service offer for groups with relatively lower rates of setting and achieving quits. The conclusion makes additional general recommendations relating to the working of the LLBD team, data collection, data consistency, benchmarking, and ensuring progress is reviewed to assess the impact of changes.

## 2. Aim and objectives

The aim of this audit is to assess the equity of access and outcomes for people accessing the smoking cessation service in Derbyshire between April 2019 and April 2021.

The objectives are:

- To set out the prevalence of smoking in Derbyshire in different population groups. These groups are occupation / socioeconomic status, deprivation, area of Derbyshire (District), age, sex, pregnancy, sexual orientation, ethnicity, mental health, and disability.
- To examine and compare the use and success of smoking cessation services by these various groups.
- To assess whether resources are being distributed in a fair manner relative to the different health needs of these populations.
- To identify potential barriers to access to the smoking cessation service and/or issues impacting on outcomes.
- To propose recommendations to help address any inequities found.

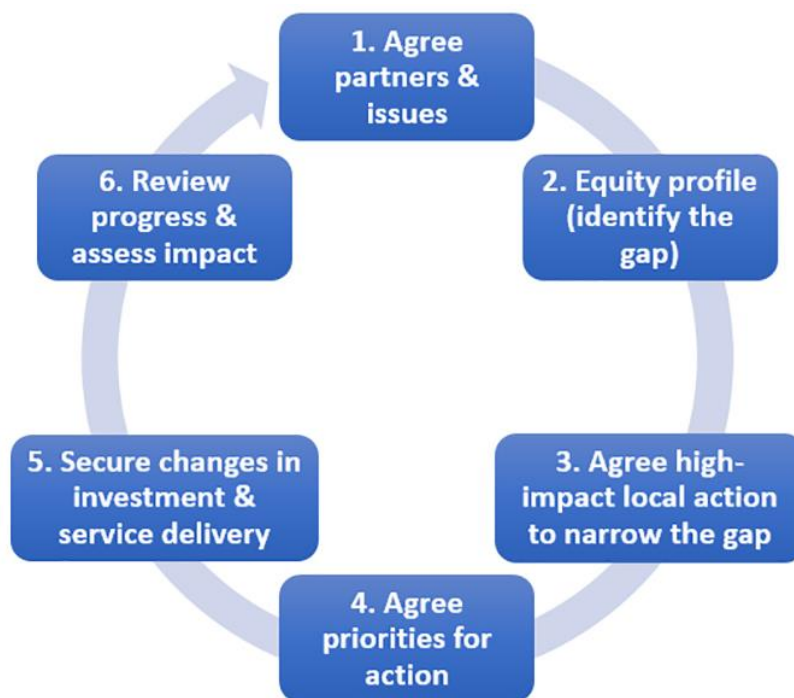
## 3. Introduction and background

A health equity audit (HEA) is a tool used to identify health inequities between different population groups and to assess whether resources are being distributed in a fair manner. Rather than distributing resources equally amongst different population groups, the aim is to ensure resources are divided relative to the health need of each population group. This HEA aims to identify if there are inequities, in access or outcomes, within the smoking cessation service provided in Derbyshire and examine whether the resources in this service are being distributed relative to the need of different population groups in the county. This work builds on Derbyshire County Council's, 2019 tobacco control health needs assessment (Derbyshire County Council, 2019).

Smoking cessation services in Derbyshire are part of Live Life Better Derbyshire (LLBD), a lifestyle and wellbeing support service delivered by Derbyshire County Council. It is open to all Derbyshire residents, or those who are registered with a Derbyshire general practice, aged over 12 years and offers one-to-one telephone sessions in which a trained smoking cessation advisor supports the person to stop smoking and arranges access to smoking cessation medications. Whether the person has been successful at stopping smoking at the four week point after their quit date is recorded. Before the Covid-19 pandemic, smoking status would be confirmed by carbon monoxide monitoring – this is now self-reported.

This HEA will consider the rate of smoking between different population groups in Derbyshire, whether population groups are accessing the smoking cessation service relative to their population group's health need, the rate of successful attempts at stopping smoking using the smoking cessation service, and identify possible actions to address any inequities found.

Figure 1: Health equity audit cycle



Source: Health Development Agency, 2005

Before the start of the Covid-19 pandemic, LLBD made some changes to the service pathway to help increase people setting a quit day and quits, for example:

- Additional training for stop smoking advisors led by a clinical psychologist on supporting people to set smoking quit dates
- Motivational texts sent by the advisors throughout the quit attempt
- Following up clients routinely using a variety of methods, including phone and text
- Additional training on inputting and recording data correctly

As a result of the Covid-19 pandemic, LLBD changed to a remote service delivery, supporting people solely via telephone or video call with nicotine replacement therapy (NRT) posted to clients. For some people, Covid-19 acted as an incentive to stop smoking. This was because links were made between smoking and severity of Covid-19 illness (Clift et al, 2022).

## 4. Data analysis

Data from people who used the Derbyshire smoking cessation service between April 2019 and April 2021 was compiled and analysed. 5,858 people accessed LLBD's smoking cessation services in Derbyshire during this period. For this analysis, only those aged 18 and over were included (n=5800) unless specified. We chose to include only those aged 18 and older because much of the comparator data (both for Derbyshire and England) presented data for over 18s. The data includes whether people have set a quit date and their smoking status four weeks after this date. Data is also collected on a range of characteristics that allow us to analyse access and outcomes in relation to the following variables:

- Occupation/socioeconomic status
- Deprivation
- Area of Derbyshire
- Age
- Sex
- Pregnancy
- Sexual orientation
- Ethnicity
- Mental health condition
- Disability

Comparator data has been used from a variety of sources. These are summarised in the relevant sections. The Annual Population Survey (APS) is conducted by the Office for National Statistics (ONS) and is collected quarterly, with an annual publication for each year produced (January to December). In 2020, the APS was conducted over the telephone as dictated by the Covid-19 pandemic, with only data from quarters two, three and four collected. Due to the limitations of the data collected, we have primarily used data from the 2019 APS.

In the charts summarising the 'proportion of the 2019-2021 cohort who agreed a quit date, and the proportion who quit four weeks after agreeing a quit date', please note the following definitions:

% of those who agreed a quit date: The numerator is the number of people who set a quit date. The denominator is the number of people who accessed the service. This bar is always purple on the relevant charts, as defined in the legend.

% of those who quit at four weeks: The numerator is the number of people who quit smoking four weeks after setting a quit date. The denominator is the number of people who set a quit date. This bar is always green on the relevant charts, as defined in the legend.



Table 1: Characteristics of the cohort (18 and older only)

Characteristic	Total number (proportion of total)
<b>Age at which the person accessed the service (n=5800)</b>	
18 – 24	391 (6.7%)
25 – 34	1368 (23.6%)
35 – 44	1085 (18.7%)
45 – 54	1261 (21.7%)
55 – 64	1045 (18.0%)
65+	650 (11.2%)
<b>Ethnicity – 6 Categories (n=5800)</b>	
Asian/Chinese	25 (0.4%)
Black	33 (0.6%)
Mixed	52 (0.9%)
Unknown	116 (2.0%)
White	5574 (96.1%)
<b>Sexual orientation (n=5800)</b>	
Bisexual	97 (1.7%)
Gay or Lesbian	138 (2.4%)
Heterosexual or straight	5310 (91.6%)
Other	14 (0.2%)
Unknown or not stated/missing data	248 (4.3%)
<b>Derbyshire district (n=5800)</b>	
Amber Valley	924 (15.9%)
Bolsover	702 (12.1%)
Chesterfield	894 (15.4%)
Derbyshire Dales	333 (5.7%)
Erewash	864 (14.9%)
High Peak	600 (10.3%)
North East Derbyshire	734 (12.7%)
South Derbyshire	598 (10.3%)
Unknown/Outside Derbyshire/Missing data	151 (2.6%)
<b>Occupation (NS-SEC 2020) (n=5800)</b>	
Intermediate	354 (6.1%)
Managerial and Professional	676 (11.7%)
Never worked and long term unemployed	1542 (26.6%)
Routine and manual	1850 (31.9%)
Other (full-time student, home carer, retired, self-employed with no other information)	1242 (21.4%)
Unknown/missing data	136 (2.3%)

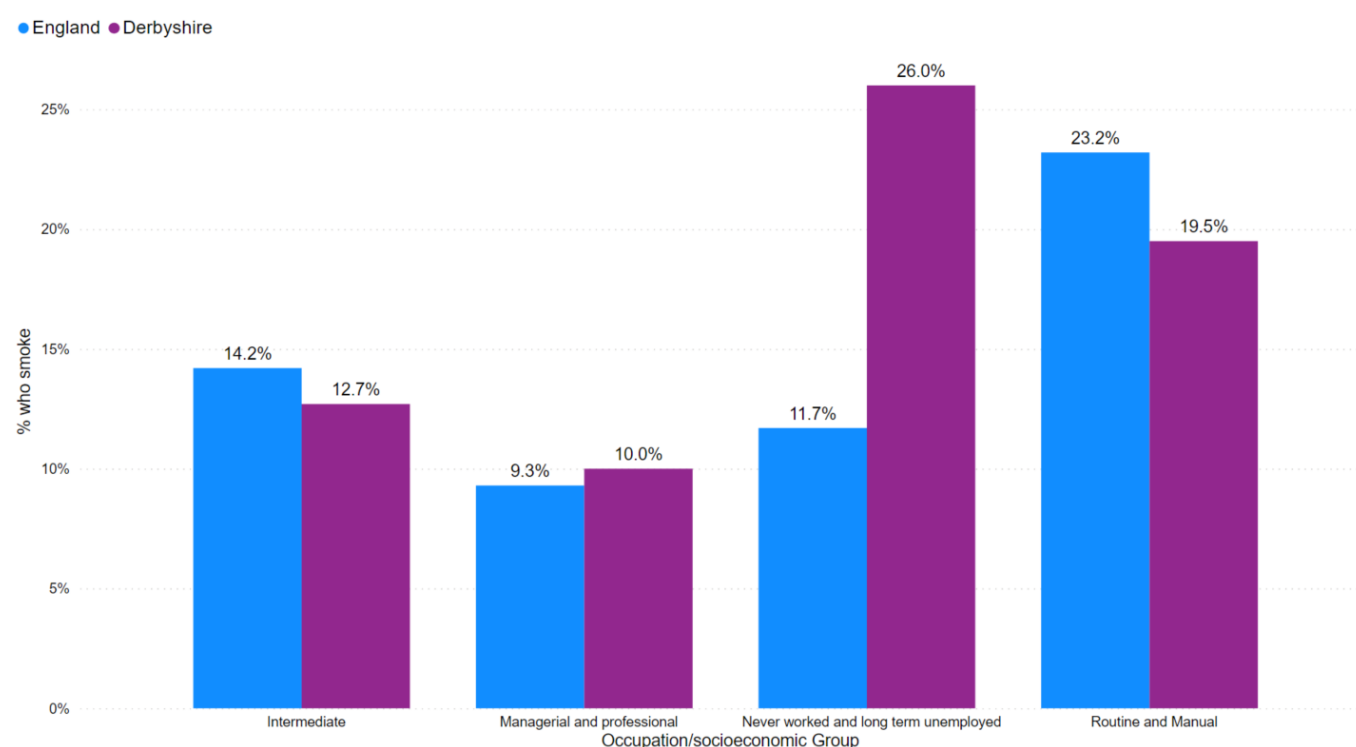
<b>Pregnancy status (females aged 18 to 45 only; n=1905)</b>	
Pregnant	670 (35.2%)
Not pregnant	1212 (63.6%)
Unknown/missing data	23 (1.2%)
<b>IMD Quintile (n=5800)</b>	
1	1433 (24.7%)
2	1503 (25.9%)
3	1323 (22.8%)
4	917 (15.8%)
5	550 (9.5%)
Unknown/missing data	74 (1.3%)
<b>IMD Decile (n=5800)</b>	
1	526 (9.1%)
2	907 (15.6%)
3	867 (14.9%)
4	636 (11.0%)
5	795 (13.7%)
6	528 (9.1%)
7	476 (8.2%)
8	441 (7.6%)
9	327 (5.6%)
10	223 (3.8%)
Unknown/missing data	74 (1.3%)
<b>Agreed a quit date (n=5800)</b>	
Yes	4028 (69.4%)
No	1772 (30.6%)
<b>Client received treatment for mental health, or consider themselves to have a mental health illness or mental health problem (n=5800)</b>	
Yes	1277 (22.0%)
No	3821 (65.9%)
Unknown/missing data	702 (12.1%)
<b>Client has a disability (n=5800)</b>	
Yes	1360 (23.4%)
No	4115 (70.9%)
Unknown/missing data	325 (5.6%)

## 4.1 Occupation / socioeconomic status

A person's job impacts on their likelihood of being a smoker. Rates of smoking in England are highest among those in routine and manual occupations and lowest in managerial and professional occupations. Using data from the 2019 Annual Population Survey (APS), it is estimated that 23.2% of adults aged between 18 and 64 who live in England and work in routine and manual occupations smoke. The same survey estimates 19.5% of adults aged between 18 and 64 who live in Derbyshire and who work in routine and manual occupations smoke. The occupation/socioeconomic group with the lowest proportion of smokers is the managerial and professional category. 9.3% of adults aged 18 to 64 in England who work in managerial and professional occupations smoke. 10.0% of adults aged 18 to 64 in Derbyshire who work in managerial and professional occupations smoke.

The most notable disparity between England and Derbyshire across these groups is in the "never worked and long-term unemployed" category. 11.7% of adults between the age of 18 and 64 in England who have never worked or who are long term unemployed smoke, whereas 26.0% of adults of this age in Derbyshire who have never worked or who are long-term unemployed smoke (Figure 2).

Figure 2: Smoking Prevalence in adults (18+) in England and Derbyshire by occupation/socioeconomic group (18-64 years)



We were not able to calculate how many people in Derbyshire who were employed in each of these four main occupation/socioeconomic groups (intermediate; managerial or professional; never worked and long term unemployed; routine and manual). Therefore, we could not determine how equitably LLBD smoking cessation services were accessed across these occupation/socioeconomic groups. This section will therefore focus on the outcomes of those who accessed LLBD smoking cessation services by occupation/socioeconomic group.

5800 Derbyshire residents aged 18<sup>1</sup> and over accessed LLBD smoking cessation services between April 2019 and March 2021. Of these, 4422 worked in one of these four occupation/socioeconomic groups which are categorised in Table 1.

**Table 2: Numbers of Derbyshire residents aged 18+ who accessed LLBD smoking cessation services by occupation/socioeconomic group**

<b>Occupation/socioeconomic group</b>	<b>Number of people who accessed LLBD smoking cessation services</b>
Intermediate	354
Managerial and professional	676
Never worked and long term unemployed <sup>2</sup>	1542
Routine and Manual	1850

There is some variation between the different occupation/socioeconomic groups in relation to the proportion of those who agreed a quit date once they accessed LLBD smoking cessation services (Figure 3). Those who worked in intermediate occupations had the highest proportion of people who agreed a quit date once they accessed LLBD smoking cessation services (77.1%; 273 out of 354). Those who had never worked or were long term unemployed had the lowest proportion of people who agreed a quit date once they accessed LLBD smoking cessation services (64.3%; 1273 out of 1850).

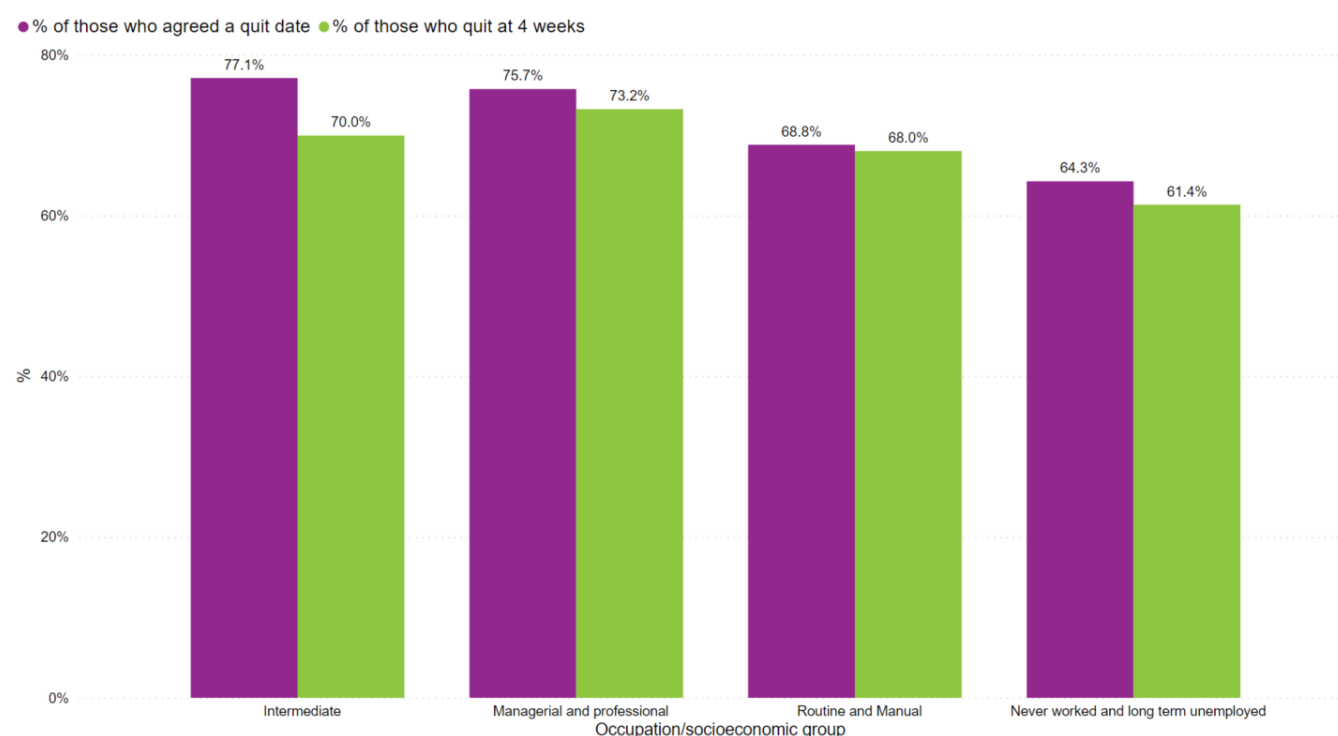
Those who worked in managerial and professional occupations had the highest proportion of people who quit four weeks after agreeing a quit date (73.2%; 375 out of 512 who set a quit date). Those who were unemployed and long term unemployed had the lowest proportion of people who quit four weeks after agreeing a quit date (61.4%; 866 out of 1273 who set a quit date).

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<sup>1</sup> 13 service users under the age of 18 (ages 13-17) were classed as working in one of these four occupation/socioeconomic groups. 4 intermediate; 1 managerial and professional; 1 never worked and long term unemployed; 7 routine and manual. They were not included in the analysis due to their age.

<sup>2</sup> To be consistent with the NS-SEC 2020 occupation codes, we included those categorised as 'sick or disabled and unable to work' in the 'never worked or long term unemployed' occupation category.

Figure 3: Proportion of the 2019-2021 cohort who agreed a quit date, and the proportion who quit four weeks after agreeing a quit date – Occupation/socioeconomic group



A sub-analysis of each occupation/socioeconomic group by age and sex was also conducted. This was to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix tables A1 (Occupation/socioeconomic by age group) and A2 (Occupation/socioeconomic by sex)

18 to 24 year-olds who never worked or who were long term unemployed had the lowest rate of setting quit dates (48.0%; 49 out of 102). People aged 55 to 64 in this category were much more likely to agree a quit date (71.2%; 272 out of 382). 48.8% (41 out of 84) of 18 to 24-year-olds who were in routine or manual employment quit smoking four weeks after setting a quit date. 76.8% (152 out of 198) of 55 to 64-year-olds who were in routine or manual employment quit smoking four weeks after setting a quit date.

Males in managerial and professional employment were very likely to agree a quit date once they accessed the service (81.2%, 237 out of 292). 71.6% (275 out of 384) of females in this employment category agreed a quit date. A similar difference was observed in success quitting smoking. 77.6% (184 out of 237) of males in managerial and professional employment quit four weeks after setting a date compared to 69.5% (191 out of 275) of females in this employment category.

### Limitations

The primary limitation was the lack of data available to be able to determine what proportion of Derbyshire residents work in one of the four high-level occupation groups. This data would have allowed us to estimate the distribution of workers across Derbyshire and enable us to more accurately determine how equitable access is to Derbyshire stop smoking services.

The LLBD data coded occupation using the following 10 codes:

- Full time student
- Home carer
- Intermediate
- Managerial or professional
- Never worked or long term unemployed
- Retired
- Routine and manual
- Self-employed
- Sick or disabled and unable to work
- Unknown

Due to the lack of detailed data, it was not possible to match each of these occupation codes to the four occupation groups used in this section of the analysis. Full time students (n=89), home carers (n=366), people who have retired (n=724), self-employed (n=106) and those without a documented occupation (n=138) of all ages were all excluded from this section of the analysis<sup>3</sup>. These exclusions account for 24.3% of the cohort (1423 out of 5858)<sup>4</sup>. Excluding such a large proportion of the cohort from the analysis might skew the results presented in the above charts. A sub-analysis of these five categories has been summarised in Table 2.

Table 3: Sub-analysis of excluded occupation/socioeconomic groups

Occupation/socioeconomic group (N) – all ages	% of those who agreed a quit date	% of those who quit at four weeks
Full time student – all ages (89)	60.7% (54/89)	59.3% (32/54)
Home carers (366)	63.1% (231/366)	62.8% (145/231)
Retired (724)	74.4% (539/724)	72.7% (392/539)
Self-employed (106)	79.2% (84/106)	75.0% (63/84)
Unknown (138)	64.5% (89/138)	64.0% (57/89)

It was not possible to assign self-employed people to one of these four main occupation groups because there was no additional information on their employment status.

## Discussion

While we have not been able to determine how equitably LLBD smoking cessation services are accessed by occupation / socioeconomic group, we recommend particular efforts should be made to target the promotion of these services to people who have never worked or who are long term unemployed. This is because the proportion of people in this group who are estimated to be smokers is more than double the England figure. Efforts could include working with partners (e.g., employment advisor services and providers of social housing) to highlight and encourage access to the service.

Of people who accessed the LLBD service, those who are long term unemployed or who have never worked are also least likely to set a quit date and least likely to be successful in quitting at four weeks. People in this category aged 18 to 24 years were least likely to have a successful outcome from the service.

<sup>3</sup> Due to the categories, all ages have been included, not just 18+.

<sup>4</sup> Due to the categories, all ages have been included, not just 18+.

Of people in work, those in routine and manual occupations were less likely to agree a quit date and less likely to quit at four weeks. This may be because there are a relatively high number of smokers in their workplace. This can result in reduced pressure to stop smoking and reduced support with attempts to quit (Sorensen et al, 2002). Evidence from the United States suggests that smokers in routine and manual professional smoke more cigarettes than other occupation groups (Fujishiro et al, 2012): this makes attempts to stop smoking more challenging. LLBD should consider how they can address this inequity for example through engagement with employers and linking stop smoking with other workplace-based initiatives.

Where appropriate, LLBD should develop plans to increase the flexibility of the service to try to improve the outcomes for people who are long term unemployed or who have never worked, full time students and home carers. This could include extended access to NRT, provision of e-cigarettes, and increased flexibility on appointments and quit dates.

LLBD should explore opportunities to work jointly with Derbyshire County Council's adult care team to understand the perspectives of home carers in relation to smoking cessation. This could provide insights on the barriers to setting quit dates and successfully quitting smoking for people in this group.

## 4.2 Deprivation

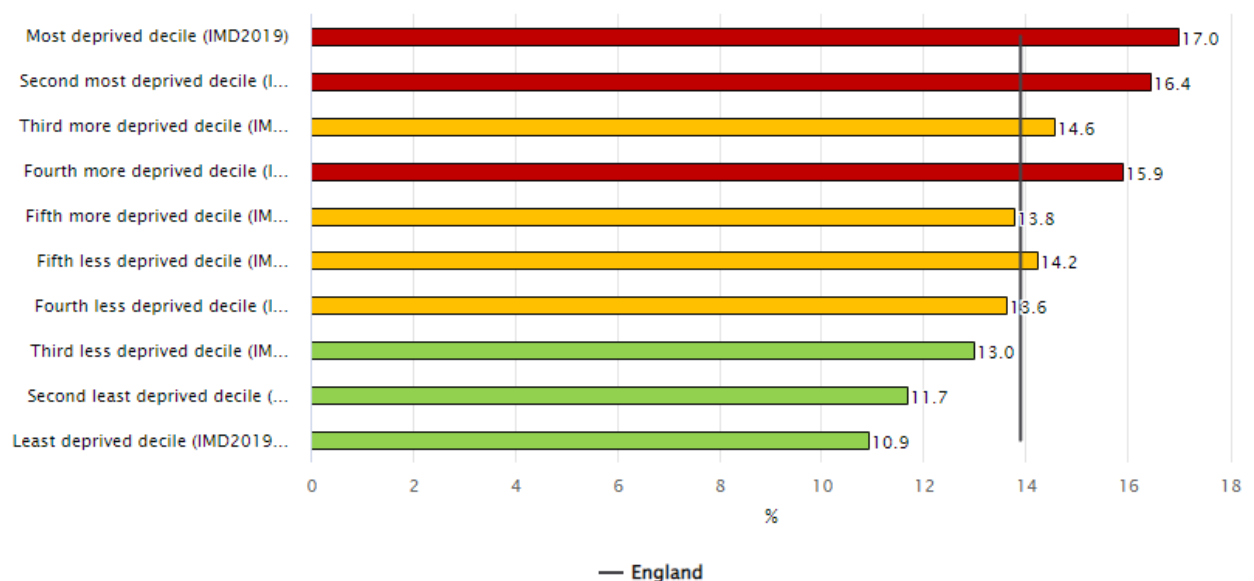
A person's likelihood of smoking increases in line with the level of deprivation in their neighbourhood (ONS, 2018).

The Index of Multiple Deprivation (IMD) allow us to measure the deprivation of an area by measuring, scoring and combining:

- Income
- Employment
- Education, skills and training
- Health deprivation and disability
- Crime
- Barriers to housing and services
- Living environment

Each of the 32,844 Lower Layer Super Output Areas (LSOAs) in England are assigned a score between 1 (most deprived) and 10 (least deprived). Using data from the 2019 APS, an estimated 13.9% (n=6,144,703) of adults aged over 18 years in England smoke. Figure 4 shows a noticeable trend, with those in the more deprived deciles accounting for a significantly greater proportion of the smoking population.

Figure 4: Smoking prevalence in adults (18 and over) in England (2019) by IMD decile



Data from the 2019 APS estimates that 12.6% (n=81,716) of adults aged 18 and over in Derbyshire smoke. This is statistically similar to the England average.

There is no data available to stratify the number of smokers by IMD decile in Derbyshire and compare it to the England average. To estimate the number of adults who smoke by each of the IMD deciles in Derbyshire, we applied the England prevalence on smoking by IMD decile (displayed in Figure 4 above) to the Derbyshire population for each IMD decile. This allowed us to consider the equity of access to Derbyshire stop smoking services by deprivation.

To do this, we took the adult population (aged 18 and older) using the 2019 mid-year population estimate and matched each LSOA in Derbyshire with the IMD deciles (using the 2019 IMD data). This allowed us to see the population estimate for each IMD decile. We then



applied the England average for each IMD decile (as displayed in Figure 4 above) to calculate an estimate of the number of smokers in Derbyshire by IMD decile. This resulted in an over-estimate of the number of smokers because the England average of 13.9% was assumed as opposed to the Derbyshire prevalence of 12.6%.

5726 people aged 18 and over who accessed the service between April 2019 and March 2021 had a valid postcode (97.7% of the 18 and over cohort). The English Indices of Deprivation 2019 postcode lookup (MHCLG, 2019) was used to assign each person with a valid postcode an IMD number between 1 and 10.

Table 4: Adult population of Derbyshire by IMD decile

Derbyshire IMD decile	≥ 18 population (% of ≥ 18 population)	Estimated number of ≥ 18 population who smoke based on England 2019 average	≥ 18 population who accessed the Derbyshire Smoking Cessation Service	% of ≥ 18 smoking population who accessed the Derbyshire Smoking Cessation Service
1	25660 (4.0%)	4362	526	12.1%
2	52385 (8.1%)	8591	907	10.6%
3	61880 (9.5%)	9034	867	9.6%
4	55780 (8.6%)	8869	636	7.2%
5	87038 (13.4%)	12011	795	6.6%
6	62691 (9.7%)	8902	528	5.9%
7	72493 (11.2%)	9859	476	4.8%
8	82006 (12.6%)	10661	441	4.1%
9	83834 (12.9%)	9809	327	3.3%
10	64663 (10.0%)	7048	223	3.2%
Total	648430	89147	5726	6.4%

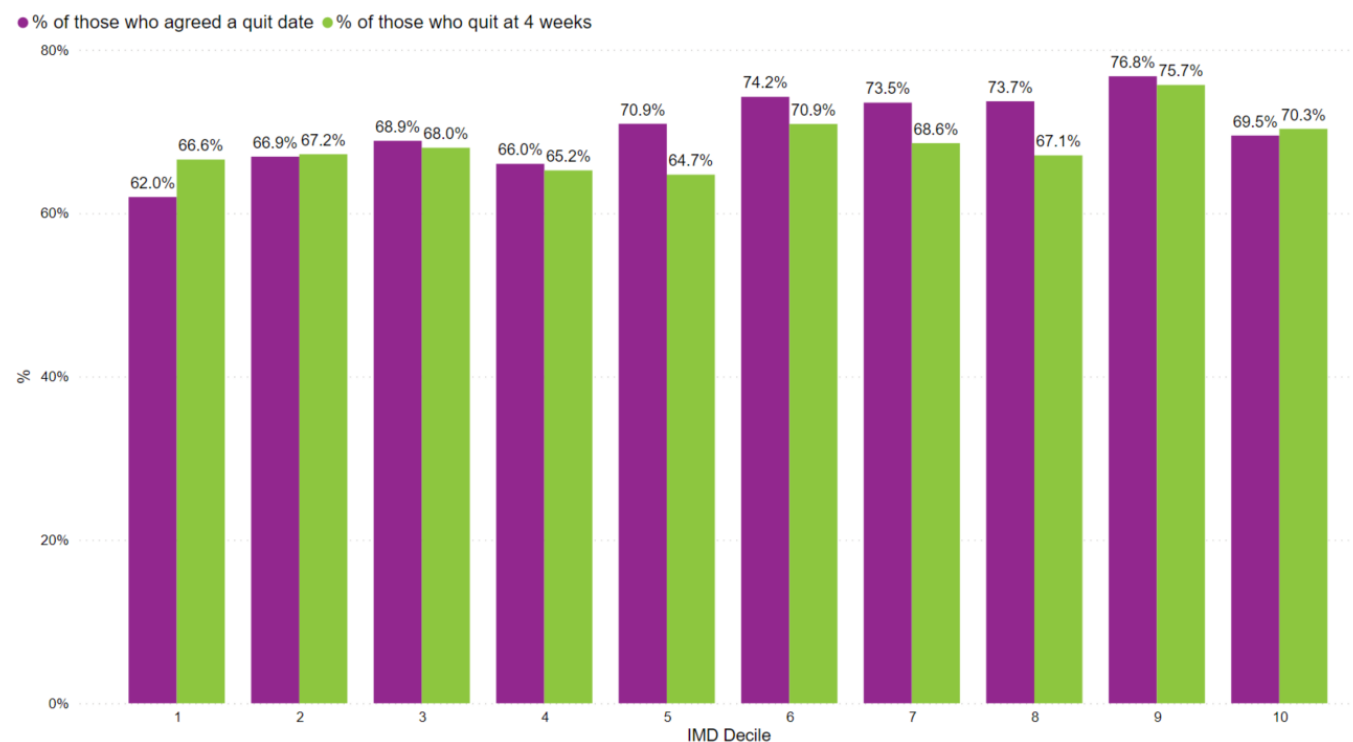
Based on extrapolated data, it appears that smokers who live in the most deprived areas of Derbyshire access the service more than those in the least deprived areas. 12.1% of the smoking population who live in IMD decile 1 areas accessed Derbyshire stop smoking services. 3.2% of the smoking population who lived in IMD decile 10 areas accessed Derbyshire stop smoking services. There is a consistent decline in the proportion of the smoking population who access Derbyshire stop smoking services as the level of deprivation decreases.

There is some variation between the different IMD deciles in relation to the proportion of those who agreed a quit date once they accessed LLBD smoking cessation services. The IMD decile with the highest proportion of those who set a quit date once they had accessed the service was decile 9 (76.8%; 251 out of 327). The IMD decile with the lowest proportion of those who set a quit date once they had accessed the service was decile 1 (62.0%; 326 out of 526) (Figure 5).

The IMD decile with the highest proportion of those who quit smoking four weeks after setting a quit date was decile 9 (75.7%; 190 out of 251). The IMD decile with the lowest proportion of

those who quit smoking four weeks after setting a quit date was decile 5 (64.7%; 365 out of 564) (Figure 5).

Figure 5: Proportion of the 2019-2021 cohort who agreed a quit date, and the proportion who quit four weeks after agreeing a quit date – IMD Decile



A sub-analysis of each IMD quintile by age and sex was conducted to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix tables A3 (Deprivation by age group) and A4 (Deprivation by sex).

Younger people in IMD decile 1 areas were much less likely to set quit dates and quit smoking at four weeks. 45.5% (55 out of 121) of 18 to 24 year-olds who lived in IMD decile 1 areas agreed a quit date once they accessed the service. This was compared to 74.3% (200 out of 269) of 55 to 64 year-olds who lived in IMD decile 1 areas. 45.5% (25 out of 55) of 18 to 24-year-olds who lived in IMD decile 1 areas quit smoking four weeks after setting a quit date. 75.0% (138 out of 184) of 45 to 54-year-olds who lived in IMD decile 1 areas quit.

Males who lived in IMD decile 1 areas were more likely to agree a quit date (78.4%, 294 out of 375) and quit smoking four weeks later (71.1%, 209 out of 294) than females (70.3%, 381 out of 542 agreed a date, and 54.9%, 209 out of 381, quit at four weeks).

### Limitations

Table 3 assumes the same proportion of the adult population in Derbyshire smoke as the England population. This will not be true as using the method, there were an estimated 89,147 smokers in Derbyshire in 2019. The Office for Health Improvement and Disparities (OHID) Fingertips site states that, according to the APS for 2019, there were 81716 smokers. This means we have overestimated the true prevalence of smokers in Derbyshire by using the England average of 13.9%. We know the Derbyshire average was 12.6% so we must acknowledge this limitation in this section of the analysis. However, as there was no data

available at a local level breaking down the smoking population by IMD decile, these results have been calculated to give us an opportunity to consider how equitably LLBD smoking cessation services are accessed across Derbyshire by deprivation decile.

Another limitation is the relatively small sample size for people who accessed the LLBD smoking cessation services in each decile. As the comparator data was presented by decile it was not possible to estimate the smoking prevalence by quintile.

## Discussion

This analysis estimates that smokers who live in the most deprived areas of Derbyshire accessed the LLBD service relatively more than those in the least deprived. This is at odds with what we know about how many health services are accessed (Hart, 1971), but consistent with findings relating to smoking cessation services elsewhere in England (NCSCT, 2013). The National Centre for Smoking Cessation and Training has noted that stop smoking services are effective at reaching and treating disadvantaged groups (NCSCT, 2013). LLBD should consider how they can address the relatively low rates of access among smokers in the least deprived areas of the county. This could include targeted promotion of the service, the online offer, and the ORCHA-approved app via social media.

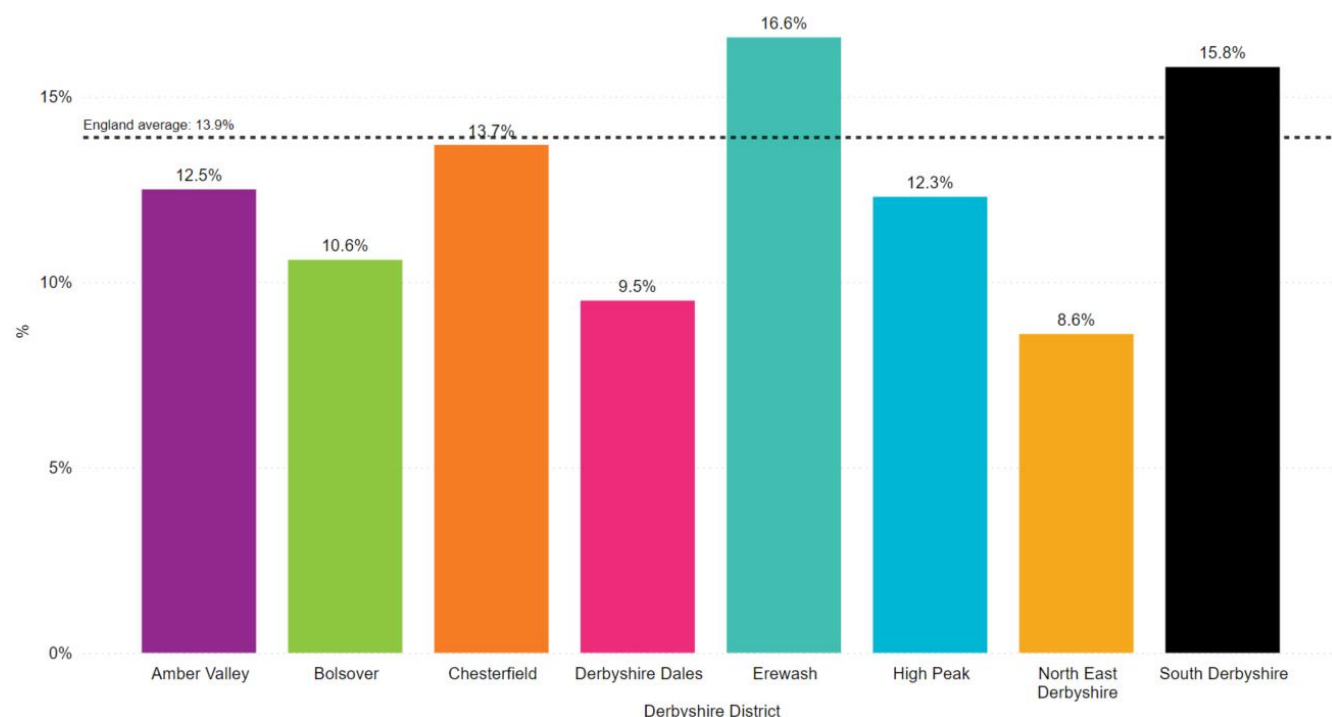
This analysis is consistent with findings from previous studies that have found smokers who live in deprived areas find it more difficult to stop with the help of stop smoking services than their more affluent neighbours (Low et al, 2007; Hill et al, 2014). Studies have shown that people from low socioeconomic status groups are more likely to start smoking, and once they have started, they are less likely to be successful in a quit attempt (Hiscock et al, 2012; Hiscock et al, 2015; ONS, 2018). There is evidence that nicotine intake and nicotine dependence increase systematically with deprivation (Jarvis & Wardle, 2005). Nicotine dependence is an important determinant of ease of quitting and may partially explain lower rates of cessation.

LLBD should explore opportunities to improve outcomes from the service among smokers living in the most deprived parts of the county. This could include, where appropriate, increasing the flexibility of the service for example through extended access to NRT, provision of e-cigarettes, and increased flexibility on appointments and quit dates. Advisors could increase emphasis on the positive financial implications of successfully quitting smoking.

### 4.3 Area of Derbyshire

Using data from the 2019 APS, the district in Derbyshire with the highest estimated prevalence of adults aged 18 and over who smoke is Erewash, with 16.6% (n=15,356). The district in Derbyshire with the lowest estimated prevalence of adults aged 18 and over who smoke is North East Derbyshire, with 8.6% (n=7,146). Neither of these are statistically different to the England average of 13.9%.

Figure 6: Smoking prevalence by Derbyshire district in adults 18 and over



The maps below (Figures 7 and 8) use the most recent available data (from 2017) to show the distribution of male and female smokers in Derbyshire by LSOA.

Figure 7: Estimated number of smokers per census lower super output area – Males 2017

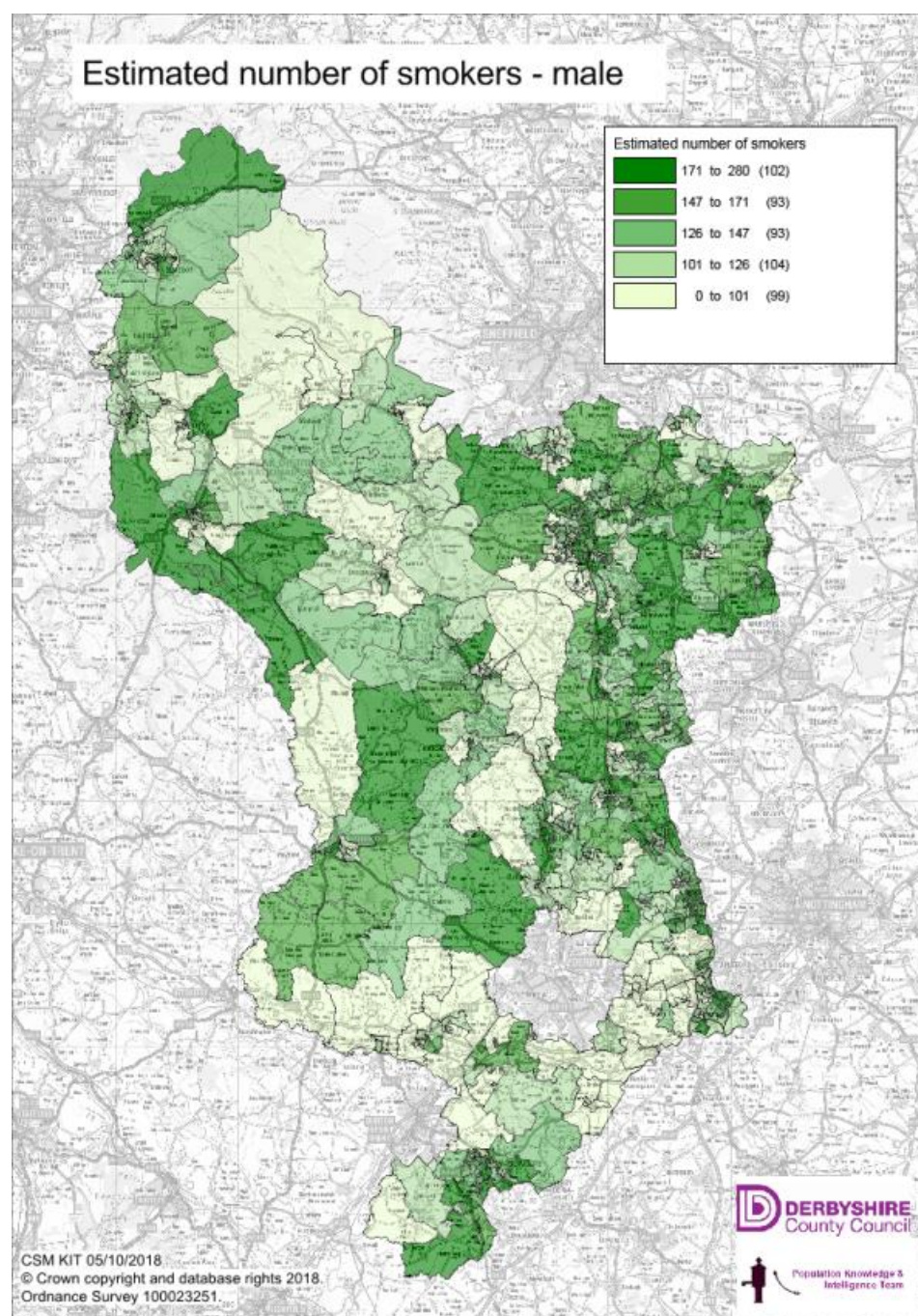
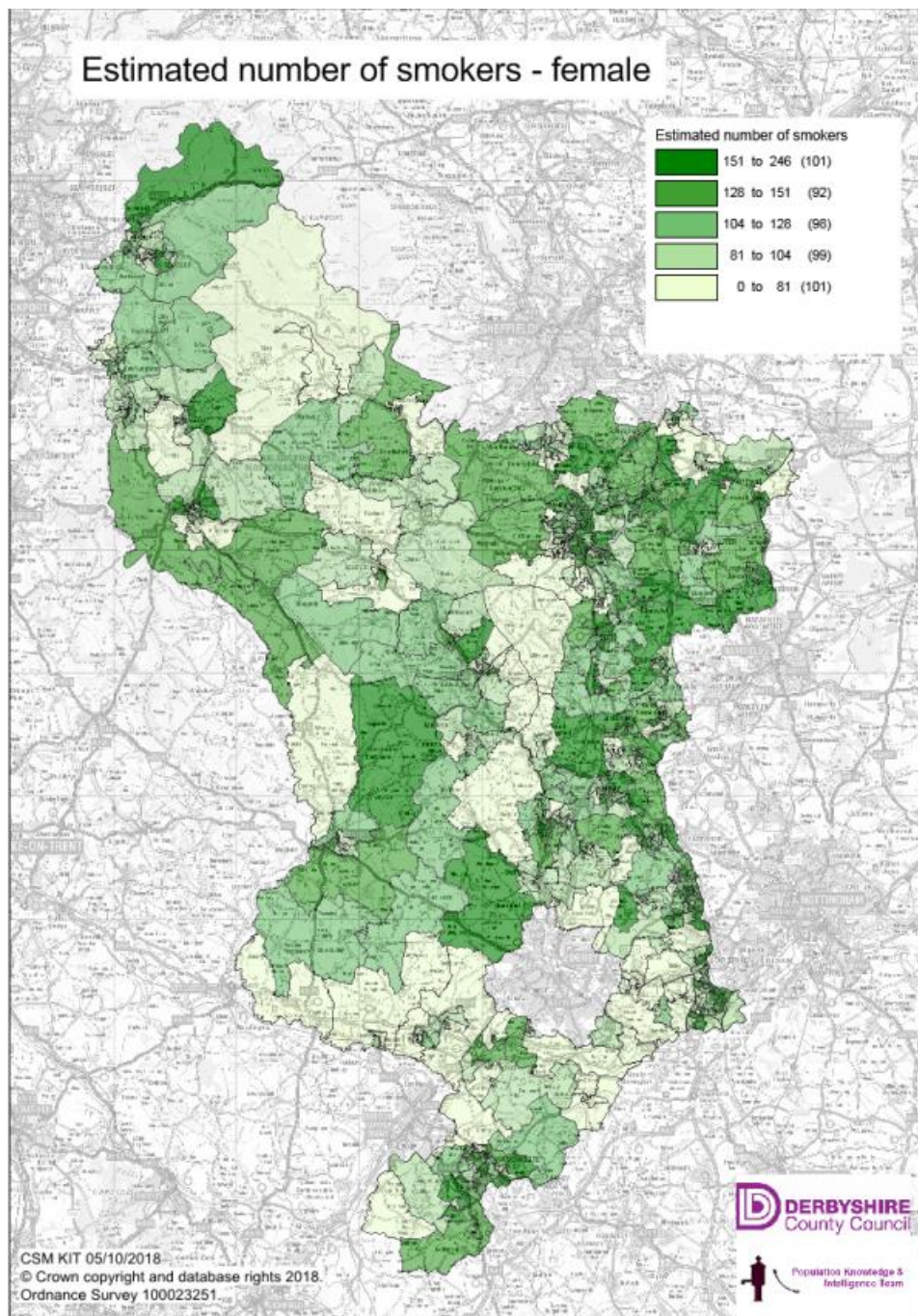


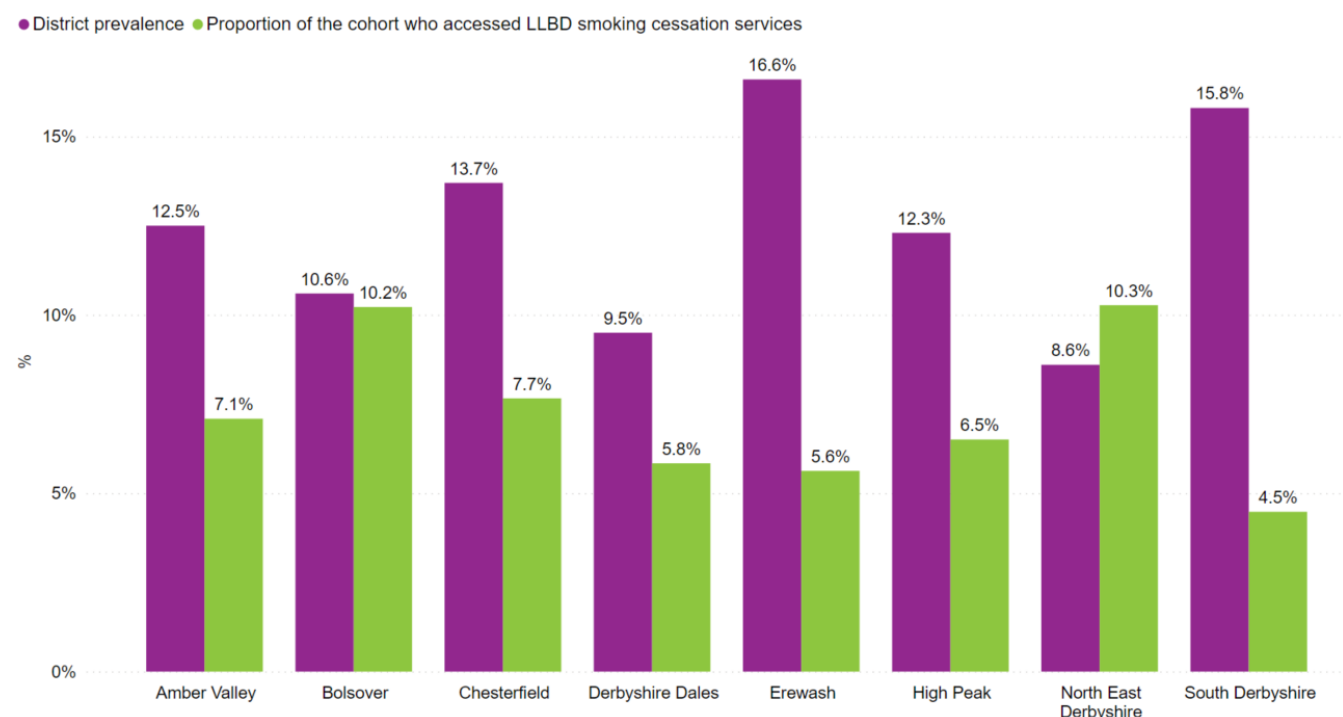


Figure 8: Estimated number of smokers per census lower super output area – Females 2017



There is some variation between the Derbyshire districts in relation to equity of access to Derbyshire stop smoking services. The district with the highest proportion of residents who accessed the service is North East Derbyshire, where 10.3% of the estimated smoking population accessed Derbyshire stop smoking services (734 North East Derbyshire residents accessed the service out of an estimated population of 7146 smokers). The district with the lowest proportion of residents who accessed the service is South Derbyshire, where 4.5% of the estimated smoking population accessed Derbyshire stop smoking services (598 South Derbyshire residents accessed the service out of an estimated population of 13349 smokers).

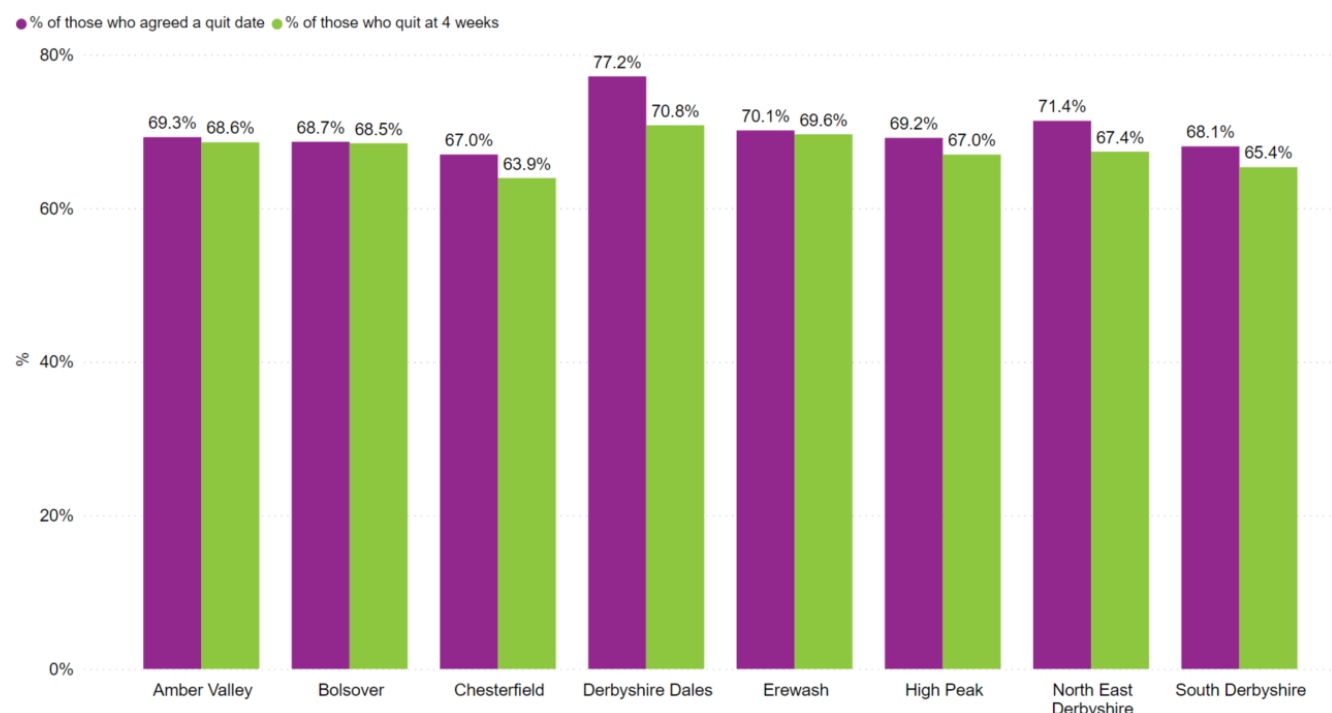
Figure 9: Smoking prevalence by Derbyshire district in adults 18 and over, and the proportion of smoking population who accessed LLBD smoking cessation services between April 2019 and March 2021, by district



There is also some variation between the Derbyshire districts in relation to the proportion of those who accessed Derbyshire stop smoking services and who agreed a quit date. The district with the highest proportion of residents who agreed a quit date once they accessed the service was Derbyshire Dales, where 77.2% (257 out of 222) of those who accessed the service agreed a quit date. The district with the lowest proportion of residents who agreed a quit date once they accessed the service was Chesterfield, where 67.0% (599 out of 894) of those who accessed the service agreed a quit date (Figure 10).

The Derbyshire district with the highest proportion of residents who quit smoking four weeks after they agreed a quit date was Derbyshire Dales, where 70.8% (182 out of 257) of those who accessed the service agreed a quit date. The Derbyshire district with the lowest proportion of residents who quit smoking four weeks after they agreed a quit date was Chesterfield, where 63.9% (383 out of 599) of those who accessed the service agreed a quit date (Figure 10).

Figure 10: Proportion of the 2019-2021 cohort who agreed a quit date, and the proportion who quit four weeks after agreeing a quit date – Derbyshire District



A sub-analysis of each district group by age and sex was also conducted. This was to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix tables A5 (Area of Derbyshire (district) by age group) and A6 (Area of Derbyshire (district) by sex).

The proportion of quit dates set was particularly low among 18 to 24 year-olds who lived in South Derbyshire (29.2%, 7 out of 24). Only 41.2% (14 out of 34) 18 to 24-year-olds who lived in North East Derbyshire quit smoking four weeks after setting a quit date.

### Limitations

While Derbyshire Dales appears to have a higher proportion of the population who agreed a quit date and subsequently quit smoking four weeks later, the sample size for these two outcomes is the smallest of all eight Derbyshire districts. We cannot state with confidence that Derbyshire Dales residents are more successful at setting a quit date and quitting four weeks later.

151 people aged 18 and over were excluded from this section of the analysis because their postcodes were out of the area (n=82) or were unknown (n=69).

### Discussion

LLBD should explore opportunities to promote the service in areas of the county where access is proportionately lower, in particular South Derbyshire and Erewash. This could include using media, social media, and engagement with health and care professionals in these areas.

The differences in outcomes from the service across the county's geography are relatively limited. This is likely in part because people from all areas of Derbyshire received the same



remote service during this time period. LLBD should ensure equity is considered and maintained as the service moves away from a fully remote offer. This could include for example monitoring equity of access to in-person carbon monoxide monitoring.

## 4.4 Age

Data from the 2019 APS estimates there is variation in the prevalence of smoking in different age groups. It is highest in those aged between 25 and 34 years (18.9%) and lowest in those aged 65+ (7.4%) (ONS, 2020).

**Table 5: Breakdown of smoking prevalence by age groups in England in adults over the age of 18**

Age Group (years)	Smoking prevalence
18 to 24	16.0%
25 to 34	18.9%
35 to 44	15.4%
45 to 54	15.5%
55 to 64	13.4%
65+	7.4%

While the 2019 APS estimates 12.6% (n=81,716) of adults in Derbyshire smoke, there is no data at a local authority level to stratify the number of smokers by these age groups in Derbyshire. In an attempt to estimate the number of adults in Derbyshire who smoke in each of the above age groups, we applied the England prevalence on smoking by age group (displayed in table 4 above) to the Derbyshire population for each age group. To do this, we took the adult population (aged 18 and older) using the 2019 mid-year population estimate to gauge how many people in each age group lived in Derbyshire. We applied the England average for each age group (as displayed in table 4 above) to estimate the number of smokers in these six age groups in Derbyshire. This resulted in an over-estimate in the number of smokers because the England average of 13.9% was assumed as opposed to the Derbyshire prevalence of 12.6%. The results of this pseudo-method analysis are presented in table 5.

**Table 6: Adult population of Derbyshire by age group estimates**

Age group	Adult population (% of adult population)	Estimated number of adult population who smoke based on England 2019 average	Population who accessed the Derbyshire Smoking Cessation Service	% of population who accessed the Derbyshire Smoking Cessation Service
18 to 24	55143 (8.5%)	8823	391	4.4%
25 to 34	94341 (14.5%)	17830	1368	7.7%
35 to 44	91309 (14.1%)	14062	1085	7.7%
45 to 54	121344 (18.7%)	18808	1261	6.7%
55 to 64	111337 (17.2%)	14919	1045	7.0%
65+	174956 (27.0%)	12947	650	5.0%
Total	648430 (100%)	87389	5800	6.6%

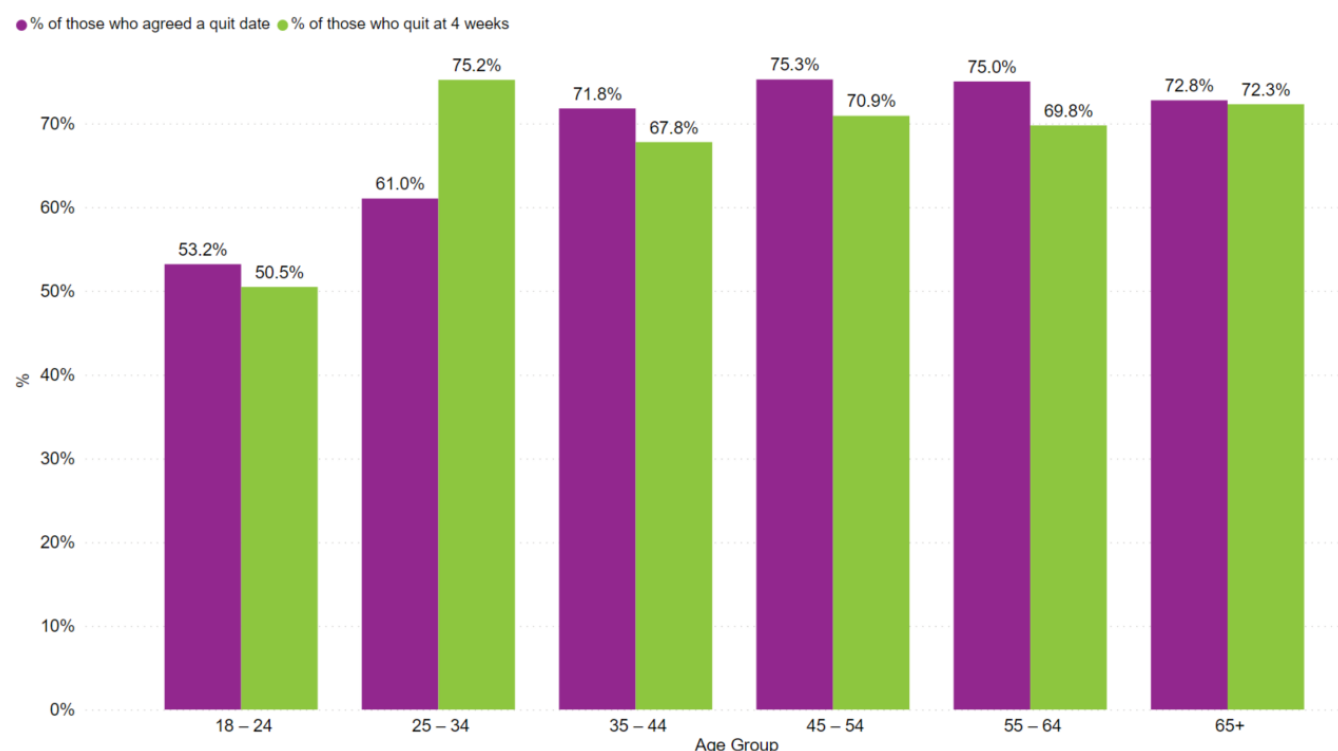
Based on extrapolated data using the England average, it appears as though smokers between the ages of 18 and 24 are least likely to access LLBD smoking cessation services. Those in the 25 to 34 and 35 to 44 age groups appear to be more likely to access LLBD

smoking cessation services. There does not appear to be a noticeable trend across the age groups.

Of those who accessed the service, there is some variation between the different age groups who agreed a quit date. The age group with the highest proportion of people who agreed a quit date once they accessed the service is the 45 to 54 year-olds, where 75.3% (949 out of 1261) of those who accessed the service agree a quit date. The age group with the lowest proportion of people who agreed a quit date once they accessed the service is the 18 to 24 year-olds, where 53.2% (208 out of 391) of those who access the service agree a quit date (Figure 11).

The age group with the highest proportion of people who quit smoking four weeks after they agreed a quit date is the 25 to 34 year-olds, where 75.2% (628 out of 835) of those who set a quit date successfully quit four weeks later. The age group with the lowest proportion of people who quit smoking four weeks after they agreed a quit date is the 18 to 24 year-olds, where 50.5% (105 out of 208) of those who set a quit date successfully quit four weeks later (Figure 11).

Figure 11: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Age



58 people under the age of 18 accessed LLBD smoking cessation services between April 2019 and March 2021. 39.7% (23 out of 58) of them agreed a quit date and 43.5% (10 out of 23) who set a quit date successfully quit four weeks later.

A sub-analysis of each age group by and sex was also conducted. This was to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix table A7 (Age group by sex).

55 to 64 year-old males were more likely to agree a quit date (80.1%; 367 out of 458) than females of the same age (70.8%; 409 out of 578).

25 to 34 year-old males were more likely to quit smoking four weeks after setting a quit date (68.9%; 188 out of 273) than females of the same age (55.4%; 307 out of 554).

### Limitations

The data in table 5 assumes the same proportion of the adult population in Derbyshire smoke as the England population. This will not be true as using the method, there were an estimated 87389 smokers in Derbyshire in 2019. OHID's Fingertips states that, according to the APS for 2019, there were an estimated 81716 smokers. This means we have overestimated the true prevalence of smokers in Derbyshire by using the England average of 13.9%. We know the Derbyshire average was 12.6% so we must acknowledge this limitation in this section of the analysis. However, as there was no data available at a local level breaking down the smoking population by these age groups, these results have been calculated to allow us to estimate the equitability of access to Derbyshire stop smoking services for each age group.

### Discussion

This analysis estimates access to LLBD stop smoking services are proportionately lowest among smokers in the younger and oldest age groups. LLBD should explore opportunities to promote and encourage access to the service among these people. This could include targeting promotion in places where people work, study, exercise, and socialise.

LLBD should review the available evidence to better understand the interventions that may increase service uptake and quit successes among young people.

These results suggest more needs to be done to encourage those aged 18 to 24 who have accessed LLBD smoking cessation services to set a quit date and persevere with quitting four weeks later.

Where appropriate, LLBD should consider how the flexibility of the service can be increased for example through extended access to NRT, provision of e-cigarettes, and increased flexibility on appointments and quit dates.

LLBD should consider working with relevant colleagues to promote their app as this may appeal to and be effective for some smokers including those in the younger age groups.

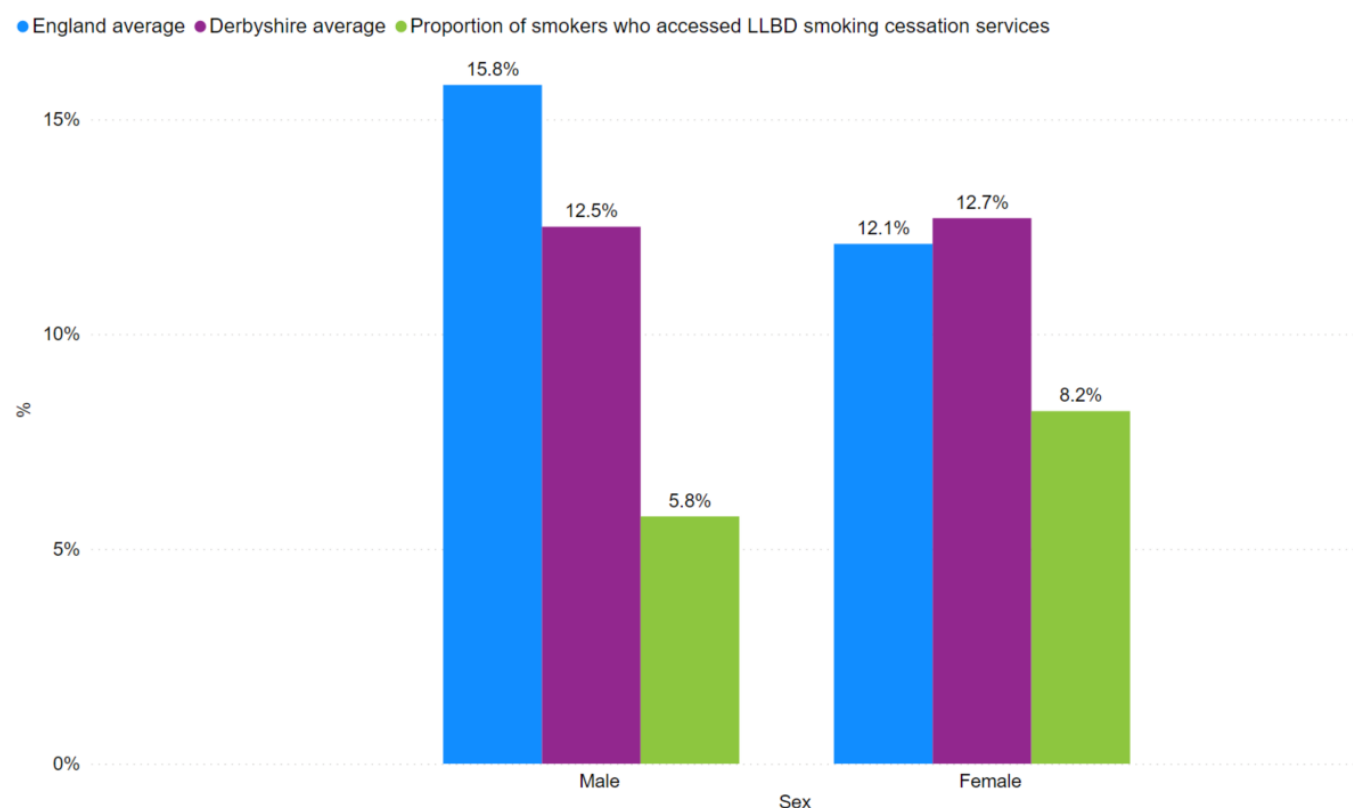
## 4.5 Sex

Rates of smoking differ by sex. In addition, differences have been observed in smoking behaviour (e.g., age of smoking initiation, number of cigarettes per day) between men and women (Peters et al, 2014). There is evidence that hazards of prolonged smoking are considerably larger for women than for men (Huxley & Woodward, 2011; Peters et al, 2013).

Using data from the 2019 Annual Population Survey (APS), 15.8% of males over the age of 18 in England smoke which is statistically worse than the national average of 13.9%. 12.1% of females over the age of 18 in England smoke which is statistically better than the national average of 13.9%. In Derbyshire, there is a much more even split between males and females. 12.5% (n=39249) of males over the age of 18 who live in Derbyshire smoke and 12.7% (n=42287) of females over the age of 18 who live in Derbyshire smoke. Both these are statistically similar to the England average of 13.9%, and to the Derbyshire average of 12.6%.

There is some variation between the proportion of male and female smokers who accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and 31<sup>st</sup> March 2021. Of the estimated 39,249 males over the age of 18 in Derbyshire who smoked, 5.8% (n=2270) accessed the stop smoking service. Of the estimated 42,287 females over the age of 18 in Derbyshire who smoked, 8.2% (n=3471) accessed the stop smoking service. This indicates that female smokers were more likely to access the service, despite their being a similar proportion of smoking males and females in Derbyshire (Figure 12).

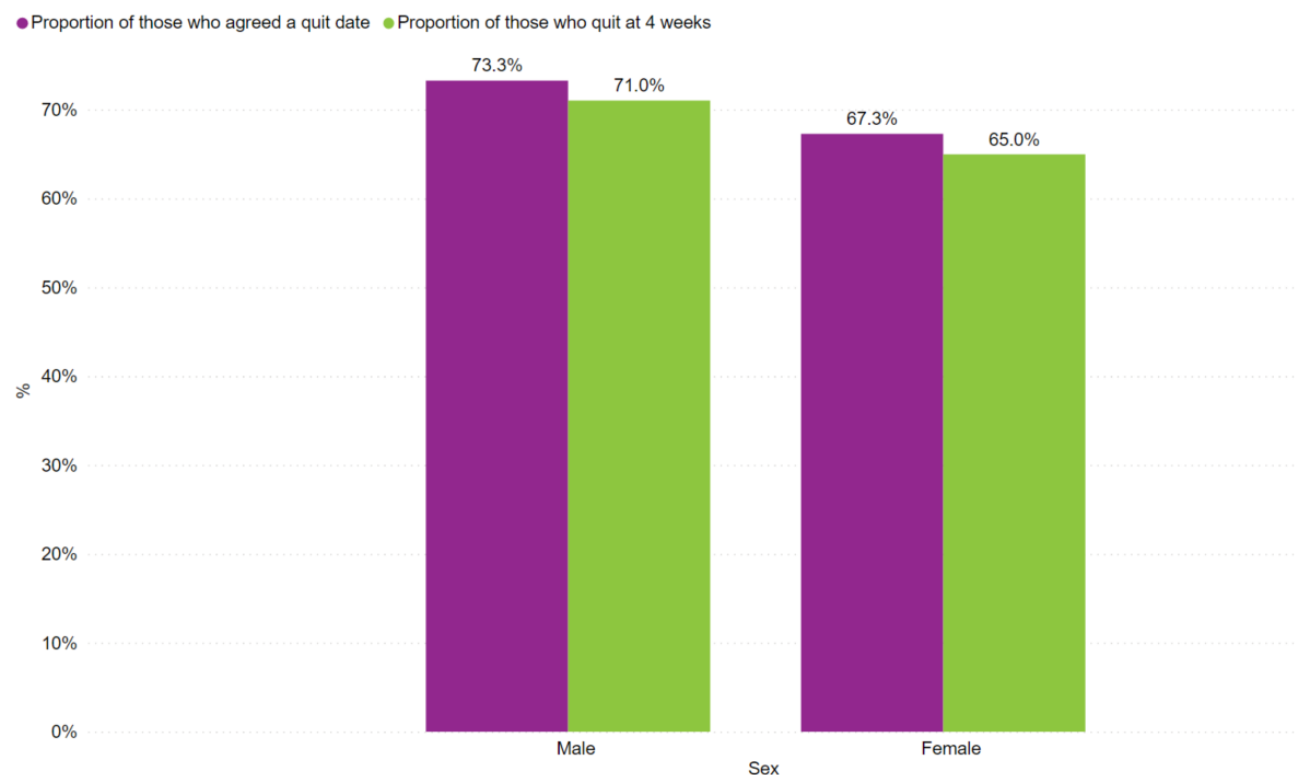
Figure 12: Proportion of population smoke by sex in England and Derbyshire, compared with the proportion of the 2019-2021 cohort who accessed LLBD smoking cessation services



Of those who accessed the service, there is variation between the sexes on proportions who agreed a quit date. Of the males who accessed the service, 73.3% (95% CI: 71.4% - 75.0%) agreed a quit date (1663 out of 2270). Of females who accessed the service, 67.3% (95% CI: 65.7% - 68.8%) agreed a quit date (2335 out of 3471) (Figure 13).

Of the males who agreed a quit date, 71.0% (95% CI: 68.8% - 73.1%) had quit smoking four weeks later (1181 out of 1663). Of the females who agreed a quit date, 65.0% (95% CI: 63.0% - 66.9%) had quit smoking after four weeks (1517 out of 2335).

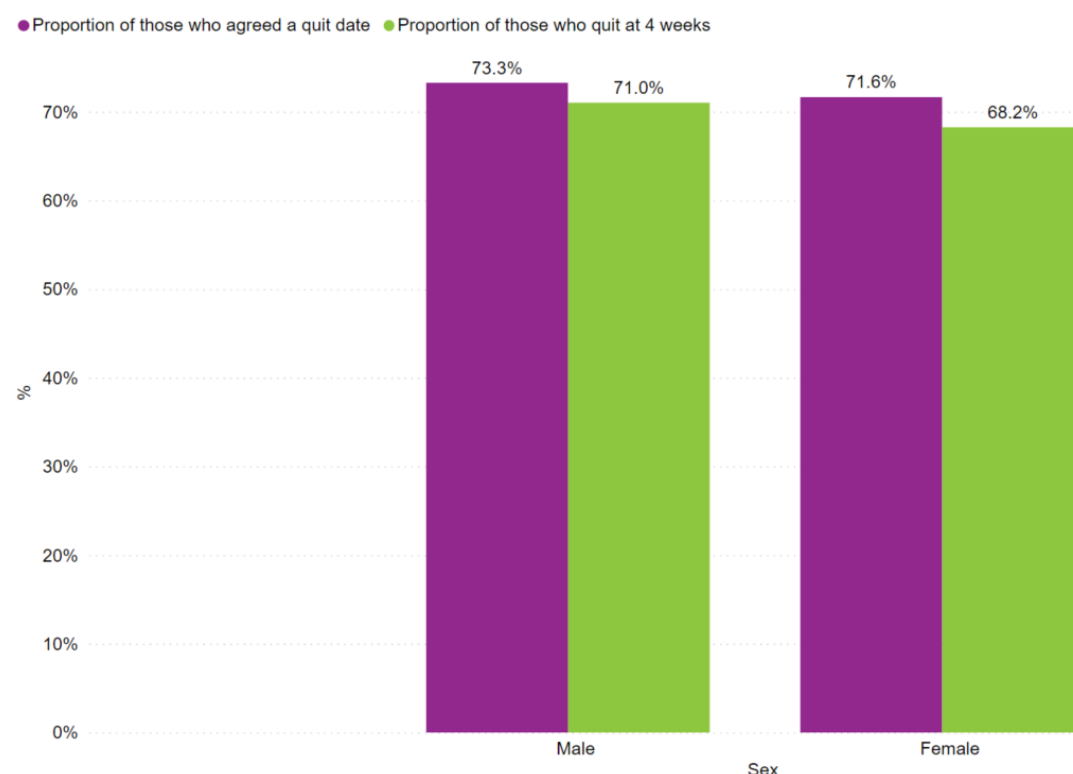
Figure 13: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion of those who quit four weeks after agreeing a quit date – Sex



A sub-analysis was conducted which excluded pregnant females from the female category (n=671). Of those who accessed the service, there is variation between the sexes on proportions who agreed a quit date. Of the males who accessed the service, 73.3% (95% CI: 71.4% - 75.0%) agreed a quit date (1663 out of 2270). Of non-pregnant females who accessed the service, 71.6% (95% CI: 69.9% - 73.3%) agreed a quit date (2006 out of 2800) (Figure 14).

Of the males who agreed a quit date, 71.0% (95% CI: 68.8% - 73.1%) had quit smoking four weeks later (1181 out of 1663). Of the non-pregnant females who agreed a quit date, 68.2% (66.2% - 70.2%) had quit smoking after four weeks (95% CI: 1369 out of 2006) (Figure 14).

Figure 14: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion of those who quit four weeks after agreeing a quit date – Sex (excluding pregnant women)



Excluding pregnant women from the female category showed there was an increase in the proportion of females who agreed a quit date, from 67.3% (95% CI: 65.7% - 68.8%) to 71.6% (95% CI: 69.9% - 73.3%). There was also an increase in the proportion of females who quit smoking 4 weeks after setting a quit date, from 65.0% (95% CI: 63.0% - 66.9%) to 68.2% (85% CI: 66.2% - 70.2%).

### Limitations

59 people over the age of 18 who accessed the service did not specify their sex or had missing information.

### Discussion

This analysis suggests that male smokers in Derbyshire are accessing the LLBD stop smoking service proportionately less than females (figure 12). LLBD should explore opportunities to promote the service to male smokers and increase their access to it.

Figure 13 shows that males are significantly more likely than females to agree a quit date and quit smoking four weeks later. This is consistent with previous literature on smoking cessation services which have found in a given attempt, women have more difficulty quitting smoking than men (Smith et al, 2016). Figure 14 shows that once pregnant females are removed from the analysis, the differences in outcomes are narrowed significantly. In addressing inequities of outcomes from the service by sex, LLBD should focus on females who are pregnant. This group are considered in more detail in section 4.6.

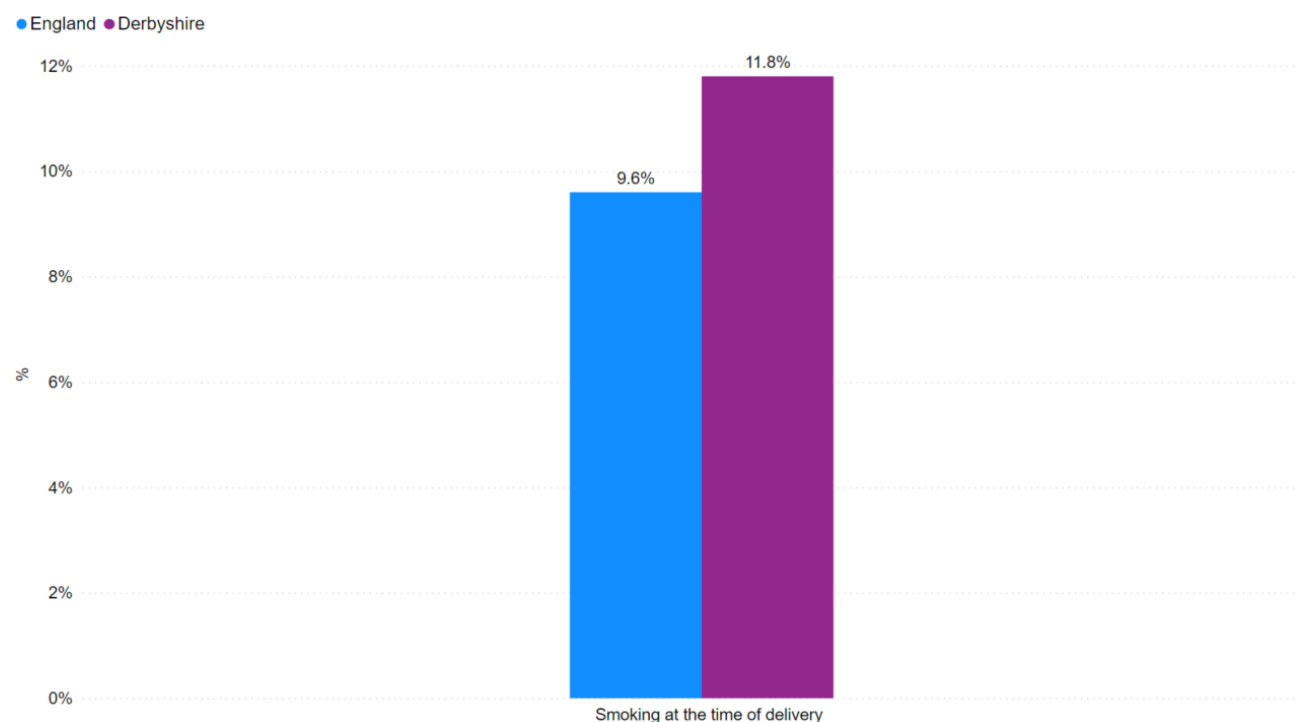
## 4.6 Pregnancy

Smoking during pregnancy is harmful to the mother and unborn baby and is a risk factor for a range of negative outcomes including miscarriage and stillbirth (Marufu et al, 2015; McDonnell & Regan, 2019).

The percentage of women in England who are known to be smokers during pregnancy has been decreasing over time. In 2006/07, 15.8% of women were smokers at the time of delivery and this decreased to 9.1% in quarter one 2021/22 (NHS Digital, 2021). This is still above the national ambition for a prevalence of 6% or less in this group by the end of 2022 (DHSC, 2017).

11.8% of pregnant women in Derbyshire were smoking at the time of delivery in 2020/21 (NHS Digital, 2021). This is significantly worse than the national average of 9.6% (Figure 15). There is limited variation in the proportion of women smoking at the time of delivery across the Derbyshire districts according to estimates. 11.9% of mothers are smoking at the time of delivery in each Derbyshire district, with the exception of High Peak where 11.4% of mothers are smoking at the time of delivery.

Figure 15: Proportion of mothers who are smoking at the time of delivery



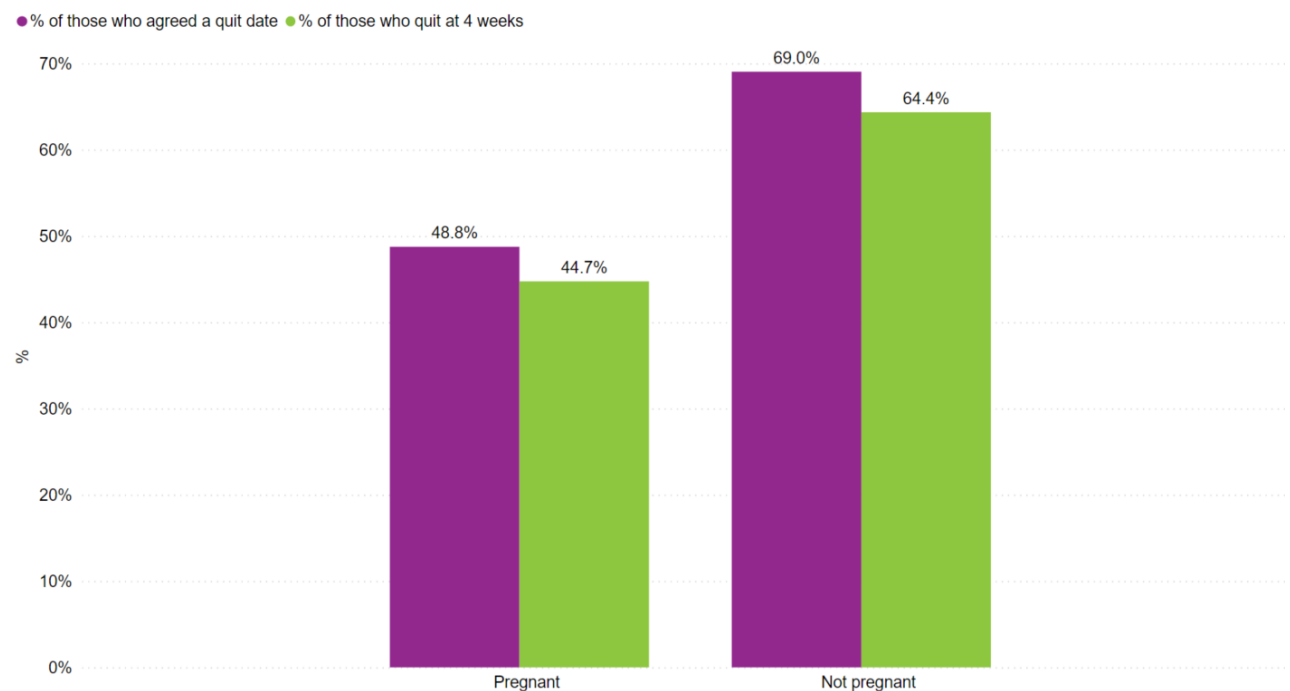
The number of pregnant women is not available at an Upper Tier Local Authority (UTLA) level. Nor is data on the number of pregnant women who smoke. The absence of these pieces of information means we cannot calculate an appropriate numerator and denominator required to determine how equitably pregnant and non-pregnant access LLBD smoking cessation services.

Of the 1905 females between the age of 18 and 45 inclusive who accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and 31<sup>st</sup> March 2021, 35.2% (n=683) were pregnant. 63.5% (n=1231) were not pregnant and 24 (1.2%) had no pregnancy status recorded.



Of the women of this age who accessed the service, 48.8% of them who were pregnant (333 out of 683) agreed a quit date and 69.0% (850 out of 1231) who were not pregnant agreed a quit date. Of those who agreed a quit date, 44.7% (149 out of 333) of pregnant women had quit smoking four weeks later and 64.4% (547 out of 850) of non-pregnant women had quit smoking four weeks later (Figure 16).

Figure 16: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Pregnancy



No sub-analysis for pregnancy was conducted.

### Limitations

The locally captured LLBD smoking cessation services do not specify at what stage of pregnancy women are smoking. For our context, we used the women smoking at time of delivery.

### Discussion

While we cannot say how equitable the access is for pregnant and non-pregnant smokers, there appears to be a marked difference in the proportion of pregnant and non-pregnant women of the same age who, once they have accessed the service, agree a quit date and subsequently quit smoking four weeks after setting a quit date.

Significant work is already in progress within Derby and Derbyshire to reduce levels of smoking in this cohort. This includes the development of an in-house stop smoking service for pregnant women (including the continuation of a champion midwife at Chesterfield and Derby hospitals) and further planned joint working with maternity services. Live Life Better Derbyshire support women up to a year after birth; support is also offered to partners and friends/family. A pathway document has been developed and implemented at both Chesterfield and Derby hospitals.

LLBD should consider other opportunities to improve outcomes from the stop smoking service for pregnant women. This should include consideration of the role of e-cigarettes and provision of incentives.

LLBD should consider the inclusivity of the stop smoking service delivery and ensure all efforts are made that all interactions with clients are non-judgmental.

## 4.7 Sexual orientation

People who identify as gay, lesbian or bisexual are more likely to be smokers than heterosexual people (Davies et al, 2020). The Office of National Statistics compared smoking prevalence between sexual identities in England. They estimated the odds of smoking is 1.6 times higher in people who identify as gay or lesbian than those who identify as heterosexual / straight (ONS, 2018). The same odds ratio (1.6) was estimated for people who identify as bisexual.

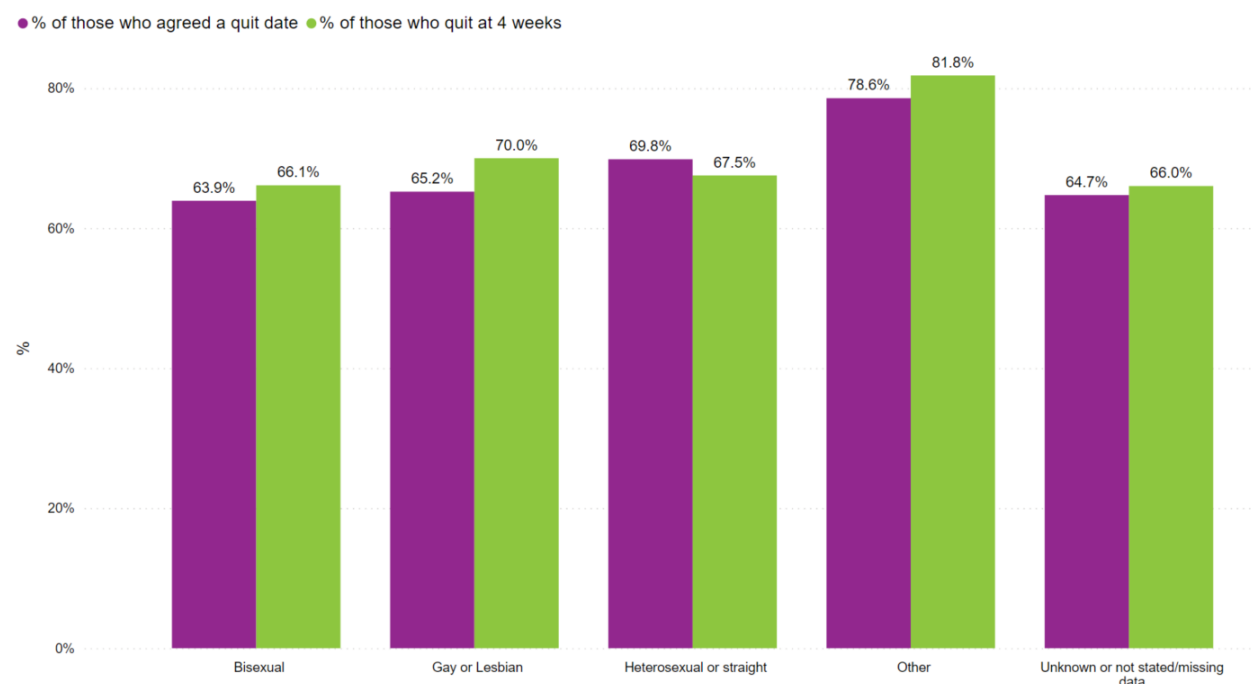
The majority of people aged 18 and over who accessed LLBD smoking cessation services identified as heterosexual or straight; 5310 out of 5800 people aged 18 and over accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and 31<sup>st</sup> March 2021.

- 1.7% (n=97) identified as Bisexual
- 2.4% (n=138) identified as Gay or Lesbian
- 91.6% (n=5310) identified as Heterosexual or Straight
- 0.2% (n=14) identified as Other
- 4.2% (n=241) were Unknown, did not state their sexual orientation or had missing data

The number of people who identify as bisexual, gay or lesbian, heterosexual or straight, identify as an 'other' sexual identity is not available at a UTLA level. Likewise, data on the number of people in these sexual orientation categories who smoke is not available at a UTLA level. The absence of this information means we cannot calculate an appropriate numerator and denominator required to determine how equitably those of different sexual orientations access LLBD smoking cessation services.

Figure 17 shows the proportion of people in each sexual orientation group who agreed a quit date and had managed to quit smoking four weeks after setting their quit date. It is important to keep in mind the absolute numbers (set out above) when interpreting this chart.

Figure 17: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Sexual orientation



### Limitations

The main limitation of this section is that 91.6% people (5310 out of 5800) who accessed LLBD smoking cessation services identified as being heterosexual or straight. This makes it difficult to determine if there is genuine variation between the proportion of people who set a quit date and subsequently quit smoking four weeks later based on their sexual orientation. The above results should be interpreted with extreme caution as most of the proportions are based on small numbers.

The sub-analysis was not presented as it would have either been a further analysis on the significant majority of the overall cohort (the 91.6% of people identifying as straight or heterosexual) or be based on very small numbers in the other categories.

The sexual orientation was unknown, not stated, or missing for 4.2% (241) users of the service.

### Discussion

The limitations of the available data mean it is not possible to estimate how sexual orientation impacts equity of access to the LLBD stop smoking service.

The small numbers of users of the service who identify as anything other than straight or heterosexual mean it is not possible to take any meaningful findings from the analysis of outcomes from the service.

LLBD should consider the inclusivity of the stop smoking service delivery and ensure all efforts are made that all interactions with clients are non-judgmental.

LLBD should consider if it is possible to improve the completeness of data for this aspect of their recording. Information was unknown, not stated, or missing for 4.2% (241) of users of the service during the time period.

## 4.8 Ethnicity

In 2019, 13.9% of adults in England were smokers (ONS, 2020). The percentage of adult smokers was higher than average in the Mixed (19.5%) and White (14.4%) ethnic groups, whereas it was lower than average in the Chinese (6.7%), Asian (8.3%) and Black (9.7%) ethnic groups (ONS, 2020). Individuals born in Poland had the highest proportion of current smokers (24.5%) (ONS, 2020).

Figures produced by the Office for National Statistics (ONS, 2020) as part of the Race Disparity Audit<sup>5</sup> estimate that, in Derbyshire in 2019:

- 95.8% of the population (n=768991) were White British
- 1.3% of the population (n=10682) were White Other
- 1.1% of the population (n=9014) were Mixed
- 1.2% of the population (n=10000) were Asian
- 0.4% of the population (n=2983) were Black
- 0.1% of the population (n=1023) were any other ethnic group

The 2019 ethnic breakdown for England shows quite a difference to the Derbyshire population:

- 79.1% of the population (n=44539011) were White British
- 4.7% of the population (n=2668646) were White Other
- 2.8% of the population (n=1602611) were Mixed
- 8.4% of the population (n=4710209) were Asian
- 3.8% of the population (n=2133884) were Black
- 1.1% of the population (n=632600) were any other ethnic group

5574 out of 5800 people aged 18 and over who accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and March 1<sup>st</sup> 2021 were 'White'. Asian/Chinese clients had the lowest proportion of service access, accounting for 0.4% of all episodes of access (n=25)<sup>6</sup>.

- 0.4% (n=25) were Asian/Chinese<sup>6</sup>
- 0.6% (n=33) were Black
- 0.9% (n=52) were Mixed
- 2.0% (n=116) were Unknown, not stated or had missing data
- 96.1% (n=5574) were White

The number of people by ethnic group is not available at an UTLA level. Likewise, data on the number of people in different ethnic groups who smoke is not available at a UTLA level. The absence of these pieces of information means we cannot calculate an appropriate numerator and denominator required to determine how equitably those from different ethnic groups access LLBD smoking cessation services.

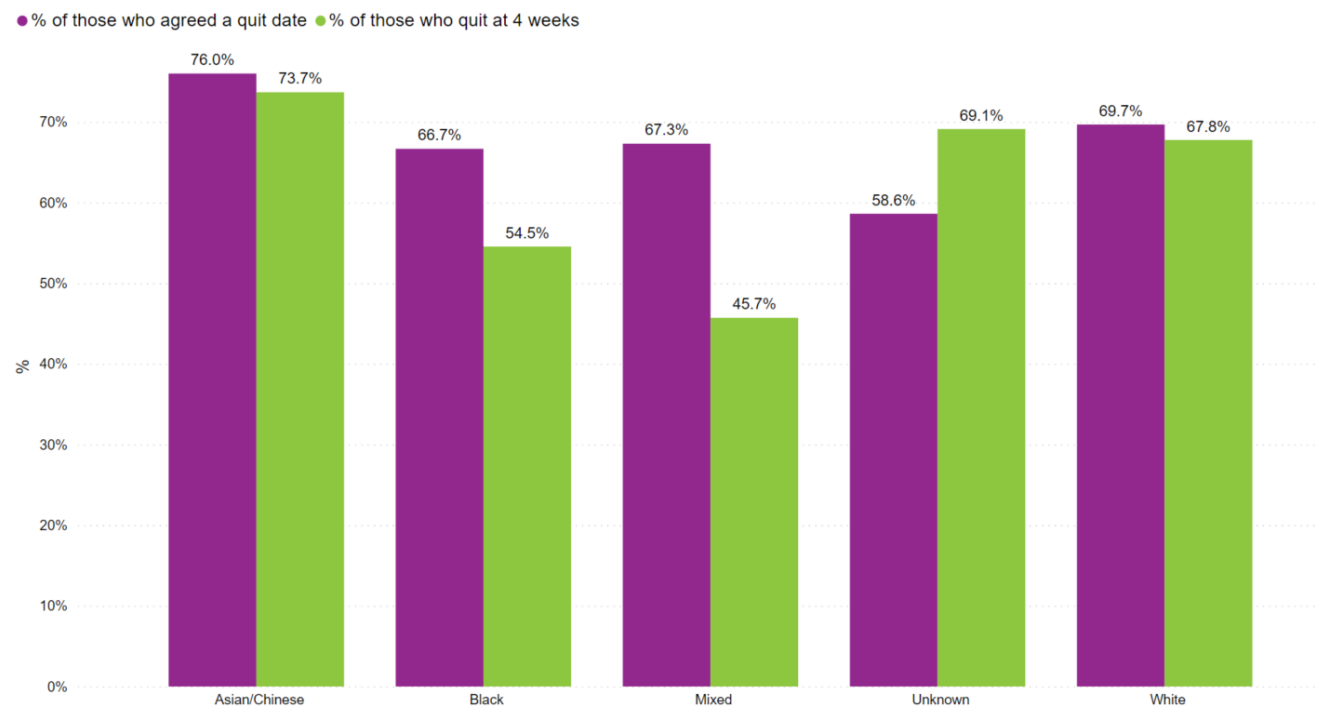
Figure 18 shows the proportion of each ethnic group who agreed a quit date and had managed to quit smoking four weeks after setting their quit date. It is important to bear in mind the absolute numbers (set out above) when interpreting this chart.

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<sup>5</sup> This data was not subject to formal quality assurance by the Office for National Statistics

<sup>6</sup> Asian and Chinese clients have been combined due to very small numbers

Figure 18: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Ethnic group



### Limitations

The main limitation of this section is that 96.1% (n=5574) of people who accessed LLBD smoking cessation services between April 2019 and March 2021 were White. This makes it difficult to determine if there are issues relating to equity of access as well as variation between the proportion of people who set a quit date and subsequently quit smoking four weeks later based on their ethnic group. The above results should be interpreted with extreme caution as most of the proportions are based on very small numbers.

### Discussion

The limitations of the available data mean it is not possible to estimate how ethnicity impacts equity of access to the LLBD stop smoking service.

The small numbers of users of the service who identify as anything other than White mean we cannot take any meaningful findings from the analysis of outcomes from the service.

People from some ethnic groups may be more likely to use alternative forms of tobacco, for example shisha pipes and chewed or sucked tobacco products (ASH, 2019). Stop smoking service training should include training for advisors around this.

LLBD should consider the inclusivity of the stop smoking service delivery and ensure all efforts are made that all interactions with clients are non-judgmental.

As part of a planned forthcoming review of the provided materials and resources, LLBD should consider the accessibility of these with particular consideration to language and any relevant cultural issues.

## 4.9 Mental health

Smoking rates among people with a mental health condition are significantly higher than in the general population (ASH, 2019). There is a strong association between smoking and mental health conditions – this association becomes stronger relative to the severity of the mental health condition (ASH, 2019).

People with poor mental health die on average 10 to 20 years earlier than the general population – smoking is the biggest cause of this life expectancy gap (PHE, 2020). Reducing smoking among people with mental illness has been identified as the single most effective action for reducing this gap in life expectancy (WHO, 2021).

Of the 5800 people aged 18 and over who accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and March 1<sup>st</sup> 2021:

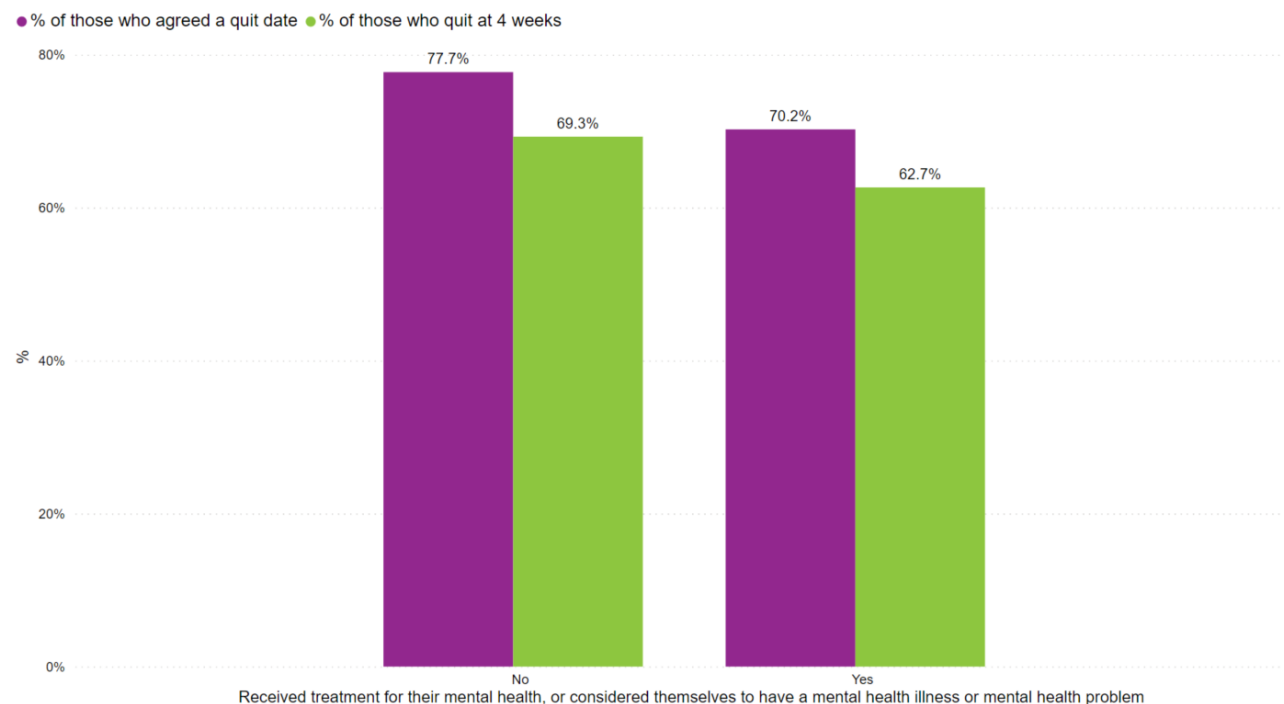
- 22.0% (n=1277) had received treatment for mental health, or considered themselves to have a mental health illness or mental health problem
- 65.9% (n=3821) had not received treatment for mental health, or did not consider themselves to have a mental health illness or mental health problem
- 12.1% (n=702) did not provide information on whether they had received treatment for mental health, or considered themselves to have a mental health illness or mental health problem

The definition used by LLBD is broad and could include people who had any kind of mental health problem of any severity, diagnosed or otherwise. It is not possible to accurately estimate the number of people in Derbyshire who meet this definition or the number of those people who smoke. The absence of these pieces of information means we cannot calculate an appropriate numerator and denominator required to determine how mental health impacts on equity of access to LLBD smoking cessation services.

Figure 19 shows the proportion of those who have and have not received treatment for their mental health, or considered themselves to have a mental health illness or mental health problem who have accessed the service, agreed a quit date and managed to quit smoking four weeks later.

The chart demonstrates that people with a mental health illness or problem were less likely to agree a quit date and less likely to quit at four weeks than people without a mental health illness or problem.

Figure 19: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Mental Health (received treatment for their mental health, or considered themselves to have a mental health illness or mental



A sub-analysis of whether the client has received treatment for their mental health, or considered themselves to have a mental health illness or mental health problem by age and sex was also conducted. This was to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix table A12 (Mental Health by age group) and A13 (Mental Health by sex).

18 to 24 year-olds who had received treatment for their mental health, or considered themselves to have a mental health illness or mental health problem had relatively low levels of setting quit dates (58.6%, 41 out of 70) and quitting four weeks later (51.2%, 21 out of 41).

Males with a mental health illness or problem were more likely than females to set quit dates (72.4% vs 68.8%) and quit at four weeks (65.9% vs 60.2%).

### Limitations

The main limitation of this section is that we have not been able to determine how many people over the age of 18 who live in Derbyshire have and have not received treatment for their mental health or considered themselves to have a mental health illness or mental health problem. Likewise, we have not been able to determine how many of these people smoke. This means it has not been possible to determine how equitably people who have and have not considered themselves to have a mental health illness or mental health problem access LLBD smoking cessation services.

### Discussion

Due to the limitations of the available data, it is not possible for us to accurately estimate the impact of mental health on equity of access to LLBD stop smoking services.



These results suggest that more work needs to be done to support people who receive support for mental health services or considered themselves to have a mental illness or mental health problem in their attempts to stop smoking. This is a broad group as at least 22% (1277) of users of the service reported this with a sizeable number (12.1%, 702) not providing a response.

A tobacco dependency treatment offer is being developed for inpatient and outpatient mental health services in Derby and Derbyshire.

Where appropriate, LLBD should consider how the flexibility of the service can be increased to improve outcomes for people in this group. This could include, for example, extended access to NRT, provision of e-cigarettes, and increased flexibility on appointments (attending appointments with a support worker, chaperone or friend if requested) and quit dates.

LLBD should consider the inclusivity of the stop smoking service delivery and ensure all efforts are made that all interactions with clients are non-judgmental.

## 4.10 Disability

Adults in the UK with disabilities are more likely to smoke than their peers (Emerson, 2018). ONS estimate that people whose activity is limited a lot through disability are twice as likely to smoke as those whose activity is not limited at all (ONS, 2018).

Recent estimates suggest approximately 22% of the UK population have a disability (DWP, 2021). The number of people with a disability in Derbyshire is not routinely collected data, but if we apply this national average to the most recent mid-year population estimate for Derbyshire (807,183) then we can estimate there are approximately 177,580 people with a disability living in Derbyshire.

The lack of data makes it challenging to estimate how equitable the uptake of this service is among people with and without a disability. Using the national estimate of the number of people with a disability, and recognising the increased prevalence of smoking in this population, we would expect more than 22% of people using the Derbyshire stop smoking service to have a disability.

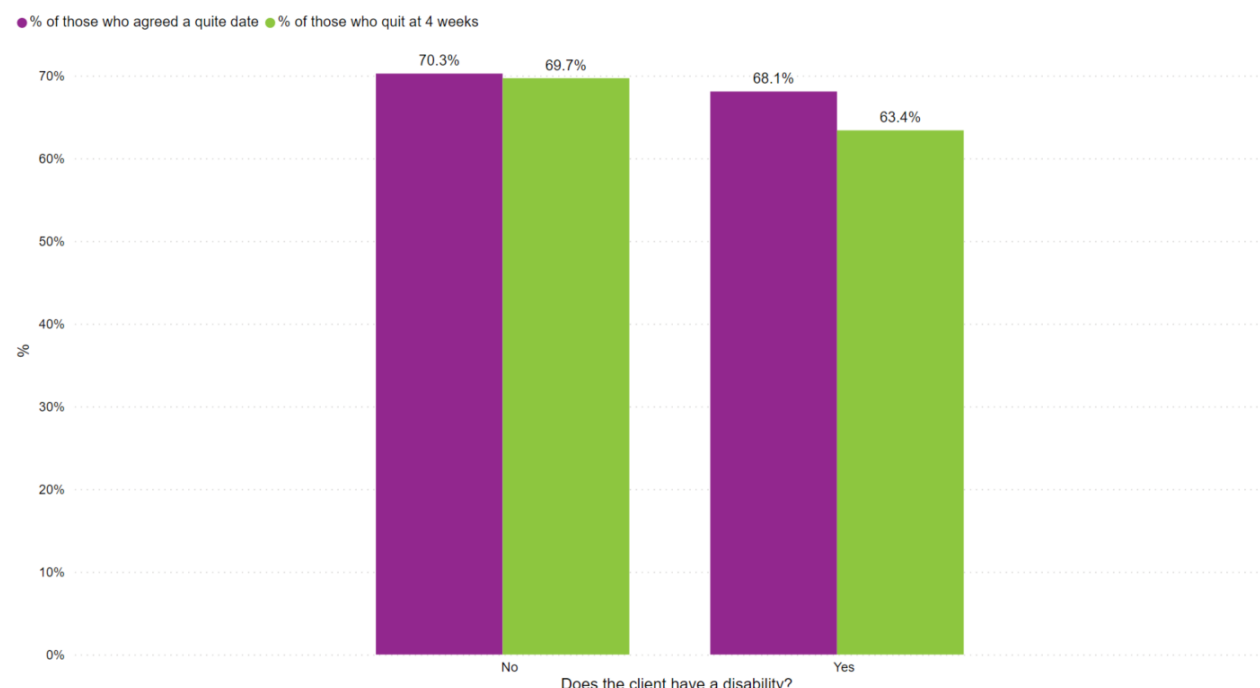
Of the 5800 people aged 18 and over who accessed LLBD smoking cessation services between 1<sup>st</sup> April 2019 and March 1<sup>st</sup> 2021:

- 23.4% (n=1360) had a disability
- 70.9% (n=4115) did not have a disability
- 5.6% (n=325) had no data on whether they had a disability or not

Of the 1360 people over the age of 18 in Derbyshire with a disability who accessed LLBD smoking cessation services, 68.1% of those set a quit date (926 out of 1360). Of those who set a quit date, 63.4% managed to quit smoking four weeks later (587 out of 926) (Figure 21).

Of the 4115 people over the age of 18 in Derbyshire who did not have a disability who accessed LLBD smoking cessation services, 70.3% of those set a quit date (2891 out of 4115). Of those who set a quit date, 69.7% managed to quit smoking four weeks later (2015 out of 2891) (Figure 20).

Figure 20: Proportion of the 2019-2021 cohort who agreed a quit date and the proportion who quit four weeks after agreeing a quit date – Disability (does the client have a disability?)



A sub-analysis of whether the client had a disability by age and sex was also conducted. This was to determine whether there were significant differences in the proportion of those who agreed a quit date and subsequently quit smoking four weeks later. The main differences noted are detailed below, with a full breakdown available in appendix tables A14 (Disability status by age group) and A15 (Disability status by sex).

47.1% of 18 to 24 year-olds who had a disability agreed a quit date once they accessed the service (24 out of 51). 74.2% of 65+ year-olds who had a disability agreed a quit date once they accessed the service (173 out of 233).

33.3% of 18 to 24-year-olds who had a disability quit smoking four weeks after setting a quit date (8 out of 24). 69.4% of 65+ year-olds who had a disability quit smoking four weeks after setting a quit date (120 out of 173).

71.0% of males who had a disability agreed a quit date once they accessed the service (431 out of 607). 65.7% of females who had a disability agreed a quit date once they accessed the service (494 out of 752).

65.2% of males who had a disability quit smoking four weeks after setting a quit date (281 out of 431). 61.7% of females who had a disability quit smoking four weeks after setting a quit date (305 out of 494).

### Limitations

Because it was not possible to determine the number of people with a disability in Derbyshire who smoke, the equity of service access is for those with and without a disability was not estimated.

The data collected by LLBD asks “does the client have a disability?”. This is a broad question and does not take in to account different types of disability, or the severity of disabilities. Not having as detailed data could also skew the results presented in Figure 21.

### Discussion

Although the impact of disability on equity of access to the LLBD stop smoking service was not estimated, the proportion of people accessing the service who reported to have a disability (23.4%) was similar to the national estimates for the number of people with a disability (22%).

Literature suggests possible explanations for poorer smoking cessation outcomes among people with a disability including smoking by caregivers (Havercamp et al, 2019) plus depression and anxiety (Le Faou et al, 2020). Researchers in the United States investigated how to create a smoking cessation programme for people with disabilities (Pomeranz, 2014). Their study demonstrated use of community-based participatory research involving potential service users, stakeholders, and researchers were useful in creating a programme for people with disabilities.

Figure 20 shows that disability status appears to have an impact on success quitting smoking at four weeks through the LLBD service. LLBD should consider how advisors can explore issues of disability and how people perceive this may impact on their ability to quit.

LLBD should consider issues of equity for people with a disability as the service moves away from a fully remote offer. This could include ensuring reasonable adjustments are offered for appointments.

## 5. Conclusion

This audit has used data from two years of LLBD stop smoking service provision to consider the equity of access and outcomes for users of the service.

The analysis found some inequalities in access, including in relation to age and sex. It is estimated that smokers who live in the most deprived areas of Derbyshire access the service proportionately more than those who live in the least deprived areas. This is consistent with published literature. Limitations in the availability of data meant not all the desired analysis on equity of access was possible.

Groups with poorer outcomes from the service (setting of quit dates and quitting smoking four weeks later) include: people who have never worked or are long term unemployed; people who work in routine and manual occupations; full time students; home carers; people who live in the most deprived areas; people aged between 18 to 24 years; and pregnant women.

High level recommendations have been made in each section in response to the analysis findings. Some of recommendations relate to more than one group, these are set out below along with some overall recommendations for the service to consider.

- An action plan should be developed to provide detail on how and when the recommendations will be progressed.
- The action plan should include plans to review progress and assess impact of the changes made. Research has shown that few HEAs complete the audit cycle resulting in limited evidence of the effectiveness of these tools (van Daalen et al, 2021).
- For groups with relatively lower rates of setting and achieving quits, a more flexible approach should be explored. This could include extended access to NRT and behavioral support, a potential role for e-cigarettes, and opportunities to increase flexibility of appointments and quit dates.
- In forthcoming reviews of staff and client facing materials, LLBD should consider what changes could be made that might positively impact understanding, engagement, and outcomes.
- LLBD should consider how they can take a settings-based approach to delivering stop smoking services. This could include working with employers or community organisations to provide a service in workplaces or community centres.
- LLBD should further explore how best to share experience and expertise among advisors, for example through team-based reflective practice and discussion of themes.
- LLBD should consider the inclusivity of the stop smoking service delivery and ensure all efforts are made that all interactions with clients are non-judgmental.
- LLBD should consider how to compare and benchmark the Derbyshire stop smoking service against neighbouring services and national performance. This can provide further opportunities for insight, mutual learning, and improvement.
- LLBD should make efforts to maximise the completeness of the data collected on users of the service. This could help advisors better understand the individual circumstances

of clients and will improve the ability of the service to undertake future analysis and audit.

- LLBD should review consistency between national data and their local collection to see if changes in categories can be made. This will help the service ensure use of current terminology and would be valuable when this audit is revisited or other comparative analysis is undertaken.

## 6. Limitations

The service data used in this analysis, particularly for the first part of the period, are already relatively dated. In addition, there have been significant unforeseen changes to service delivery due to the Covid-19 pandemic response. This will have impacted access to and outcomes from the service within the audit time period.

Limited availability of data meant it was not possible to estimate prevalence of certain populations in the country and/or the levels of smoking in those groups. This meant the equity of access to the stop smoking service could not be estimated for all the groups.

Consistency between categories used in local and national collections (for example occupation categories) meant it was difficult or not possible to compare the Derbyshire and England populations for all the desired analysis.

For some parts of the analysis, including ethnicity, the small numbers in some categories meant it was not possible to make robust findings about the equity of service outcomes.

## 7. Appendix

### Appendix A – Sub-analysis tables

**Table A1: Occupation/socioeconomic by age group**

Occupation/socioeconomic group: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Intermediate: 18-24	28	17	10	60.7	58.8
Intermediate: 25-34	102	64	40	62.7	62.5
Intermediate: 35-44	79	71	55	89.9	77.5
Intermediate: 45-54	87	75	49	86.2	65.3
Intermediate: 55-64	51	40	31	78.4	77.5
Intermediate: 65+	7	6	6	85.7	100.0
Managerial and professional: 18-24	33	20	12	60.6	60.0
Managerial and professional: 25-34	181	123	87	68.0	70.7
Managerial and professional: 35-44	160	121	87	75.6	71.9
Managerial and professional: 45-54	194	158	117	81.4	74.1
Managerial and professional: 55-64	103	85	68	82.5	80.0
Managerial and professional: 65+	5	5	4	100.0	80.0
Never worked and long term unemployment: 18-24	102	49	21	48.0	42.9
Never worked and long term unemployment: 25-34	320	180	92	56.3	51.1
Never worked and long term unemployment: 35-44	320	209	133	65.3	63.6
Never worked and long term unemployment: 45-54	399	271	172	67.9	63.5
Never worked and long term unemployment: 55-64	382	272	185	71.2	68.0
Never worked and long term unemployment: 65+	19	10	5	52.6	50.0
Routine and manual: 18-24	153	84	41	54.9	48.8
Routine and manual: 25-34	543	340	204	62.6	60.0
Routine and manual: 35-44	386	274	193	71.0	70.4
Routine and manual: 45-54	468	353	258	75.4	73.1
Routine and manual: 55-64	269	198	152	73.6	76.8
Routine and manual: 65+	31	24	18	77.4	75.0



**Table A2: Occupation/socioeconomic by sex**

Occupation/socioeconomic group: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Intermediate: Male	84	67	51	79.8	76.1
Managerial and professional: Male	292	237	184	81.2	77.6
Never worked and long term unemployed: Male	648	435	282	67.1	64.8
Routine and Manual: Male	760	557	404	73.3	72.5
Intermediate: Female	270	206	140	76.3	68.0
Managerial and professional: Female	384	275	191	71.6	69.5
Never worked and long term unemployed: Female	893	555	325	62.2	58.6
Routine and Manual: Female	1090	716	462	65.7	64.5

**Table A3: Deprivation (IMD Quintile) by age group**

IMD Quintile: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
IMD 1: 18-24	121	55	25	45.5	45.5
IMD 1: 25-34	351	202	118	57.5	58.4
IMD 1: 35-44	275	185	128	67.3	69.2
IMD 1: 45-54	265	184	138	69.4	75.0
IMD 1: 55-64	269	200	147	74.3	73.5
IMD 1: 65+	152	107	67	70.4	62.6
IMD 2: 18-24	119	64	34	53.8	53.1
IMD 2: 25-34	352	210	122	59.7	58.1
IMD 2: 35-44	269	181	117	67.3	64.6
IMD 2: 45-54	354	264	175	74.6	66.3
IMD 2: 55-64	260	187	148	71.9	79.1
IMD 2: 65+	149	111	78	74.5	70.3
IMD 3: 18-24	69	44	24	63.8	54.5
IMD 3: 25-34	323	216	134	66.9	62.0
IMD 3: 35-44	268	204	137	76.1	67.2
IMD 3: 45-54	284	219	156	77.1	71.2
IMD 3: 55-64	226	163	106	72.1	65.0
IMD 3: 65+	153	110	85	71.9	77.3
IMD 4: 18-24	55	33	15	60.0	45.5
IMD 4: 25-34	176	104	59	59.1	56.7
IMD 4: 35-44	167	127	90	76.0	70.9
IMD 4: 45-54	222	175	120	78.8	68.6
IMD 4: 55-64	175	146	106	83.4	72.6
IMD 4: 65+	122	90	67	73.8	74.4
IMD 5: 18-24	21	12	7	57.1	58.3
IMD 5: 25-34	136	89	61	65.4	68.5
IMD 5: 35-44	93	73	49	78.5	67.1
IMD 5: 45-54	128	101	79	78.9	78.2
IMD 5: 55-64	106	80	60	75.5	75.0
IMD 5: 65+	66	51	43	77.3	84.3

**Table A4: Deprivation (IMD Quintile) by sex**

IMD Quintile: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
IMD 1: Male	523	358	259	68.5	72.3
IMD 2: Male	587	413	281	70.4	68.0
IMD 3: Male	526	402	274	76.4	68.2
IMD 4: Male	375	294	209	78.4	71.1
IMD 5: Male	251	190	155	75.7	81.6
IMD 1: Female	909	574	363	63.1	63.2
IMD 2: Female	916	604	393	65.9	65.1
IMD 3: Female	797	554	368	69.5	66.4
IMD 4: Female	542	381	209	70.3	54.9
IMD 5: Female	299	216	144	72.2	66.7

*Table A5: Area of Derbyshire (district) by age group*

Age group		Area of Derbyshire (district)	
Age group		Area of Derbyshire (district)	Area of Derbyshire (district)
0-4		Area of Derbyshire (district)	Area of Derbyshire (district)
5-9		Area of Derbyshire (district)	Area of Derbyshire (district)
10-14		Area of Derbyshire (district)	Area of Derbyshire (district)
15-19		Area of Derbyshire (district)	Area of Derbyshire (district)
20-24		Area of Derbyshire (district)	Area of Derbyshire (district)
25-29		Area of Derbyshire (district)	Area of Derbyshire (district)
30-34		Area of Derbyshire (district)	Area of Derbyshire (district)
35-39		Area of Derbyshire (district)	Area of Derbyshire (district)
40-44		Area of Derbyshire (district)	Area of Derbyshire (district)
45-49		Area of Derbyshire (district)	Area of Derbyshire (district)
50-54		Area of Derbyshire (district)	Area of Derbyshire (district)
55-59		Area of Derbyshire (district)	Area of Derbyshire (district)
60-64		Area of Derbyshire (district)	Area of Derbyshire (district)
65-69		Area of Derbyshire (district)	Area of Derbyshire (district)
70-74		Area of Derbyshire (district)	Area of Derbyshire (district)
75-79		Area of Derbyshire (district)	Area of Derbyshire (district)
80-84		Area of Derbyshire (district)	Area of Derbyshire (district)
85-89		Area of Derbyshire (district)	Area of Derbyshire (district)
90-94		Area of Derbyshire (district)	Area of Derbyshire (district)
95-99		Area of Derbyshire (district)	Area of Derbyshire (district)
100+		Area of Derbyshire (district)	Area of Derbyshire (district)

District: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Amber Valley: 18-24	72	46	22	63.9	47.8
Amber Valley: 25-34	218	131	79	60.1	60.3
Amber Valley: 35-44	176	129	95	73.3	73.6
Amber Valley: 45-54	198	148	106	74.7	71.6
Amber Valley: 55-64	169	130	96	76.9	73.8
Amber Valley: 65+	91	56	41	61.5	73.2
Bolsover: 18-24	41	26	12	63.4	46.2
Bolsover: 25-34	154	95	56	61.7	58.9
Bolsover: 35-44	141	97	66	68.8	68.0
Bolsover: 45-54	167	122	92	73.1	75.4
Bolsover: 55-64	118	75	58	63.6	77.3
Bolsover: 65+	81	67	46	82.7	68.7
Chesterfield: 18-24	83	38	21	45.8	55.3
Chesterfield: 25-34	222	138	75	62.2	54.3
Chesterfield: 35-44	158	112	78	70.9	69.6
Chesterfield: 45-54	169	120	85	71.0	70.8
Chesterfield: 55-64	167	130	88	77.8	67.7
Chesterfield: 65+	95	61	36	64.2	59.0
Derbyshire Dales: 18-24	16	11	9	68.8	81.8
Derbyshire Dales: 25-34	64	39	23	60.9	59.0
Derbyshire Dales: 35-44	56	40	22	71.4	55.0
Derbyshire Dales: 45-54	75	62	53	82.7	85.5
Derbyshire Dales: 55-64	68	57	39	83.8	68.4
Derbyshire Dales: 65+	54	48	36	88.9	75.0
Erewash: 18-24	45	26	14	57.8	53.8
Erewash: 25-34	209	123	81	58.9	65.9
Erewash: 35-44	174	131	88	75.3	67.2
Erewash: 45-54	185	142	99	76.8	69.7
Erewash: 55-64	148	110	84	74.3	76.4
Erewash: 65+	103	74	56	71.8	75.7
High Peak: 18-24	39	18	9	46.2	50.0
High Peak: 25-34	131	79	50	60.3	63.3
High Peak: 35-44	111	80	49	72.1	61.3
High Peak: 45-54	127	92	62	72.4	67.4
High Peak: 55-64	133	101	77	75.9	76.2
High Peak: 65+	59	45	31	76.3	68.9
North East Derbyshire: 18-24	59	34	14	57.6	41.2
North East Derbyshire: 25-34	168	107	66	63.7	61.7
North East Derbyshire: 35-44	138	96	67	69.6	69.8
North East Derbyshire: 45-54	170	138	96	81.2	69.6
North East Derbyshire: 55-64	109	81	56	74.3	69.1
North East Derbyshire: 65+	90	68	54	75.6	79.4
South Derbyshire: 18-24	24	7	2	29.2	28.6
South Derbyshire: 25-34	159	99	60	62.3	60.6
South Derbyshire: 35-44	101	73	47	72.3	64.4
South Derbyshire: 45-54	148	107	66	72.3	61.7
South Derbyshire: 55-64	105	79	58	75.2	73.4
South Derbyshire: 65+	61	42	33	68.9	78.6

**Table A6: Area of Derbyshire (district) by sex**

District: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Amber Valley: Male	338	248	180	73.4	72.6
Bolsover: Male	290	208	149	71.7	71.6
Chesterfield: Male	326	233	159	71.5	68.2
Derbyshire Dales: Male	133	111	80	83.5	72.1
Erewash: Male	347	251	182	72.3	72.5
High Peak: Male	229	174	124	76.0	71.3
North East Derbyshire: Male	291	212	154	72.9	72.6
South Derbyshire: Male	261	186	124	71.3	66.7
Amber Valley: Female	586	392	259	66.9	66.1
Bolsover: Female	412	274	181	66.5	66.1
Chesterfield: Female	568	366	224	64.4	61.2
Derbyshire Dales: Female	200	146	102	73.0	69.9
Erewash: Female	516	354	239	68.6	67.5
High Peak: Female	371	241	154	65.0	63.9
North East Derbyshire: Female	443	312	199	70.4	63.8
South Derbyshire: Female	335	220	141	65.7	64.1

**Table A7: Age group by sex**

Age group: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
18-24: Male	65	35	20	53.8	57.1
25-34: Male	424	273	188	64.4	68.9
35-44: Male	476	360	245	75.6	68.1
45-54: Male	543	406	301	74.8	74.1
55-64: Male	458	367	269	80.1	73.3
65+: Male	304	222	158	73.0	71.2
18-24: Female	320	173	85	54.1	49.1
25-34: Female	921	554	307	60.2	55.4
35-44: Female	602	415	279	68.9	67.2
45-54: Female	710	536	366	75.5	68.3
55-64: Female	578	409	298	70.8	72.9
65+: Female	340	248	182	72.9	73.4



**Table A8: Sexual orientation by age group**

Sexual Orientation: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Bisexual: 18-24	18	8	4	44.4	50.0
Bisexual: 25-34	30	19	14	63.3	73.7
Bisexual: 35-44	26	17	10	65.4	58.8
Bisexual: 45-54	12	8	6	66.7	75.0
Bisexual: 55-64	10	9	6	90.0	66.7
Bisexual: 65+	1	1	1	100.0	100.0
Gay or Lesbian: 18-24	7	4	4	57.1	100.0
Gay or Lesbian: 25-34	50	30	15	60.0	50.0
Gay or Lesbian: 35-44	34	25	17	73.5	68.0
Gay or Lesbian: 45-54	32	19	15	59.4	78.9
Gay or Lesbian: 55-64	13	11	11	84.6	100.0
Gay or Lesbian: 65+	2	1	1	50.0	100.0
Heterosexual or straight: 18-24	348	187	93	53.7	49.7
Heterosexual or straight: 25-34	1227	757	454	61.7	60.0
Heterosexual or straight: 35-44	978	702	476	71.8	67.8
Heterosexual or straight: 45-54	1175	887	625	75.5	70.5
Heterosexual or straight: 55-64	967	725	531	75.0	73.2
Heterosexual or straight: 65+	615	451	326	73.3	72.3
Other: 18-24	1	0	0	0.0	NA
Other: 25-34	2	2	2	100.0	100.0
Other: 35-44	4	4	2	100.0	50.0
Other: 45-54	3	3	3	100.0	100.0
Other: 55-64	2	0	0	0.0	NA
Other: 65+	2	2	2	100.0	100.0
Unknow, not stated or had missing data: 18-24	17	9	4	52.9	44.4
Unknow, not stated or had missing data: 25-34	59	27	14	45.8	51.9
Unknow, not stated or had missing data: 35-44	43	31	23	72.1	74.2
Unknow, not stated or had missing data: 45-54	39	32	24	82.1	75.0
Unknow, not stated or had missing data: 55-64	53	39	26	73.6	66.7
Unknow, not stated or had missing data: 65+	30	18	12	60.0	66.7

**Table A9: Sexual orientation by sex**

Sexual Orientation: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Bisexual: Male	26	21	14	80.8	66.7
Gay or Lesbian: Male	77	49	32	63.6	65.3
Heterosexual or straight: Male	2084	1541	1097	73.9	71.2
Other: Male	8	6	5	75.0	83.3
Unknow, not stated or had missing data: Male	75	46	33	61.3	71.7
Bisexual: Female	71	41	27	57.7	65.9
Gay or Lesbian: Female	61	41	31	67.2	75.6
Heterosexual or straight: Female	3225	2167	1407	67.2	64.9
Other: Female	6	5	4	83.3	80.0
Unknow, not stated or had missing data: Female	108	81	48	75.0	59.3

**Table A10: Ethnicity by age group**

<b>Ethnicity: Age group</b>	<b>Count of those accessing LLBD Services</b>	<b>Count of those who agreed a quit date</b>	<b>Count of those who quit at 4 weeks</b>	<b>Proportion who agreed a quit date (%)</b>	<b>Proportion who quit at 4 weeks (%)</b>
Asian/Chinese: 18-24	1	0	0	0.0	NA
Asian/Chinese: 25-34	5	4	3	80.0	75.0
Asian/Chinese: 35-44	10	8	4	80.0	50.0
Asian/Chinese: 45-54	3	2	2	66.7	100.0
Asian/Chinese: 55-64	5	4	4	80.0	100.0
Asian/Chinese: 65+	1	1	1	100.0	100.0
Black: 18-24	1	0	0	0.0	NA
Black: 25-34	6	3	2	50.0	66.7
Black: 35-44	10	7	4	70.0	57.1
Black: 45-54	9	8	4	88.9	50.0
Black: 55-64	7	4	2	57.1	50.0
Black: 65+	0	0	0	NA	NA
Mixed: 18-24	5	4	2	80.0	50.0
Mixed: 25-34	18	7	2	38.9	28.6
Mixed: 35-44	10	10	5	100.0	50.0
Mixed: 45-54	14	12	6	85.7	50.0
Mixed: 55-64	4	2	1	50.0	50.0
Mixed: 65+	1	0	0	0.0	NA
Unknown: 18-24	7	0	0	0.0	NA
Unknown: 25-34	35	16	10	45.7	62.5
Unknown: 35-44	19	12	8	63.2	66.7
Unknown: 45-54	25	19	14	76.0	73.7
Unknown: 55-64	19	15	11	78.9	73.3
Unknown: 65+	11	6	4	54.5	66.7
White: 18-24	377	204	103	54.1	50.5
White: 25-34	1304	805	482	61.7	59.9
White: 35-44	1036	742	507	71.6	68.3
White: 45-54	1210	908	647	75.0	71.3
White: 55-64	1010	759	556	75.1	73.3
White: 65+	637	466	337	73.2	72.3

**Table A11: Ethnicity by sex**

<b>Ethnicity: Sex</b>	<b>Count of those accessing LLBD Services</b>	<b>Count of those who agreed a quit date</b>	<b>Count of those who quit at 4 weeks</b>	<b>Proportion who agreed a quit date (%)</b>	<b>Proportion who quit at 4 weeks (%)</b>
Asian/Chinese: Male	15	12	8	80.0	66.7
Black: Male	15	9	7	60.0	77.8
Mixed: Male	20	11	4	55.0	36.4
Unknown: Male	31	20	13	64.5	65.0
White: Male	2189	1611	1149	73.6	71.3
Asian/Chinese: Female	10	7	6	70.0	85.7
Black: Female	18	13	5	72.2	38.5
Mixed: Female	32	24	12	75.0	50.0
Unknown: Female	27	19	12	70.4	63.2
White: Female	3384	2272	1482	67.1	65.2

**Table A12: Mental Health by age group**

Mental Health: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Mental Health - Yes: 18-24	70	41	21	58.6	51.2
Mental Health - Yes: 25-34	307	195	105	63.5	53.8
Mental Health - Yes: 35-44	284	217	136	76.4	62.7
Mental Health - Yes: 45-54	324	230	146	71.0	63.5
Mental Health - Yes: 55-64	229	165	126	72.1	76.4
Mental Health - Yes: 65+	63	49	28	77.8	57.1
Mental Health - No: 18-24	239	163	82	68.2	50.3
Mental Health - No: 25-34	851	605	374	71.1	61.8
Mental Health - No: 35-44	674	532	375	78.9	70.5
Mental Health - No: 45-54	820	679	503	82.8	74.1
Mental Health - No: 55-64	720	591	425	82.1	71.9
Mental Health - No: 65+	517	400	299	77.4	74.8

**Table A13: Mental Health by sex**

Mental Health: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Mental Health - Yes: Male	474	343	226	72.4	65.9
Mental Health - No: Male	1580	1265	923	80.1	73.0
Mental Health - Yes: Female	785	540	325	68.8	60.2
Mental Health - No: Female	2218	1690	1124	76.2	66.5

**Table A14: Disability status by age group**

Disability: Age group	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Disability - Yes: 18-24	51	24	8	47.1	33.3
Disability - Yes: 25-34	179	102	52	57.0	51.0
Disability - Yes: 35-44	250	175	107	70.0	61.1
Disability - Yes: 45-54	307	210	141	68.4	67.1
Disability - Yes: 55-64	340	242	159	71.2	65.7
Disability - Yes: 65+	233	173	120	74.2	69.4
Disability - No: 18-24	289	155	84	53.6	54.2
Disability - No: 25-34	1042	643	405	61.7	63.0
Disability - No: 35-44	792	578	405	73.0	70.1
Disability - No: 45-54	919	711	514	77.4	72.3
Disability - No: 55-64	670	513	391	76.6	76.2
Disability - No: 65+	403	291	216	72.2	74.2

**Table A15: Disability status by sex**

Disability: Sex	Count of those accessing LLBD Services	Count of those who agreed a quit date	Count of those who quit at 4 weeks	Proportion who agreed a quit date (%)	Proportion who quit at 4 weeks (%)
Disability - Yes: Male	607	431	281	71.0	65.2
Disability - No: Male	1607	1190	874	74.1	73.4
Disability - Yes: Female	752	494	305	65.7	61.7
Disability - No: Female	2508	1701	1141	67.8	67.1





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