

# Men's Health Strategy: Call for evidence

## Q: Understanding and identifying areas where we can improve support for healthier behaviours

### Cancer incidence in Yorkshire

Cancer incidence is increasing both regionally and nationally. In 2021, there were 31,628 cancers diagnosed in Yorkshire.<sup>1</sup> This is a rate of 627 diagnoses per 100,000 people in Yorkshire. By sex, males in Yorkshire have a much higher rate of 710 cases per 100,000. From 2009 to 2019, cancer incidence rates increased by a relative 2.9% in Yorkshire.<sup>2</sup>

In 2021, 16,134 cancers in Yorkshire were diagnosed in men, an increase of 2,087 from 2011.

The four most commonly diagnosed cancers are breast, lung, prostate and bowel cancer. Prostate, lung and bowel cancers accounted for over half (51.9%) of the 16,134 cancers diagnosed in Yorkshire men, with prostate accounting for 4,032 cases alone.<sup>1</sup>

Improving support for healthier behaviours can help to reduce the prevalence of the preventable causes of cancer, so that more people can live longer, healthier lives, free from cancer. A 2018 study sought to understand the proportion of cancer cases which were attributable to modifiable risk factors in the UK. It selected factors classified by the International Agency for Research on Cancer (IARC) as showing 'sufficient' evidence of a causal association with cancer. Factors included tobacco smoking, excess body weight<sup>i</sup>, and alcohol consumption. The study found that in England in 2015, nearly four in ten (38.0%) of cancer cases in men were attributable to known risk factors. For men, there was a higher proportion of cancers that are considered preventable than in women (36.4%). Men had a higher percentage of cancers attributable to risk factors than women across almost all individual risk factors. This could be explained by generally higher exposure to preventable causes of cancer in men than in women.

### Tobacco smoking and cancer

Tobacco smoking is the leading cause of preventable cancer in England. It is linked to at least 16 different cancer types, including lung and bowel cancer, the second and third most common cancer types in men.<sup>1, 3</sup> The proportion of cancer cases caused by smoking in England is significantly higher in men (17.3%) than women (12.1%).<sup>4</sup> In Yorkshire, the Charity estimates that smoking causes approximately 2,791 new cases of cancer each year in men.<sup>1, 4</sup>

Regional analysis shows that Yorkshire has the second highest smoking prevalence across England.<sup>5</sup> A total of 14.4% men in Yorkshire smoke, compared to 10.4% of women. Smoking prevalence among men in Yorkshire is above the national average for men (13.4%).

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<sup>i</sup> Excess body weight is defined as when a person's Body Mass Index is overweight and above. When the term excess body weight is used in this call for evidence, it refers to both overweight and obesity.

Within Yorkshire, there is significant variation of smoking prevalence among men.<sup>5</sup> In Doncaster, 20.8% of men currently smoke, which is the highest prevalence in the region. By contrast, 5.4% of men in Richmondshire currently smoke.

Tobacco smoking is the single biggest cause of health inequalities in the UK. In England, there is a significantly higher proportion of people who smoke in the most deprived decile (14.6%), in comparison to those in the least deprived decile (9.3%).<sup>5</sup> The relationship between deprivation and smoking prevalence is also reflected in Yorkshire. An estimated 292,631 men smoke in Yorkshire, forming the majority of people who smoke in the region.<sup>5, 6</sup> The most deprived local authorities have the highest proportion of people who smoke. Of 13 local authority areas in Yorkshire, 8 fall within the 20% most deprived.<sup>7</sup> Of the near 300,000 men who smoke in Yorkshire, seven in 10 live in these more deprived areas in the region.

Research illustrates the relationship between deprivation, smoking and cancer incidence. A 2022 study of cancer incidence rates between 2013 and 2017 found that if the smoking prevalence across all quintiles was the same as the least deprived, 20% of the gap in cancer incidence as a result of deprivation could have been prevented.<sup>8</sup> This equates to the prevention of 5,504 cases of cancer each year in England. If nobody smoked in England, 61% of the gap in deprivation associated cancers could have been prevented, equal to the prevention of 16,544 cases each year.

In 2019, the Government first announced an ambition to reach 5% smoking prevalence by 2030. Government has since continued to legislate to reduce smoking prevalence. The Tobacco and Vapes Bill includes the landmark commitment to a smokefree generation, which will ban the sale of tobacco products to anyone born on or after 1 January 2009. Nonetheless, at the current rate of decline, Yorkshire is not projected to reach the 5% smoking prevalence target until 2043. Overall, 307,395 people in Yorkshire would need to stop smoking in order to meet the 5% target.<sup>5, 6</sup> 191,189 men would need to stop smoking in order to meet a 5% smoking prevalence in males in Yorkshire.

Specialist smoking cessation services offer people the best possible chance of quitting smoking. The NICE guidelines for stop smoking support explain that they provide a combination of behavioural support and pharmacotherapy.<sup>9</sup> In Yorkshire, a lower proportion of male smokers set a quit date with a local stop smoking services in 2023/24 compared to females.<sup>10</sup> This meant that an estimated one in 36 men (2.8%) who currently smoke in Yorkshire set a quit date with these services. This is slightly lower than the estimated proportion of female smokers who set a quit date with these services in Yorkshire (4.0%). Despite being less likely to set a quit date, men were similarly successful in quitting as women (65.9% men quit compared to 63.4% of women).

People who smoke who access smoking cessation services are up to three times more likely to successfully quit than those who try to quit through willpower alone.<sup>11</sup> Vaping products are provided by the majority of local authorities' specialist stop smoking services surveyed by Action on Smoking and Health.<sup>12</sup> Vaping products are the most popular stop smoking aid in England and offer people who smoke a smokefree nicotine alternative.<sup>13</sup> There is high-certainty evidence to show that nicotine containing vaping products increase quit rates compared to NRT.<sup>14</sup>

Yorkshire Cancer Research has committed to funding £2.7 million of stop smoking services in the region and has helped 4,400 people successfully quit smoking.

Yorkshire Cancer Research funded the Yorkshire Enhanced Stop Smoking study, which was delivered alongside the Yorkshire Lung Screening Trial.<sup>15</sup> People who were attending lung

health checks as part of the Yorkshire Lung Screening Trial were invited to attend a stop smoking appointment at the same time, in the same location. They were then provided with ongoing smoking cessation support for a maximum of 12 weeks and a free supply of stop smoking aids including NRT and e-cigarettes. This support was presented as an opt-out offer to participants.

The study found that offering opt-out specialist smoking cessation support alongside another medical appointment was successful in supporting people to quit smoking.<sup>15</sup> A total of 15% of those eligible for stop smoking support self-reported quitting smoking at 4 weeks. Analysis showed that men (56.0%) were more likely to quit at 4 weeks than women (44.0%).

Yorkshire Cancer Research supports policy recommendations which could further reduce smoking rates in order to realise the Smokefree 2030 ambition, including the Tobacco and Vapes Bill progressing through Parliament currently.

The Yorkshire Enhanced Stop Smoking Study demonstrates how presenting smoking cessation services within another medical appointment can increase quit rates among men. Therefore, Yorkshire Cancer Research supports the incorporation of smoking cessation support into as many touchpoints of the NHS as possible. This includes lung screening appointments, mental health appointments and whilst awaiting cancer treatment. This can help to ensure that whenever people interact with the NHS, they are offered the opportunity to access the high quality of support that is needed to stop smoking.

In addition, Yorkshire Cancer Research supports the introduction of a levy on the tobacco industry to increase the funding of smoking cessation programmes. Currently, the tobacco industry in the UK has a net profit margin of approximately 50%, far greater than the average profit margin for UK manufacturing of 10%.<sup>16</sup> The All Party Parliamentary Group on Smoking and Health estimate that a tobacco industry levy could raise £700 million each year.<sup>16</sup> Revenue from the levy could support the implementation of smoking cessation support within as many touchpoints of the NHS as possible. It could also help to ensure that every local authority includes vaping products as part of their smoking cessation provision.

### Excess body weight and cancer

Research has linked excess body weight to at least 13 different types of cancer.<sup>17</sup> In 2015, it was estimated that 6.3% of all preventable cancer cases were attributable to excess body weight.<sup>4</sup> In recent decades, the prevalence of excess body weight has increased, from 53% of English adults in 1993 to 65% in 2023.<sup>18, 19</sup>

In England, the prevalence of excess body weight is higher among men than women. In 2023, 69.7% of men and 59.2% of women were living with excess body weight.<sup>18</sup> Despite this, it is important to acknowledge that excess body weight is estimated to cause a higher proportion of cancer cases in women than men. In women, it is estimated that 7.5% of cancer cases were caused by excess body weight, compared to 5.2% of cases in men.<sup>4</sup> One potential reason why a higher overall proportion of cancers are attributable to excess body weight in women is that some cancers are either significantly more common in women (breast cancer) or specific to women (uterine and ovarian cancer) are linked to excess body weight.<sup>4</sup>

Of cancers that affect both men and women, men have an increased proportion attributable to excess body weight for seven of the 10 cancer types that can be caused by excess body weight.<sup>4</sup> For example, in bowel cancer, 6.8% of cases in women are attributable to excess body weight compared to 15.3% in men.<sup>4</sup>

Men with excess body weight are at an increased risk of certain cancer types compared to women, including bowel, oesophageal, pancreatic cancer, and multiple myeloma.<sup>4</sup> As the degree of excess body weight increases, so does the risk of cancer.

When men require clinical treatment for excess body weight, they are less likely to be referred to weight loss services than women. An analysis of routine NHS data from primary and secondary care between 2007-2020 found that as a percentage of those that were referred to weight management services, 34.4% were men and 65.6% were women.<sup>20</sup> Men are also less likely to enrol in services following referral.<sup>21</sup> These factors may contribute to the fact that fewer men undergo bariatric surgery, despite levels of obesity being similar (26.4% in men and 26.2% in women).<sup>18, 20</sup>

A range of policies can reduce the prevalence of excess body weight. Yorkshire Cancer Research supports the establishment of a new national strategy which prioritises the prevention of excess body weight.

Within this strategy, the Charity recommends the implementation of a Salt and Sugar Reformulation tax as proposed by the Government-commissioned National Food Strategy in 2021.<sup>22</sup> This would tax salt and sugar sold for use in processed foods, catering and restaurants. Government modelling suggests that the tax could stop the trend towards weight gain at a population level.<sup>22-24</sup>

To address the gap between men and women in enrolment and referral to weight management services, Government should ensure that every Integrated Care Board provides the entire range of weight management services, and that services are accessible across all sociodemographic groups. This can ensure that when men require treatment, they receive timely and appropriate levels of care.

### Alcohol consumption and cancer

Alcohol consumption has been linked to at least seven different types of cancer, including bowel cancer, the third most common cancer type in men. In the UK, the most recent study estimates that alcohol causes 4.1% of attributable cancer cases, with more cases caused in men (4.9%) than in women (3.2%).<sup>25</sup> In Yorkshire, it is estimated that alcohol causes 1,297 cases of cancer annually, with the majority of cases occurring in men.<sup>1</sup>

Nationally, men are more likely than women to have consumed alcohol in the last 12 months and are also more likely to consume alcohol on a regular basis. A majority of men (55.3%) consumed alcohol at least once per week, compared to 41.6% of women.<sup>26</sup> Men are also significantly more likely to drink at higher risk when compared to women: in England, 5.9% of men consumed more than 50 units of alcohol per week compared to 3.7% of women consuming more than 35 units per week.<sup>27</sup> National guidelines suggest limiting alcohol consumption to 14 units per week maximum. Within Yorkshire and the Humber, 6.3% of men drink at a higher risk compared to 3.2% of women.

A complex relationship exists between alcohol and deprivation. Despite men from the most deprived groups reporting similar or lower levels of alcohol consumption, there is greater alcohol-attributable mortality among men from the most deprived group compared to the least deprived.<sup>27, 28</sup> Reductions in levels of alcohol consumption at a population level would help to narrow the inequalities in alcohol-related harms.<sup>28</sup>

To improve health positive behaviours, Yorkshire Cancer Research supports the enforcement of pricing regulations that prevent the sale of cheap, high strength alcoholic drinks. Government should implement a Minimum Unit Pricing policy, as introduced in

Scotland in 2018 and Wales in 2020. This policy has proven successful in reducing alcohol-related harms. An evaluation by Public Health Scotland estimated that Minimum Unit Pricing had reduced the number of deaths directly caused by alcohol by 13.4% and hospital admissions by 4.1%.<sup>29</sup> Minimum Unit Pricing in Scotland has also contributed to addressing alcohol-related health inequalities. The evaluation found that the largest reductions in alcohol caused deaths were in men, the over 65s and those living in the 40% most deprived areas of Scotland.<sup>29</sup>

The charity also supports a comprehensive, evidence based public health campaign on the connection between alcohol and cancer. Research has found that when unprompted, only 12.9% of those surveyed identified cancer as a potential outcome of alcohol consumption.<sup>30</sup> Furthermore, men were less likely than women to be aware of this link. A public health campaign can increase awareness of the relationship between alcohol and cancer among men, support the promotion of positive health behaviours and ultimately reduce the number of cancer cases attributed to alcohol consumption.

## **Q: Improving outcomes for health conditions that typically, disproportionately or differently affect men**

### **Cancer in men**

Men are disproportionately and differently affected by cancer compared to women. It is therefore key that a men's health strategy considers and addresses the unique impact of cancer on men. Men are significantly more likely to be diagnosed with and die from cancer than women. In England in 2019, 689 men per 100,000 are diagnosed with cancer compared to 556 women per 100,000 and 306 men per 100,000 die from cancer compared with 216 women per 100,000.<sup>2</sup> These respective rates are significantly higher in Yorkshire than the national average.

There are many cancers that men are more likely to be diagnosed with than women, including two of the most common – bowel and lung. Men have significantly higher case and death rates from these cancers compared to women. Men are two to three times as likely to be diagnosed with some cancers compared to women. Some of these cancers include oesophageal, stomach and liver, where fewer than half of those diagnosed will survive past one year from diagnosis. Finally, there are certain cancers that only affect men. For example, penile, prostate and testicular cancers, which make up over one in four (27.3%) of all cancer diagnoses in men.

### **Why are men disproportionately affected by cancer?**

There are several potential reasons why men are more likely to be diagnosed with cancer than women including high prevalence of smoking, excess body weight and alcohol consumption, which are discussed in the previous question. Occupation could also be a key factor. In Britain it is estimated that 3.7% of all cancers are caused by workplace carcinogens.<sup>4</sup> This proportion is over twice as high in men compared to women (4.9% compared to 2.4%). This is because men are more likely than women to work in jobs which expose them to carcinogens. These occupations can include roles in construction and manufacturing (among many other sectors) which can lead to a higher exposure to harmful and carcinogenic substances such as asbestos, silica and radiation, increasing cancer risk. In England, 19.4% of the male workforce are employed in the broad construction and manufacturing industries compared to 5.9% of women.<sup>31</sup> Occupational cancer risk could be



particularly key for men living in Yorkshire where a higher percentage of the local workforce is in manufacturing and construction than nationally (25.0% vs 19.4%). Whilst much has been done to reduce workplace carcinogens, they continue to present a risk to people in certain occupations. Moreover, Yorkshire's industrial past means that Yorkshire's older, especially male, population are likely to have previously worked in environments with high levels of carcinogenic exposure such as steel, mining and rail works.

There is evidence to suggest that screening services are not meeting the needs of men which could help to explain men's comparatively poor cancer outcomes. Of the four national cancer screening programmes, only two are for cancers which affect men (lung and bowel cancer) whilst women are additionally invited to the breast and cervical cancer screening programmes. There are therefore not as many opportunities for cancers affecting men to be caught before symptoms present. This can potentially explain the later stage profile of cancers which typically affect men compared to those which typically affect women. 55.7% of prostate cancers are diagnosed at a late stage compared to 15.2% of breast cancers in Yorkshire.<sup>32</sup>

Additionally, even where men are included in screening programmes, they have lower coverage than women. In 2023/24, 70.3% of women participated in the bowel cancer screening programme within 6 months of their invitation compared to just 64.9% of men.<sup>33</sup> Yet, men are significantly more likely to be diagnosed with bowel cancer than women at 85 cases per 100,000 men, compared to 58 cases per 100,000 women in England.<sup>2</sup> Yorkshire rates are slightly higher than the England averages at 87 cases per 100,000 in men and 57 cases per 100,000 for women).

### **What can be done to improve cancer outcomes for men?**

To both increase the number of screening opportunities available to men and to increase coverage within existing programmes, there is a need for an enhanced emphasis on sustained screening innovation. Whilst there is currently insufficient evidence to introduce a national screening programme for prostate cancer, once a safe, effective and cost-effective screening programme is developed, it is essential for men's cancer outcomes that it is rolled out in a timely manner. For novel developments to be rolled out as soon as safe and effective, the National Screening Committee may need to adapt to remove any system constraints. The National Screening Committee should actively seek and be open to new evidence to improve coverage of existing programmes and to develop new screening programmes. There are constantly new developments in evidence for interventions within screening which have the potential to increase coverage. For example, since the announcement of the National Lung Screening Programme, there have been several research developments which could be incorporated into the programme to enhance its effectiveness. There is ongoing research into optimising the eligibility for lung cancer screening to maximise the clinical benefit of screening. As evidence is developed, it should be promptly considered and, if found to be effective, safe and cost-effective, integrated as swiftly as possible into programmes. Moreover, the National Screening Committee should proactively seek to work with researchers at the development stages of trials so once evidence is presented to the committee, all the information required is readily available. When developing IMProVE, a prostate cancer screening trial funded by Yorkshire Cancer Research, researchers engaged with the National Screening Committee to ensure the trial design was appropriate to inform future evidence gathering and related recommendations on prostate cancer screening.

## Q: Improving men's access, engagement and experience of the health service

### Engagement with health services

As discussed, men are more likely to be diagnosed with cancer than women but are less likely to be diagnosed with cancer at an early stage. This is likely to be due at least in part to low engagement with health care services.

GPs play an essential role in early diagnosis as they are often the first professionals that people speak to when they notice symptoms. Cancers diagnosed by GPs are more likely to be early-stage cancers than those diagnosed through an emergency route. Of cancers diagnosed at a known stage, three in five (57.8%) cancers diagnosed through a GP referral are found at an early stage compared to just one in four (25.6%) of those found through an emergency route.<sup>34</sup> However, men who are later diagnosed with cancer are more likely to wait longer before contacting their GP than women. In England in 2023, 14.2% of men waited at least 6 months before going to the GP after thinking something might be wrong compared with 10.1% women.<sup>35</sup> Men are also slightly more likely to have to see their GP more times before receiving an urgent referral for cancer. Two in three women (65.7%) spoke to their GP just once before being diagnosed with cancer compared to a 57.7% of men. Additionally, men are less likely to engage with smoking cessation and weight management services than women. In 2023/24, we estimate that 2.8% (8,084) of men engaged with smoking cessation services compared to 4.0% (8,894) of women in Yorkshire.<sup>36</sup> This is despite the fact that men are more likely to smoke and live with excess body weight than women. This potentially increases their risk of developing cancer in the first place.

Low engagement with health services could stem from a lack of opportunities presented to men to engage with health professionals, resulting in early warning signs of cancer going unnoticed and risk factors such as smoking and excess body weight not being addressed. From a young age, women have various established touchpoints within the health system. Across their lives women regularly engage with primary and secondary care services due to reproductive reasons such as contraception, pregnancy, childbirth and menopause.<sup>37</sup> Moreover, women are more likely to seek help from health professionals for their mental health, for example in 2022/23 a more than twice the number of women compared to men were referred into Improving Access to Psychological Therapies (IAPT) in England (1,154,373 compared to 570,700).<sup>38</sup> Women were also more than twice as likely to finish a full course of talking therapy compared to men (68.6% of women compared to 30.4% of men).

In contrast, men may not have necessarily been to the GP since childhood.<sup>37</sup> This results in a lot of men first going to the GP when there is already something seriously wrong, often attempting to resolve the problem alone or play down its significance.<sup>37, 39</sup> Moreover, as discussed in the previous question, of the four cancer screening programmes, men are only eligible for lung and bowel cancer screening which have limited eligibility criteria. Both have high age thresholds (ages 54 to 74 for bowel cancer and 55 to 74 for lung cancer) and the lung cancer screening programme is only available to those who have a history of smoking. Additionally, the bowel cancer screening programme often does not involve interacting with any health professionals as this is usually completed via the post. Whereas women not only have access to all four screening programmes but the additional screening programmes that they are eligible for have younger age thresholds (ages 25 to 64 for cervical cancer and 50 and 70 for breast cancer). This means a larger proportion of women across a wider age range have regular invitations to engage with healthcare professionals. Men, on the other

hand, have limited opportunities to engage with healthcare professionals so do not become accustomed to a healthcare environment.

### How can the NHS improve men's engagement with healthcare services?

Given men's limited interaction with the health service, it is paramount that when they do engage, this opportunity is fully capitalised upon. For example, by combining multiple interventions into one appointment so that whilst men are engaged with one element of the health service, they are encouraged to engage more widely.

Yorkshire Cancer Research recommend that smoking cessation services are integrated into more touchpoints within the NHS, so that whenever someone who smokes interacts with the NHS, they are offered gold standard smoking cessation support as many times as possible. This should be set up so that within these touchpoints, people who smoke are automatically enrolled and must then actively opt out of the scheme. For example, whilst waiting in accident and emergency (A&E), within screening and mental health appointments, and as part of cancer treatment pathways. This has proven to be effective in a number of settings. For example, evidence from the Yorkshire Enhanced Stop Smoking Study (YESS), funded by Yorkshire Cancer Research, shows that providing opt-out, co-located smoking cessation services within the same appointment as lung screening is highly effective and results in high quit rates.<sup>15</sup> Of the eligible participants in the YESS study, 89.0% agreed to see an advisor on the unit and 15.0% of all eligible people self-reported quitting after four weeks. This is a higher quit rate than is seen in lung screening units that do not provide such intensive intervention.

Men living in Yorkshire are generally supportive of offering smoking cessation services in a number of different settings.<sup>40</sup> Indeed a higher proportion of men than women in Yorkshire consider it acceptable to offer smoking cessation services whilst people are waiting in A&E (36.1% compared to 31.0%).

Another example of capitalising on moments when men are already engaged is by combining screening programmes. Evidence from Yorkshire Cancer Research's Yorkshire Kidney Screening Trial confirmed that combining screening for lung and kidney cancers could help identify undiagnosed cases of kidney cancer.<sup>41</sup> Of the kidney cancers identified in this trial, 90% were found to be Stage 1. If treated at an early stage, the cancer is often treatable, however around six in ten people in Yorkshire will have no symptoms. This could be particularly key for men as kidney cancers are often diagnosed at a later stage in men compared to women, with a rate of 9 late-stage diagnoses per 100,000 men – over twice the rate for late-stage diagnoses in women.<sup>42</sup>

The table below outlines the impact that the recommendations in this section could have on men either through increased cancer prevention or by increasing the number of cancers which are diagnosed at an early stage.



Topic	Topic	People supported <sup>ii</sup>	Life years gained <sup>iii</sup>
Prevention	Automatic enrolment into smoking cessation at lung screening	7,700	2,732
	Automatic enrolment into smoking cessation at A&E	7,718	2,105
	Automatic enrolment into smoking cessation within CBT (mental health)	2,171	592
	Automatic enrolment into smoking cessation through urgent suspected referral for cancer	8,127	2,217
	Automatic enrolment into smoking cessation while awaiting cancer treatment	1,932	527
	<b>Total prevention</b>	<b>27,648</b>	<b>8,172</b>
Early diagnosis	Continued innovation (adding kidney screening to lung screening)	80,547	291
	<b>Total early diagnosis</b>	<b>80,547</b>	<b>291</b>
<b>Total across prevention and early diagnosis</b>		<b>108,195</b>	<b>8,464</b>

### Gaps in data and evidence

Yorkshire Cancer Research funds Active Together which has provided multimodal prehabilitation and rehabilitation to over 2,000 people with cancer in Yorkshire. Multimodal prehabilitation and rehabilitation combines evidence-based exercise, nutrition and wellbeing support both before, during and after treatment. The exercise component improves fitness and strength levels to reduce the side effects of treatment and rebuild strength and confidence after treatment. The nutritional component helps to stabilise the individual, so they are better able to tolerate treatment, and psychological support enables people who are struggling due to their psychological distress to engage with the service and/or their treatment. Across the exercise, nutritional and psychological components, Active Together integrates behaviour change techniques. The service enables participants to adopt and maintain positive lifestyle changes beyond the duration of the programme. For example, participants are provided with support to stop smoking and reduce alcohol consumption.

Active Together provides an excellent case study of a service which successfully engages with men. The evaluation of the first two years of Active Together Sheffield found that men were more likely than women to accept the offer of Active Together (81.4% compared to

<sup>ii</sup> For prevention this reflects those who quit smoking, for early diagnosis it is additional number who have a screen.

<sup>iii</sup> Life Years Gained is how the Charity measures the impact of projects across all areas of strategic focus. It refers to the number of estimated additional years lived by an individual as a result of a health intervention.

80.3%). Further research is needed in order to fully understand the reasons for the high acceptability of exercise-based cancer prehabilitation and rehabilitation among men.

An evaluation of the Active Together Sheffield service found that the majority of men who were referred to the service were from a White background (85%).<sup>43</sup> A total of 2% were from an Asian/Asian British background. Less than 1% were from a Black/Black African background, or a Mixed ethnic background. By contrast, 19% of Sheffield's population is from a minority ethnic background. Some of this disparity may be explained by the rates of cancer in the specific tumour sites covered by the service, but some may be due to men from an ethnic minority background being less likely to engage with exercise prehabilitation and rehabilitation programmes.<sup>44</sup> It is important that future research considers the needs of these groups to ensure services are set-up and designed to address barriers to participation and increase inclusivity.

## References

1. NHS Digital. *Cancer Registrations Statistics, England 2021- First release, counts only*. 2023. Accessed: 16/11/2023. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-registration-statistics/england-2021---summary-counts-only>
2. NHS Digital. *Cancer Registration Statistics, England, 2020*. 2022. Accessed: 12/03/2025. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-registration-statistics/england-2020/deaths-from-cancer-increased-with-deprivation>
3. International Agency for Research on Cancer. Personal Habits and Indoor Combustions 2012.
4. Brown KF, Rumgay H, Dunlop C, Ryan M, Quartly F, Cox A, et al. *The fraction of cancer attributable to modifiable risk factors in England, Wales, Scotland, Northern Ireland, and the United Kingdom in 2015*. *Br J Cancer*. 2018;118(8):1130-41.
5. Fingertips. *Smoking Profile*. 2025. Accessed: 14/03/2025. Available from: <https://fingertips.phe.org.uk/profile/tobacco-control>
6. Office for National Statistics. *Population estimates for England and Wales: mid-2023*. 2024. Accessed: 01/11/2024. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/populationestimatesforenglandandwales/mid2023>
7. Ministry of Housing Communities and Local Government. *English indices of deprivation 2019*. 2019. Accessed: 29/01/2024. Available from: <https://www.gov.uk/government/statistics/english-indices-of-deprivation-2019>
8. Payne NWS, Brown KF, Delon C, Kotrotsios Y, Soerjomataram I, Shelton J. *Socio-economic deprivation and cancer incidence in England: Quantifying the role of smoking*. *PLoS One*. 2022;17(9):e0272202.
9. National Institute for Health and Care Excellence. *Tobacco: preventing uptake, promoting quitting and treating dependence*. 2025. Accessed: 02/05/2025. Available from: <https://www.nice.org.uk/guidance/ng209>
10. NHS Digital. *Statistics on NHS Stop Smoking Services in England - April 2022 to March 2023 (Q4, Annual)*. 2023. Accessed: 06/12/2023. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-nhs-stop-smoking-services-in-england>
11. National Centre for Smoking Cessation and Training. *Stop smoking services: increased chances of quitting*. 2019.

12. Action on Smoking and Health. *The First Ten Years: Local authority stop smoking services and wider tobacco control in England, 2023*. 2024. Accessed: 24/10/2024. Available from: <https://ash.org.uk/resources/view/the-first-ten-years-local-authority-stop-smoking-services-and-wider-tobacco-control-in-england-2023>
13. Buss V, West R, Kock L, Kale D, Brown J. *Top-line findings on smoking in England from the Smoking Toolkit Study*. 2024. Accessed: 15/03/2024. Available from: <https://smokinginengland.info/graphs/top-line-findings>
14. Lindson N, Butler AR, McRobbie H, Bullen C, Hajek P, Begh R, et al. *Electronic cigarettes for smoking cessation*. Cochrane Database of Systematic Reviews. 2025(1).
15. Murray RL, Alexandris P, Baldwin D, Brain K, Britton J, Crosbie PAJ, et al. *Uptake and 4-week quit rates from an opt-out co-located smoking cessation service delivered alongside community-based low-dose computed tomography screening within the Yorkshire Lung Screening Trial*. European Respiratory Journal. 2024;63(4):2301768.
16. All Party Parliamentary Group on Smoking and Health. *APPG on Smoking and Health Manifesto for a Smokefree Future*. 2023. Accessed: Available from: <https://ash.org.uk/uploads/APPG-on-Smoking-and-Health-Manifesto-for-a-Smokefree-Future-2023.pdf?v=1699520107>
17. Lauby-Secretan B, Scoccianti C, Loomis D, Grosse Y, Bianchini F, Straif K. *Body Fatness and Cancer — Viewpoint of the IARC Working Group*. New England Journal of Medicine. 2016;375(8):794-8.
18. Fingertips. *Obesity, Physical Activity and Nutrition*. 2025. Accessed: 14/05/2025. Available from: <https://fingertips.phe.org.uk/profile/obesity-physical-activity-nutrition>
19. NHS England. *Health Survey for England, 2022 Part 2*. 2024. Accessed: 27/01/2025. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2022-part-2/adult-overweight-and-obesity#chapter-index>
20. Coulman KD, Margelyte R, Jones T, Blazeby JM, Macleod J, Owen-Smith A, et al. *Access to publicly funded weight management services in England using routine data from primary and secondary care (2007–2020): An observational cohort study*. PLOS Medicine. 2023;20(9):e1004282.
21. Ahern AL, Aveyard P, Boyland EJ, Halford JC, Jebb SA. *Inequalities in the uptake of weight management interventions in a pragmatic trial: an observational study in primary care*. Br J Gen Pract. 2016;66(645):e258-63.
22. National Food Strategy. *Recommendations in full*. 2021. Accessed: 06/02/2025. Available from: <https://www.nationalfoodstrategy.org/wp-content/uploads/2021/07/National-Food-Strategy-Recommendations-in-Full.pdf>
23. Department of Health and Social Care. *Technical consultation document, Department of Health and Social Care (DHSC) calorie model*. 2018.
24. Group CRE. *Statement of the Calorie Reduction Expert Group*. 2011. Accessed: 02/06/2025. Available from: [https://assets.publishing.service.gov.uk/media/5a75605ced915d73149597be/dh\\_127554.pdf](https://assets.publishing.service.gov.uk/media/5a75605ced915d73149597be/dh_127554.pdf)
25. Rumgay H, Shield K, Charvat H, Ferrari P, Sornpaisarn B, Obot I, et al. *Global burden of cancer in 2020 attributable to alcohol consumption: a population-based study*. The Lancet Oncology. 2021;22(8):1071-80.
26. NHS England. *Health Survey for England, 2022 Part 1*. 2024. Accessed: 04/03/2025. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/2022-part-1#top>
27. Fingertips. *Alcohol Profile*. 2024. Accessed: Available from: <https://fingertips.phe.org.uk/profile/local-alcohol-profiles>

28. Katikireddi SV, Whitley E, Lewsey J, Gray L, Leyland AH. *Socioeconomic status as an effect modifier of alcohol consumption and harm: analysis of linked cohort data*. The Lancet Public Health. 2017;2(6):e267-e76.
29. Public Health Scotland. *Evaluating the impact of minimum unit pricing for alcohol in Scotland: Final report*. 2023. Accessed: Available from: <https://publichealthscotland.scot/media/20366/evaluating-the-impact-of-minimum-unit-pricing-for-alcohol-in-scotland-final-report.pdf>
30. Buykx P, Li J, Gavens L, Hooper L, Lovatt M, Gomes de Matos E, et al. *Public awareness of the link between alcohol and cancer in England in 2015: a population-based survey*. BMC Public Health. 2016;16(1):1194.
31. Nomis. *Workforce jobs by industry (SIC 2007) and sex - unadjusted*. 2025. Accessed: 07/07/2025. Available from: <https://www.nomisweb.co.uk/query/construct/summary.asp?mode=construct&version=0&dataset=131>
32. NHS Digital. *Case-mix adjusted percentage of cancers diagnosed at stages 1 and 2 by sub-ICB in England, 2021*. 2023. Accessed: 26/01/2024. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/case-mix-adjusted-percentage-of-cancers-diagnosed-at-stages-1-and-2-in-england/2021>
33. Gov.uk. *Bowel cancer screening standards data report 2023-24*. 2025. Accessed: 01/07/2025. Available from: <https://www.gov.uk/government/publications/bowel-cancer-screening-annual-report-2023-to-2024/bowel-cancer-screening-standards-data-report-2023-24#overview-of-the-nhs-bowel-cancer-screening-programme-in-england>
34. National Disease Registration Service. *Routes to Diagnosis*. 2024. Accessed: 13/03/2025. Available from: <https://digital.nhs.uk/ndrs/data/data-outputs/cancer-data-hub/cancer-routes-to-diagnosis>
35. NHS. *National Cancer Patient Experience Survey 2023*. 2024. Accessed: 30/10/2024. Available from: <https://www.ncpes.co.uk/latest-results/>
36. NHS Digital. *Statistics on NHS Stop Smoking Services in England - April 2023 to March 2024 (Q4, Annual)*. 2024. Accessed: 05/11/2024. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/statistics-on-nhs-stop-smoking-services-in-england/april-2023-to-march-2024-q4-annual>
37. Wang Y, Hunt K, Nazareth I, Freemantle N, Petersen I. *Do men consult less than women? An analysis of routinely collected UK general practice data*. BMJ Open. 2013;3(8):e003320.
38. NHS England. *NHS Talking Therapies, for anxiety and depression, Annual reports, 2023-24*. 2024. Accessed: 01/07/2025. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/nhs-talking-therapies-for-anxiety-and-depression-annual-reports/2023-24>
39. Baker P. *Missing persons? Men's use of primary care services*. Trends in Urology & Men's Health. 2024;15(1):2-5.
40. YouGov. *Survey by YouGov on behalf of Yorkshire Cancer research*. 2025. Accessed: Available from: Total sample size was 2006 adults. Fieldwork was undertaken between 16th April - 29th April 2025. The survey was carried out online and is representative of Yorkshire resident aged 18+
41. Research YC. *Yorkshire Kidney Screening Trial*. 2021. Accessed: 30/05/2025. Available from: <https://www.yorkshirecancerresearch.org.uk/research-story/yorkshire-kidney-screening-trial>
42. NHS Digital. *Cancer Registration Statistics, England, 2022*. 2024. Accessed: 21/02/2025. Available from: <https://digital.nhs.uk/data-and-information/publications/statistical/cancer-registration-statistics/england->

[2022#:~:text=There%20were%20346%2C217%20new%20cancer,breast%2C%20lung%2C%20or%20bowel.](#)

43. Sheffield Hallam University. *Active Together Service Evaluation*. 2024. Accessed: 23/01/2025. Available from: <https://www.shu.ac.uk/advanced-wellbeing-research-centre/projects/active-together>
44. Stewart H, Stanley S, Zhang X, Ashmore L, Gaffney C, Rycroft-Malone J, et al. *The inequalities and challenges of prehabilitation before cancer surgery: a narrative review*. *Anaesthesia*. 2025;80(S2):75-84.